

# Orate and literate structures in spoken and written language

A comparison of monolingual and bilingual  
pupils

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# List of Abbreviations

1/2/3SG	1st/2nd/3rd person singular pronoun or suffix
1/2/3PL	1st/2nd/3rd person plural pronoun or suffix
ABL	ablative case
ACC	accusative case
Adj	adjective
AdvP	adverbial phrase
CMP	comparative degree
COM	comitative
COP	copula
CRA	case pupil's acronym
CV:TEMP	temporal converb
DAT	dative case
DET	determiner
DISC	discourse particle
DPO	case pupil's acronym
F	feminine
FOC	focus particle

GEN	genitive case
GL1	German as first language
GL2	German as second language
HKA	case pupil's acronym
INF	infinitive
INST	instrumental
INTJ	interjection
IPFV	imperfective
IU	intonation unit
L1	first language
L2	second language
LAS	project <i>Literacy acquisition in schools in the context of migration and multilingualism</i>
lex NP	noun phrase with lexical head
LOC	locative case
M	masculine
Mod.	modifier
N	neuter
NEG	negation particle
NMLZ	nominalizer
NP	noun phrase
N.PROP	proper noun
PFV	perfective
PL	plural

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PMO	case pupil's acronym
PP	prepositional phrase
PRF	perfect
PRO.DEM	demonstrative pronoun
PRO.INDF	indefinite pronoun
PRS	present tense
PRS.PTCP	present participle
PST	past
PTCL	particle
PTCP	past participle
REFLPRO	reflexive pronoun
rel.cl.	relative clause
SG	singular
SPL	superlative
&	word internal truncation



# Chapter 1

## Introduction

### 1.1 Motivation and aim of the study

Research on the relation between spoken and written language has a long tradition in linguistics. Behaghel (1899/1927) already discussed differences between speech and writing with respect to German. Bloomfield (1935, 21) addressed this distinction from a more general perspective, arguing that spoken language is prior to writing: “Writing is not language, but merely a way of recording language by means of visible marks.” This view has been continued in various approaches in theoretical linguistics, which usually take spoken language as the only language practice for applying theoretical considerations. Harris (2009, 54) notes that writing and its corresponding structures are seen as artificial constructs from this perspective. More recently, however, spoken and written language are assumed to be more or less independent from each other, i.e., their structural differences result from partially different systems (Miller & Weinert, 1998, 5).

While the theoretical relation between spoken and written language is not central to this work, structural differences of these two language practices are considered here. There is a variety of studies focussing on structural aspects of

speech and writing, increasingly from the 1970s on.<sup>1</sup> In general, it is claimed that writing is more complex and elaborate than speech. In this respect, the studies of Tannen (1981), Chafe (1982), Biber (1988) and Miller & Weinert (1998) give a lot of insight. Chapter 2 will consider general differences between speech and writing. In all studies comparing spoken and written texts, though, it is important not to draw general conclusions from the respective findings since situational characteristics, e.g., the communicative purpose, always needs to be considered as well. On that score, Biber (2009, 75) states that “[...] there are few (if any) absolute linguistic differences between speech and writing.” This results from various settings where language practices take place. In chapter 2, it will be shown that these situational characteristics entail linguistic consequences.

One central aim of this work is to develop a tool which enables a systematic analysis of these structural variations in spoken and written discourse. By means of a systematic approach, it will be possible to contrast speech and writing quantitatively and qualitatively. Qualitative analyses are particularly rare in this field of research as the weighting of linguistic features can be seen as fairly problematic. Biber (1988, 52) also emphasizes that both quantitative and qualitative analyses are necessary in order to achieve a comprehensive description of a specific text type. In order to evaluate linguistic features qualitatively, Maas (2010) established a highly useful theoretical framework, to which the elaborations applied in this work refer (see chapter 4).

Another crucial aim of this work is to apply the tool of analysis in a practical context in order to gain insight into the difficulties that written language structures might entail with respect to its acquisition. This is motivated by the results of a number of studies which show that social origin impacts on school success. Thus, children with a low socio-economic background, which - at least in Germany - especially applies to bilingual children with a migration

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<sup>1</sup>Biber (1988, 47-53) gives a good overview of studies investigating different structures in spoken and written language.

background, perform poorly in the German school system (Weishaupt et al. (2010, 9), Maas (2008, 186)). Apart from Germany, this has also been found in other contexts. On the one hand, Verhoeven (1987) has shown that immigrant children (here children with Turkish migration background) lag behind their Dutch peers with respect to their literacy competence. On the other hand, it is generally assumed that the family background highly impacts on the child's cognitive and linguistic prerequisites (Finegan & Biber, 1994). Such developmental disadvantages which are a result of one's background are difficult to make up for, when children go to school.

Due to these conditions, it is necessary to determine exactly where children with less favorable social origins encounter difficulties in school. In this respect, it is assumed that a considerable amount of problems in school is inextricably linked with the structures of written language, regarding both the production and reception. These problems can be seen as fairly far-reaching as they imply that instructions or texts might be difficult to understand (Verhoeven, 1987, 264). Consequently, the developmental disadvantages are highly likely to be reflected and reproduced by failure in school. In order to be able to counteract this process, structures that are problematic for these pupils need to be identified. Problematic issues in written language can only be determined by means of a systematic comparison of spoken and written data since such a comparison reveals where the pupils succeed in differentiating spoken and written language structures. On the basis of these findings, it also becomes apparent which linguistic features need to be fostered during literacy instruction.

Thus, on the one hand a tool for the systematic analysis of spoken and written language will be developed in this work. On the other hand, the application of this tool in the context described above will be the aim of this study. For this purpose, a rather small data basis is chosen as the data will be analyzed in a very detailed manner.

Generally, literacy and its implications are very central to this work so that respective aspects will be outlined in the following section. As the pupils in this

study are partly bilingual, crucial aspects of bilingualism will be clarified as well (see section 1.3), before theoretical aspects of spoken and written language will be discussed in chapter 2.

## 1.2 The status of literacy

Basic primary education associated with literacy is one of the basic human rights. This might result from the fact that there is a high correlation between illiteracy and poverty (Verhoeven, 1994, 4). By taking on illiteracy, it is assumed that this might have a positive effect on the rate of poverty and unemployment, which also holds for industrialized countries (Olson, 1994, 2). But also in developing countries, which generally have a much higher rate of illiteracy than industrialized countries, programs conveying literacy are assumed to ameliorate the economic condition of illiterates.

Many of these projects, however, failed to achieve their aim, i.e., decreasing the number of illiterates since the majority of participants in such a literacy campaign regressed to illiteracy after the program was completed (Triebel, 2001, 20). This is obviously associated with the undifferentiated aim of these campaigns to convey literacy (Maas, 2008, 396) as they often do not consider the social needs of particular groups in developing countries. Heath (1983), for example, revealed that there are utterly different types of literacy use and that these types are culture-specific. She compared black and white communities in the American South and found that literacy can involve very different kinds of events. For example, while literacy was rather a group activity in the black communities, reading and writing are seen as solitary activities in the white communities.

Furthermore, Maas (2008, 393) points out that the situation in Morocco does not correspond to what western societies link to functional literacy. In Morocco for example, it is sufficient when one person in each social unit, i.e., mostly the extended family, is able to read and write. Otherwise the parents

are afraid that school education might awaken aspirations that might discourage their descendants from assuring the family's livelihood. Thus, the status of literacy should always be seen in the specific cultural context. This does not only hold for developing (or threshold) countries, but also for industrialized countries where the cultural background of immigrants associated with a specific status of literacy needs to be considered as well.

In general, literacy is assumed to contribute to different types of progress in societies, which Olson (1994, ch. 1) discusses comprehensively. First, literacy is regarded as part of the social progress, in particular democratization and industrial development. Second, it is an important instrument of cultural and scientific development. Moreover, Olson (1994, 7) emphasizes that literacy impacts on the cognitive development of each individual since it "[...] imparts a degree of abstraction to thought which is absent from oral discourse and from oral cultures." That is, literacy as part of cognitive development allows an analytical access to language structures (e.g., metalinguistic competencies, see section 1.3). Although Olson (1994, 13) regards certain aspects that contradict the positive social, cultural and developmental implications of literacy, he underlines that literacy undeniably has positive effects in all of the areas mentioned above.

As mentioned previously, literacy is claimed to influence the individual cognitive development. In this respect, however, the literacy use needs to be beyond the scope of simple technical literacy skills. Then, it is assumed that literacy also contributes to one's personal development (Maas, 2008, 426). Hence, it becomes apparent that literacy does not only have implications for societies, but also - and possibly in a more direct way - for individuals.

In Germany<sup>2</sup>, where the present study is located, literacy has to be seen as a fundamental prerequisite in order to participate in society. This is not least related to one's professional career and holds for all other modern societies (Brockmeier & Olson, 2009, 4). Consequently, schools in Germany (as well as

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<sup>2</sup>For a more detailed illustration of the status of literacy in Germany, see Maas (2001).

in other countries) have to convey corresponding literacy skills so that each pupil - regardless of his/her social and linguistic background - has a shot at acquiring literacy to the same extent. In section 2.4, it will be seen that schools in Germany currently do not satisfy this basic requirement, which was identified as one motivation for this work.

### 1.3 Bilingualism in migration contexts

In this section, the focus is on bilingualism in a migration context since bilingualism is a field of research too wide in order to give a comprehensive outline in this work.<sup>3</sup> In this respect, I mainly refer to Maas (2008, ch. II.4) because he discusses crucial aspects that reflect the determining factors of immigrants' bilingualism.

Generally, two types of developmental processes can be distinguished with respect to bilingualism: on the one hand, bilingualism can be the naturally simultaneous primary development in two languages; on the other hand, bilingualism can be part of the secondary development, where the primary cognitive development is (partially) already complete, i.e., the secondary development is based on the first language. The former reflects *bilingual first language acquisition*, whereas the latter is referred to as *successive bilingualism* or *second language acquisition*. These types of developments can be seen as two points, where a variety of different processes lies inbetween (Maas, 2008, 439).

These types of bilingual development are tightly connected with age. It has been discussed intensively whether there is a critical period for learning a second language or not. Now, it is generally assumed that the ability to learn a second language does not decrease with advancing age; rather, the prevailing abilities in language acquisition change in the course of time (Bialystok, 2001, 87). A prime example of the age factor is the acquisition of phonetic articu-

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<sup>3</sup>Hamers & Blanc (2000) and Bialystok (2001) are very comprehensive books as they illustrate the decisive factors (e.g., cognitive, psychological, social, etc.) of bilingualism in detail.

lation: Young children generally succeed in acquiring the phonetic system of a second language perfectly. In contrast, adults often speak with an accent in the second language. On the basis of this finding, it is often deduced that older learners cannot achieve high or native-like competencies in a second language. In recent times, however, it is assumed that this difference results from different approaches to learning. While children tend to imitate their person of reference, adults try to achieve functional efficiency, i.e., particularly the ability to communicate in a second language. On that score, phonetic variation does not impact on verbal communication - unless it is very extreme - and thus, less effort is dedicated to this part of the language system.

With respect to migration, it is often assumed that an individual cannot achieve high competencies in two (or even more) languages, although bilingualism or multilingualism is rather normal outside of Europe or North America. One consequence of this assumption is that bilingualism results in semilingualism. Maas (2008, 441-442) ascribes this conclusion to the idea that two languages have to share one mind so that bilingualism is seen as multiple monolingualism. But the human brain is able to utilize the different resources of the two languages by managing them in a complex system and not separating them from each other. Thus, it is widely accepted nowadays that human cognition enables the acquisition of language competence in more than one language (Bialystok, 2001, 59).

The relation between the two languages does not need to be balanced, though. That is, language proficiency tends to vary regarding the two languages of a bilingual (Bialystok, 2001, 60). Furthermore, the development in the two languages is not synchronized. When the individual possesses certain structures in language A, these structures can serve as a resource in order to develop complex structures in language B. Maas (2008, 448) also points to the fact that the circumstances of the personal development contributes to utilization of bilingual abilities: The distinction between the languages is based on the distinction between the two contexts in which the languages are

used. The awareness of two coexistent language systems enables the individual to develop advanced *metalinguistic knowledge*, which is a decisive capability in the acquisition of a second language. “To the extent that a learner has metalinguistic knowledge, second-language acquisition is facilitated because a language template is available.” (Bialystok, 2001, 127) Bilinguals tend to have the advantage over monolinguals with respect to metalinguistic competencies. Thus, bilingualism can contribute to developing specific competencies.

Regarding the particular situation of immigrant children, it is important to underline that the extent to which the children gain proficiency in two languages does not depend on endogenous factors, but rather on the extent and the quality of language exposure. Learning conditions as well as the family background impact on the process of language acquisition (Maas, 2008, 452). Reich & Roth (2002, 13) refer to the study of Klatter-Folmer (1996), where the author determines a significant correlation between the socio-cultural family background and school success, on the one hand, and language profile, on the other hand. Moreover, immigrant children mainly master the communicative practices, but they have difficulties in changing the register (see sections 2.1 and 4.1). In migration contexts, the two languages are usually differently developed according to the corresponding function of each language (Maas, 2008, 451).

As a consequence, it depends on how bilingualism is treated since only by means of a skilled approach will it be possible to activate the potentials that are embedded in it. This means that the potentials require a particular support in order to be developed. In fact, the school has a great impact on developing corresponding capabilities. Thus, the resources of the school determine to a great extent whether bilingualism is an advantage or a disadvantage (Maas, 2008, 460).

## 1.4 Overview of the study

This study is organized in the following way. In the next chapter, theoretical aspects of spoken and written language are addressed, including the acquisition of literacy. Chapter 3 describes the data used for the investigation as well as the methodology for the basic analysis of the spoken data. Chapter 4 provides the theoretical framework for the systematic comparison of the spoken and written data, with hypotheses being developed on the basis of this framework at the end of the chapter. In chapter 5, the spoken and written data will be analyzed, with the hypotheses being verified. Chapter 6 deals with a second data set of written texts, which will be contrasted to the study's fundamental data in order to evaluate the pupils' performance from a more general perspective. Finally, chapter 7 presents the conclusions and a brief outlook at necessary research resulting from this study.



## Chapter 2

# Spoken and written language

In past decades, many linguists have conducted research on the differences between spoken and written language. One major issue in this field of research concerns the development of models that capture various factors in the comparison of these language practices, which will be addressed in section 2.1. Another essential issue concerns the linguistic features in which spoken and written language differ from one another (see sections 2.2 and 4.2). Section 2.3 deals with an essential characteristic of spoken language in detail, namely prosody. Finally, the ontogenetic perspective emphasizing the fact that written language needs to be acquired in a rather cumbersome way will be amplified in section 2.4.

When differences between spoken and written language are discussed, the terms ‘spoken’ and ‘written’ greatly simplify the multi-faceted aspects of language varieties as not only the mode, i.e., spoken vs. written, results in structural differences. For example, a prepared speech and a novel share more linguistic features than a prepared speech and a face-to-face conversation (Biber, 1988, 128), although both are undeniably spoken language. But in order to avoid misunderstandings, the terms ‘spoken language’ and ‘written language’ will henceforth imply typical genres for each mode, e.g., a conversation between friends for spoken and a scientific article for written language.

## 2.1 Theoretical considerations

This section will consider theoretical approaches which attempt to incorporate various factors in which spoken and written language differ. As Maas (2009, 146) puts it, language is by no means monolithic; it is a dynamic system. Therefore, it is quite challenging to develop a comprehensive model that encompasses all decisive factors.

One of the most influential models in linguistics in general was developed by Bühler (1934), who emphasizes the different dimensions of language practices by the famous Organon model. Although the Organon model will not be discussed in detail here, certain aspects of this model are essential in order to illustrate the different entrenchment of spoken and written language. In this model, a deictic and a symbolic field is distinguished with respect to speech acts, which is the model's most crucial aspect for the purpose of this work.<sup>1</sup> This distinction particularly reflects the dynamics of language that has been addressed above. It will be outlined now what the deictic and the symbolic field represent.

The deictic field is characterized by *empractic* (German: *empraktisch*) speech acts, which presuppose implicit knowledge. The linguistic signs in the deictic field are completely dependent on the situational context. That is, these signs can only receive an interpretation in their specific contexts. In contrast, speech acts in the symbolic field enable the arrangement of linguistic symbols in their synsemantic context (Bühler, 1934, 80-81). In this way, the linguistic symbols are dependent on their adjacent and surrounding signs (the synsemantic context), but they are independent of the situation. *Empractic* and *synsemantic* speech acts reflect one decisive difference between spoken and written language.<sup>2</sup>

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<sup>1</sup>Primarily, linguists refer to the Organon model in order to illustrate the general characteristics of human communication. Maas (2010, 30), however, stresses the fact that the model encompasses far more than the different aspects that are involved in a communicative act, which will be outlined in this chapter.

<sup>2</sup>The contextual embeddedness of spoken language will also be addressed in section 2.2.

On the basis of the distinction between the deictic and symbolic field, Maas (2008) develops the categories *orate* and *literate*.<sup>3</sup> These concepts play an important role in his model that consists of three dimensions which, according to him, need to be considered when analyzing language. In what follows, the respective model will be outlined with the elaborations based on Maas (2010, part I). The model's theoretical principles can be ascribed to Bühler's deictic and symbolic field of language.

Initially, both non-verbal interaction and language are communicative. But the decisive difference between non-verbal interaction and language practice is that the latter is articulated through linguistic signs. The form of these linguistic signs is socially predefined and is reproduced in language practice. In normal communication, language structures which are entailed in the symbolic field are used in addition to the communicative practice. This means that language structures involve the potential to convey meaningful information, whereas communicative practices rather reflect linguistic means for the organization of discourse. The language structures thus have to be seen as a resource, which is based on the symbolic character of language. It enables a decentered language practice and the articulation of abstract concepts, which cannot be expressed by means of purely communicative structures. Written language entails resources that enable a development of these language structures. Maas (2010, 30) claims that the symbolic structure of language practices is even developed by the resources that are embedded in written language or in the symbolic field.

Bühler (1934) insinuates that spoken and written language differ in terms of structure. The model in Maas (2010) focusses on these structural differences and is consequently characterized by them. Other models do not consider structural aspects, although they are very crucial when comparing spoken and written language. For example, the model of Koch & Oesterreicher (1985),

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<sup>3</sup>These concepts are elucidated in chapter 4. Here, it will suffice to note that *orate* and *literate* reflect structural aspects of 'prototypical' spoken and written language.

which is quite well established in German and Romance linguistics, also concerns the relation between spoken and written language. They refer to Söll (1974, 24) who distinguishes two aspects determining the character of spoken and written language. On the one hand, the two language practices have recourse to differing media, which is easily comprehensible: spoken language is characterized by the phonic code, while written language makes use of the graphic code. On the other hand, spoken and written language entail different kinds of conceptions according to Koch & Oesterreicher (1985, 17), namely the spoken and the written conception. By these distinctions, one receives a scheme with four different types of language practices, as illustrated in Table 2.1. It contains an example of each text type of the corresponding language variety. For example, a *conversation* is implemented in the phonic code and represents a spoken conception. In contrast, a *chat* indeed shows the characteristics of a spoken conception, but is graphically implemented. Vice versa, a *speech* is characterized by a written conception, whereas the medium is phonic. Finally, a *scientific article* can be seen as prototypical written language as its medium is graphic and the conception is written.

This scheme illustrates two aspects, namely *medium* and *conception*, in which spoken and written language differ from each other. However, it can only be seen as a rough approximation since the classification into *medium* and *conception* does not very explicitly take into account the structural con-

		Conception	
		spoken	written
Medium	phonic	<i>conversation</i>	<i>speech</i>
	graphic	<i>chat</i>	<i>scientific article</i>

Table 2.1: Examples of typical text types of spoken and written language according to Koch & Oesterreicher (1985).

sequences that the two language practices entail. This becomes all the more apparent when referring to the concepts of *Sprache der Nähe* (spoken) vs. *Sprache der Distanz* (written), which Koch & Oesterreicher (1985, 21) assume to be the crucial difference. This distinction is rather unfavorable as written language does not need to be ‘distanced’. For example, a shopping list or a chat does not display characteristics of language distance (Maas, 2003, 635).

Therefore, Maas (2010, 34) invokes the medium and two further criteria beside the *medium* in order to describe language practices. First, the *syntactic structure* of the utterance is decisive when describing language characteristics. Thus, whether or not the speaker/writer produces a complete sentence determines a crucial issue in the analysis of language practices. For this purpose, Maas (2008, 329) coins the terms *orate* vs. *literate*. Second, he argues that each utterance entails a *function* by differentiating between the communicative and the representing function. Purely communicative utterances do not convey information, but rather establish contact, give feedback, etc. In contrast, representing utterances always convey information.

According to this tripartite division (medium, structure, function), one receives the scheme displayed in Figure 2.1 (adopted from Maas (2010, 34)), which underlines that the three dimensions of language analysis are independent. Generally, the model reflects the framework for characteristics that have to be considered during language analysis. In principle, it is possible to locate each utterance in the three-dimensional field arising from this model.

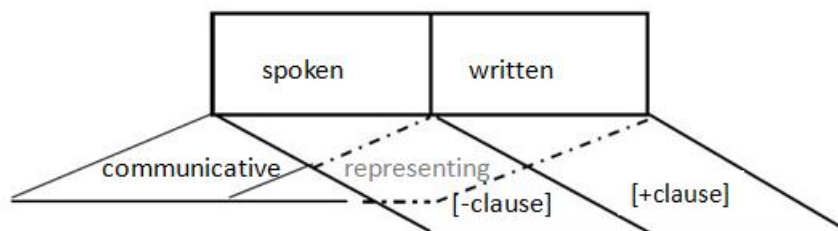


Figure 2.1: Dimensions in analyzing language practices.

From a more general perspective, it is important to point out that each language analysis deals with a specific kind of text, which is characterized by a combination of linguistic features. Some features are associated with specific groups of speakers (social dialect), others are regional characteristics (dialect). Here, the focus is on text varieties that occur in certain situations of use - these varieties are called registers (see the examples in Table 2.1 above). A register describes language use in a specific situation with the variation between registers being based on diverse factors, e.g., situational characteristics of the communication (see section 2.2). Biber (1988) conducted a very detailed analysis of several text types, the findings of which are quite insightful for this work. Therefore, the study will be briefly illustrated in the following section.

### **Register analysis by Biber**

One of the most important findings in Biber (1988) is that the linguistic features of a register are pervasive and always functionally motivated in their situation of use. He analyzed a large English corpus of spoken and written varieties by counting various linguistic forms, e.g., how often place adverbials, nominalizations, causative adverbial subordinators, etc. occur in a specific text type. The text types were very diverse and ranged for example from face-to-face conversations to speeches and official documents. By means of a statistical analysis, he ascertained a value for each linguistic feature that reflects to what extent the specific linguistic form is typical of the register in question. A positive value indicates that the linguistic feature frequently occurs in a text type, whereas a linguistic feature with a negative value is rather rarely found in this text type.

On the basis of this analysis, he identified those linguistic features that frequently co-occur in a specific text type and combined them in a factor. In other words, a factor consists of several linguistic features that frequently co-occur in texts (Biber, 1988, 102-103). Moreover, he assigned labels to each factor to represent their communicative purposes. For example, ‘informational

vs. involved production' is the strongest factor; it is characterized by private verbs (such as *think*, *know*, etc.), demonstrative pronouns and causative subordinations which co-occur frequently. Other factors are 'on-line elaboration of information' or 'narrative vs. non-narrative concerns'.

By means of further statistical analyses, Biber (1988) ascertained typical genres for each factor. In doing so, he identified for each factor which genre corresponds with the set of linguistic features. For example, with respect to the factor 'informational vs. involved production', he found that both telephone and face-to-face conversations are typical genres for involved language production. In contrast, official documents and press reviews score low regarding this factor, which indicates that these two text types are highly informational.

In this analysis, it becomes apparent that text types of both spoken and written language are identified as typical of one factor. For example, academic prose and telephone conversations score rather low in the factor 'narrative vs. non-narrative concerns', i.e., both genres are not characterized by narrative structures. Accordingly, certain differences do not result from the simple distinction between spoken and written language as such, but rather from the types of genres being analyzed (Tannen, 1981).

This investigation is very important - not only in order to investigate differences of spoken and written language in terms of structural aspects as is the purpose of this work, but for research that considers text varieties in general. The following section will indicate which situational characteristics impact on the language output.

## 2.2 Communication conditions and general linguistic implications

While the previous section considered the theoretical basis for the distinction between spoken and written language, this section deals with typical communication conditions and their general implications in terms of structure. Here,

only the most important characteristics will be discussed. As many researchers have dealt with this question, it is not possible to refer to all of them and to each particular issue that is discussed in literature. Structural aspects that are fundamental to the approach of this work will be comprehensively discussed in chapter 4. For a detailed illustration of situational characteristics, see Biber & Conrad (2009, 36-47).

In section 2.1, it was outlined that register variation partly results from the different characteristics in communicative situations. Before expanding on some of these characteristics, a general distinction between various situations of communication can be made. In this respect, Maas (2010, 38) roughly differentiates between three levels of registers: the intimate, the informal and the formal. The central dimension of this classification is the extent to which the language practice takes place in public. According to Maas, the intimate register is restricted to language use in the family and between close friends. The informal register is indeed public, but differs from the formal register in that it still concerns language use by which personal relations are established, e.g., colleagues. In contrast, language practice in the formal register deals with a generalized person, by which the structures have to be decentered. The situation of language use is closely associated with corresponding language structures: in the intimate and the informal register, written language hardly occurs and is restricted to certain genres, viz., letters, chat. The formal register, however, is characterized by a literate culture; it is the domain in which language practices are based on written language. For example, communication with public authorities mainly implies the exchange of written documents.

While this general division establishes the basic framework for the following distinctions, more definite communication conditions that entail structurally obvious differences will be discussed now. One of the most obvious aspects concerns production conditions. Spoken language is produced on-line, i.e., the speaker generates the utterance while speaking, which requires quite a lot of cognitive effort. In contrast, a writer can dedicate all his cognitive effort to

constructing one sentence - or even to looking for a particular word, regardless of how long it takes. Furthermore, he has the possibility to revise his text over and over again. Utterances produced by the speaker, though, cannot be edited; a correction or an explanation can be added, but what has been said is irreversible (Auer, 2009, 3). This fundamental difference has been called ‘on-line production constraint’ and refers to the speaker’s constraint with respect to producing complex structures. Generally, the speaker does not have enough cognitive resources to produce complex phrases or clauses. Instead, he conveys the information in separated chunks. The writer, though, can carefully construct phrases and clauses that integrate maximal information (Chafe, 1982, 39). Apart from that, on-line production implies many truncations or blended constructions, when the speaker combines two different units during language production. Such occurrences are not (generally) found in written language, which is characterized by structures that integrate several pieces of information, e.g., nominalizations.<sup>4</sup> Essentially, this difference impacts on the syntactic form of utterances, which will be addressed more explicitly in section 4.2.2.

Moreover, spoken language is always produced in the here and now, which has so far been referred to as *empractic* vs. *synsemantic* speech acts (see section 2.1). Thus, spoken language makes use of context-dependent structures, which cannot be utilized in written language as there, the detachment from its context is necessary in order to be comprehensible.<sup>5</sup> Linguistically, this results in the use of deictic expressions in spoken discourse. In comparison, writers need to use the resources of language structures in the symbolic field to a large extent (see section 2.1) as they cannot refer to the context (Maas, 2003, 636). In other words, strategies in spoken discourse make maximum use of the context,

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<sup>4</sup>As mentioned above, all aspects refer to typical genres for each register. In favor of a clear illustration, cases where an author makes use of spontaneous spoken language structures or the like are not considered here.

<sup>5</sup>Literate structures enable such a detachment from the communicative context, see chapter 4.

while written language strives generally for structures that are most explicit (Tannen, 1981, 3).

Olson (1977, 276-277) also points to this crucial characteristic:

[...] the degree to which this linguistic knowledge is conventionalized and formalized need not be very great in oral contexts since the listener has access to a wide range of information with which to recover the speaker's intention. [...] To serve the requirements of written language, however, all of the information relevant to the communication of intention must be present in the text.

Finegan & Biber (1994, 321) consider the contextuality of spoken language from the perspective of the speaker's effort in order to achieve an expression which is not ambiguous.

[...] to the extent that interlocutors share a communicative context and background information, less elaboration and explicitness will be necessary, and more economy and compression will be tolerable.

Many studies emerging from this field of linguistics point to the aspect of contextual embedding, thereby illustrating the relevance of this feature for the distinction between speech and writing. Formal consequences of contextualized and decontextualized structures will be resumed in section 4.2.1.

Another decisive aspect is that conversations are always interactive, which implies that the speaker communicates with a particular person, who is usually familiar to him and near him. As opposed to this, written language often aims at a group of people, who does not necessarily share the same background information with the writer. Accordingly, the writer needs to integrate all information, which he cannot presuppose for the reader. Furthermore, in an interactive conversation the hearer can give direct feedback to the speaker if he needs to elaborate more. This also implies that intimately acquainted friends do not need to spell out everything in a conversation as they tend to know

which knowledge they share. This means that the linguistic form depends on the speaker's assumptions to the information states, i.e., if it is new or given information (see Lambrecht (1994)). Here, it is important to mention that different information states are marked by means of syntactic, prosodic and lexico-grammatical cues (see section 4.2.1).

Chafe (1982, 45) also points to the interactive character of conversations, which is generally lacking in written compositions. With reference to this, he describes speakers as being involved with their audience, while writers are rather detached from their readers. This is also partly implied by contextual embedding, whereas involvement and detachment in the case presented by Chafe rather refer to the relationship between the discourse participants. Linguistically, this is reflected by an increased use of nominalizations and passives in written texts; both contribute to decentered language structures. Involvement in conversations, however, is manifested through references to the speaker (1st person pronouns) and his mental processes (private verbs: *think*, *find*, *know*, *hope*, emphatic particles and vagueness, often expressed by hedges).

In sum, spoken and written language differ particularly in terms of production conditions, contextual embedding, the types of participants and their relationship, which all have implications for language structures. One further fundamental difference between spoken and written language has not yet been discussed, namely prosody. Prosody, which is of course restricted to spoken language, fulfills several functions, as will be shown in the following section.

## 2.3 Prosodic aspects

The most fundamental and obvious difference between spoken and written language is that spoken language is characterized by prosody as an inherent feature, which written language completely lacks.<sup>6</sup> Here, it is argued that

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<sup>6</sup>There are, of course, specific substitutional means by which emphasis, urgency, etc. can be expressed in writing (e.g., printed in bold, exclamation mark); however, prosodic features have more far-reaching implications in speech, as will be seen in the following illustrations.

prosodic features not only express pragmatic function, but they also define spoken language units, namely intonation units (IUs) (Cruttenden, 1986; Chafe, 1987; Maas, 2006, 75). These prosodic units are discussed in the following section and section 3.2.2. In section 2.3.2, German intonation as one part of the German prosodic system will be elucidated.

### 2.3.1 Intonation units in spoken language

In many studies concerned with spoken language, the intonation unit (IU) is assumed to be the natural unit of spoken discourse (Cruttenden, 1986; Chafe, 1987; Ford & Thompson, 1996; Tao, 1996). Although researchers refer to this prosodic unit by various names (intonation-group, intonation phrase, tone group, etc.), they all take prosodic characteristics as the basis for “[...] dividing the flow of speech into useful units for analysis” (Tao, 1996, 9). For identifying the boundaries of IUs, several prosodic criteria have been discussed. For example, Cruttenden (1986, 36-42) outlines that a pause is a decisive cue, but one that does not solely indicate an IU boundary. In addition to that, he names three further boundary markers, namely anacrusis, lengthened final syllables and a change in pitch level. These criteria for IU boundaries are amplified in section 3.2.2. Moreover, it is assumed that these characteristics are universal as they are physiologically, linguistically, cognitively, and interactionally motivated (Tao, 1996, 43).

Taking prosodic units as the basic unit of spoken language contrasts particularly with approaches that analyze units of spoken language on the basis of syntactic criteria. Tao (1996, ch. 2 and 9) argues that prosodic units have to be seen as the fundamental units in speech analysis. At first, he rejects the assumption that IU boundaries are placed in the wrong place when they do not correspond with syntactic units (p. 7 and 174). In fact, this is supported by other researchers, who show that speakers consider restrictions when setting prosodic markers (e.g., Nespor & Vogel (1984, 130)). Then, Tao (1996, 7) even suggests that the division of speech into IUs by native speakers “[...] must be

treated as direct evidence for the structure of the language, which [...] theories of grammar must be able to accommodate.” In other words, he argues that the correspondence of grammatical elements and IUs should be seen as part of a language’s grammar. Hence, the description of grammatical structures in IUs contributes to the understanding of language production since the prosodic unit joins crucial factors in the analysis of spoken discourse: syntax, speech production and interactional constraints (Tao, 1996, 176).

Although many studies analyze spoken discourse by describing syntactic structures in IUs (Chafe, 1987; Matsumoto, 2003; Ford & Thompson, 1996), to my knowledge systematic research on the basis of prosodic units is missing in many individual languages. While the aim of this work is not to generally determine which syntactic structures correspond with IUs in German, the analysis of spoken discourse is based on prosodic units. Therefore, IUs will be identified and subsequently described with respect to grammatical structures (see sections 3.2.2 and 5.1.1). In this respect, it is also important to briefly outline prosodic aspects of German, as will be done in the following section.

### 2.3.2 German intonation

Intonation constitutes one part of a language’s prosodic system, which also includes accentuation, rhythm, pitch, speech velocity, phrasing and pauses (Gilles, 2005, 3). “Intonation involves the occurrence of recurring pitch patterns, each of which is used with a set of relatively consistent meanings [...]” (Cruttenden, 1986, 9). This characteristic differentiates German as an intonational language from tone languages, such as Mandarin, where pitch patterns or tones are also part of the lexicon as they distinguish the meaning of words. As mentioned before, intonation in German thus impacts on the pragmatics of utterances and divides utterances into prosodic units.

Moreover, German is considered as a stress-timed language<sup>7</sup> that expresses

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<sup>7</sup>The rhythm of stress-timed languages is characterized by a periodical sequence of accents, where stressed and unstressed syllables/words alternate. In contrast, the rhythm

focus by means of different pitch accents (Grice & Baumann, 2002, 267). The description of intonation in a language is generally considered to be problematic since intonation entails high variability and structural complexity. Two approaches are particularly opposing with respect to the description of intonation. While one model considers intonation contours, the other approach determines prominent syllables, from which the intonation contour is interpolated, i.e., the intonation contour is received by connecting the prominent tones. Thus, the first intonation model regards the intonation contour as a holistic figure, whereas the latter first focuses on particular pitch accents, before the entire contour is reconstructed (Gilles, 2005, 7). In the past two decades, an autosegmental-metric model, which is based on the latter approach, has been developed for the description of German intonation (Grice et al., 1996). It is called GToBI (*German Tone and Break Indices*) and will only be briefly outlined here as the phonetic details of this description system are far too specific for the scope of this work.

Basically, there is a distinction between high tones (H) and low tones (L), whereas these are not associated with specific fundamental frequency values, but rather have to be seen in relation to the speaker's vocal range. H and L and combinations thereof build six elementary pitch accents which are postulated in GToBI (Grice & Baumann, 2002, 278). Together with boundary tones - H, L and their combinations - intonation contours can be described. Grice & Baumann (2002, 283) identify seven nuclear intonation patterns in German, some of which can be further subdivided into more fine-tuned nuances. Consequently, the major intonation patterns are falling, rising-falling, rising, level, falling-rising, early peak and stylized downgrading. In GToBI, a falling intonation contour is labelled as H\*L-%, i.e., H\* represents a high pitch accent followed by a low tone (L-) as boundary tone (%). Such an intonation contour occurs with typical declarative sentences. While GToBI labels will

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in syllable-timed languages is characterized by the periodical sequence of syllables, where the temporal duration between two stressed syllables is equal, regardless of the amount of intermediate unstressed syllables (e.g., French).

not be used in this study, it is important to consider that this system enables a very precise description of German intonation. Moreover, this approach reveals that German has seven (or even more) different intonation patterns that are closely linked with specific semantic contexts.

So far, two functions of intonation, namely dividing speech into (prosodic) units and expressing pragmatic meaning, have been discussed. Apart from that, intonation also contributes to the organization of conversations or more specifically to turn-constructions. However, intonation does not solely determine the end of a turn; rather, a combination of several parameters, e.g., gaze, syntax and prosody signals this (Auer, 1996, 58). In conversation analysis, attention has been paid particularly to the interaction between intonation and syntax in order to explain a very essential phenomenon, namely well-organized turn takings in conversations (Sacks et al., 1974, 699). Various investigations refer to the paper of Sacks et al. (1974) confirming the interplay of intonation and syntax in turn organization. For example, Ford & Thompson (1996, 155) show that IU boundaries mostly coincide with syntactic completion in English, whereas this does not hold in the reverse case. According to them, this underlines the prominent role of intonation in the management of turns. For German, Selting (1995, 1996) has contributed fundamentally to research on the significance of intonation in conversations. On the one hand, she has shown that speakers tend to mark the end of a turn both by falling and rising intonation contours, whereas the continuation of a turn is marked by either level or slightly rising intonation contours (Selting, 1996, 375). On the other hand, Selting (1995, ch. 3) has revealed that differing intonation patterns in syntactically equal questions induce different question types. Questions with rising intonation are ‘open questions’ where more extensive answers are expected by the speaker. In contrast, questions with falling intonation are rather restrictive, with the speaker expecting short answers and the interlocutor’s agreement or comment.

While this section emphasizes the significance of prosodic aspects in conver-

sations, the following section deals with a particular aspect of written language, namely how children acquire it.

## 2.4 Literacy acquisition

The term *literacy acquisition* contains several aspects: First, literacy acquisition requires learning to read and write a particular script. In the case of German, on which all elaborations are based in this respect, this involves learning to recognize and to produce the letters of the alphabet. Second, children also need to acquire orthographic rules when learning to read and write. These two aspects are neglected in this work as they are only marginally relevant for the following investigation (for technical reading and writing skills, see Scheerer-Neumann (1996) and respective references; for orthography acquisition, see Bredel et al. (2004); Röber (2009)). Third, literacy acquisition includes the use of structures which are characteristic of written language; this aspect will be central here (section 2.4.1).

Feilke (2003, 178) defines literacy acquisition as learning three different skills: the forms of written language (structural part), the corresponding standard (conventions in writing, including orthography) and writing itself (technical part). With respect to the structural part of literacy acquisition, Maas (2008, 423) points to the fact that one also needs to control the variation in different registers (see section 2.1) in order to achieve elaborate competencies in writing. On that score, literate skills enable an individual to differentiate between registers. In the following, it will be outlined what literate skills (as part of literacy development) include.

### 2.4.1 Literate competencies

For the purpose of this work, it is important to outline how the acquisition of literate structures might proceed. While a number of researchers have developed differing models of writing development, it is commonly assumed that

the acquisition of literate capabilities (in the sense of knowledge about written language structures) begins before children enter school. In school, they primarily receive literacy instruction in order to learn reading and writing in a more technical sense (Feilke (2002, 5), Stoep et al. (2002, 260)).

On the basis of investigations in Germany and Morocco, Maas & Mehlem (2003) show that growing up in a literate society (as is the case in Germany) even predicts a general understanding of the concept ‘written language’. In a society like Morocco, where writing does not play such an essential role, writing is not inherently associated with a symbolic value. The idea of writing as something symbolic is assumed to be a basic requirement in the acquisition of literacy. Their investigation has shown that Moroccan children in Germany utilize structural writing patterns, which they have acquired in Germany, when writing in their L1, which was Berber in all cases in their study. In contrast, children in Morocco rather tend to view writing as not entailing a symbolic function, which is shown by ‘text products’ that are simple pictures of writing which do not convey any meaning. Thus, Moroccan children in Germany are in an advantageous situation compared to some of their peers in Morocco as they have already realized what written language entails.

By being exposed to written language in early childhood, children develop an understanding of what written language implies, with the consequences being diverse. Children growing up in an environment where written text products are part of everyday life learn that these texts usually have to be handled with care. For example, they may not play with the book, the newspaper and the letter lying on the table. Hence, they learn early on that something valuable or important is associated with these written products. Furthermore, children whose parents read books to them are faced at an early age with corresponding language structures that contrast strongly with the language they use in order to communicate with their parents or siblings. These skills are generally described as *protoliterate knowledge* (Feilke (2003, 179), Maas (2008, 353)). Verhoeven & Aarts (1998, 131) find that ‘home stimulation’ appears

to be closely linked with the literacy level the pupils in their investigation acquire. If this experience is missing, children start primary school with only little understanding of the meaning and purpose of written language. Referring this aspect to the discussion of register differentiation, Finegan & Biber (1994) presume that the exposure to a variety of registers fosters corresponding competencies. Less contact with formal written language registers implies a restricted access to structures which are characteristic for these texts. This particularly holds for people with lower educational status, which also suggests that children with such a background are principally at a disadvantage.

The consequences are fairly far-reaching. In Germany, children growing up in a literate environment benefit from their background throughout their school career as children with a less favorable background generally do not succeed in closing the developmental disadvantage. This has been shown in several investigations that revealed that schools in Germany do not seem to offer the resources necessary in order to foster disadvantaged children (Maas, 2008, 481).

The school indeed contributes significantly to the reproduction of cultural inequality because the school is not able to prevent [...] the transgenerational reproduction of social class memberships lifestyles and cultural practices. (Leseman, 1994, 180)

It is obvious that the structures of written language cannot be acquired without corresponding help that naturally has to be provided by the school. That children with a less favorable social origin frequently attend a lower secondary school in disproportionate numbers in Germany might indicate that they are not sufficiently fostered with respect to written language structures (Weishaupt et al., 2010, 13). The *Programme for International Student Assessment* (PISA) confirms that school success in Germany is associated with the socio-economic family background to a comparatively great extent. The correlation of school success and family background is significantly higher than in several other

countries, e.g., Finland (OECD, 2006, 32-35). In section 2.4.2, this will be addressed as well.

Besides the commonly accepted assumption about the importance of contact with written language in early childhood, researchers also agree upon the fact that the development to becoming a proficient writer is rather cumbersome. However, it is not agreed upon which facets are most relevant in this cognitive process. An often-quoted approach in the illustration of writing development is the model developed by Bereiter (1980)<sup>8</sup>. He assumes six partial capabilities which the mature writer masters (Bereiter, 1980, 82):

1. fluency in producing written language
2. fluency in generating ideas
3. mastery of writing conventions
4. social cognition (enabling the writer to take account of the reader)
5. literary appreciation and discrimination
6. reflective thinking

Advanced writing requires the fluent coordination of these partial processes. But before one becomes an advanced writer, he passes through certain developmental stages, of which Bereiter (1980, 83) assumes five. He emphasizes that not all steps need to be passed through and that the steps are not rigidly ordered.

The simplest writing competence combines fluency in writing (technically) and the generation of ideas, which Bereiter (1980, 83) defines as *associative writing*, with the writer going by his flow of thought without taking into account the reader's needs. When associative writing is automated, cognitive capacities become available, which enables the writer to consider writing conventions. Thus, one masters *performative writing*. Once the writer realizes

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<sup>8</sup>Since this model has not been refined or substituted by another approach, it is assumed here to reflect central facts in writing development. Yet, the model assumes a rather linear development in writing ability and does not consider external factors, e.g., home stimulation. These factors, however, can have determining influence on children's writing development (as has also been mentioned above) so that the linearity of Bereiter's model might be affected.

that certain language devices can evoke something in the reader, social cognition comes into play, which Bereiter (1980, 86) defines as *communicative writing*. In *unified writing*, the writer not only takes the reader's needs into account, but his own as well. This means that he is able to evaluate his own text with respect to aesthetic aspects, which results in an important 'feedback loop'. Moreover, one develops a personal style at this stage. Finally, *epistemic writing* "[...] makes possible a kind of extended and involved thought that is almost impossible without writing." (Bereiter, 1980, 88) As a consequence, writing is not merely a product of thought, but can be seen as an essential part of thought.

As with all important scientific contributions, the model in Bereiter (1980) of course attracts criticism. One point of criticism concerns the relative vagueness of linguistic implications as it disregards which linguistic structures can be associated with each stage. Yet, it is arguable whether this was intended to be discussed. Moreover, Feilke (2002) says that it is not clear what triggers the transition from one stage to the next, as well as the fact that the development within a particular stage is rather imprecise. Despite the criticism, the model still contains insightful aspects about the development of writing strategies. Apart from this, the model has not been rejected or replaced by another more powerful approach.

More recently, literate competencies are generally described as a series of problem solving strategies. These strategies result in the development of a capability to solve problems which is fostered by the medium written language (Feilke, 1996, 1180). This approach, however, also draws on Bereiter (1980) as the communicative competence, on which the model is based, is reorganized, restructured and broadened. At the end of this development, writing competence results in epistemic writing (see above). Bereiter & Scardamalia (1989, 89) have formed the concept 'from conversation to composition', which also refers to the conception that writing development is based on communicative competence.

Maas (2008, 416) also emphasizes the fact that the development of literate competencies is based on oral communicative skills. In a more general approach, he differentiates between three developmental stages: the *protoliterate* period (period I), learning the basic structures of written language (period II) and the elaboration of writing competencies as being an experienced writer (period III). Obviously, the transition from period I to II requires explicit instruction as is usually provided by the school (Maas, 2008, 353). The decisive difference between periods II and III can be seen in the use of decentered language structures (see section 2.1). While writing in period II is still situationally embedded, period III is characterized by decentered language, e.g., explicit text organizing devices (Maas, 2008, 420). An early contact with written language makes the access to these language patterns easier.

From a less cognitive and more structural perspective, Feilke (1996, 1183) describes the development with respect to syntactic writing skills. In general, a writer integrates more semantic information into one clause with increasing age. Moreover, he determines a tendency in texts from coordination to subordination to the integration of information at a phrasal level (see section 4.2.2). At the level of textual organization, there is a development from linking single propositions to linkages at textual level, that increases the coherence in a text. The large-scale analysis of texts from German writers of 13 to 23 years of age by Augst & Faigel (1986, 95) shows that the most decisive changes take place at the age of 14. While the amount of coordination steadily decreases with subordinations increasing concurrently, the conjunctions also vary considerably and to a greater extent than before the age of 14. Moreover, deeper integration of information at the phrasal level also occurs more frequently with increasing age, whereas the age of 14 is once more critical in this respect (Augst & Faigel, 1986, 77). Also the studies of Berman (2004) and Strömqvist et al. (2004) come to the result that well-organized hierarchies, increased lexical diversity as well as increased inter-sentential connectivity can only be found in texts from adolescents or adults. Further, Berman (2004, 276) emphasizes that

[...] the ability to make consistent and appropriate distinctions in linguistic register and level of language usage is a late development, which depends on extensive exposure to and experience with literacy-related activities [...].

While the approaches discussed above consider the development of writing skills with respect to children who learn to read and write in their L1, it is important to look at the process of literacy acquisition when a child learns to read and write in his L2. This will be addressed in the following section.

### **2.4.2 Literacy acquisition by bilingual children**

The acquisition of literacy in a bilingual (or multilingual) context can take place in very diverse constellations (see e.g., Durgunoğlu & Verhoeven (1998)). On the one hand, linguistic policies in the respective country form the framework for register differentiation (see section 2.2). In Germany, the formal register is monolingual, i.e., the literate culture of the formal register is restricted to German. This is tightly connected with literacy instruction in schools (see following paragraph) so that functional literacy is solely conveyed in German in the German school system. On the other hand, literacy acquisition in a multilingual context is also dependent on the migration constellation that predominates in the specific country. If the prevalent immigrant population is part of the education elite in their home country, the conditions in the immigrant society greatly differ from those in countries where mainly working class people immigrate. The latter is applicable to Germany for the most part, which means that the majority of immigrants in Germany has a rather low educational background. Their children are in need of educational programs that consider their family background (see above).

Depending on the linguistic policies mentioned above, literacy instruction in bilingual contexts can proceed in different ways: either literacy instruction is monolingual, be it in L1 or L2, or it considers both languages. It then

depends on whether the instruction is transitional (i.e., begins in one language and after a while continues in the other), simultaneous or successive, i.e., L1 or L2 in the beginning and the other language later (Verhoeven, 1987, 11). Here, monolingual instruction in L2 will be considered because it is usually the situation immigrant children have to deal with in Germany.<sup>9</sup>

This implies that the initial situation of children with German as L2 is rather difficult as they are supposed to acquire literacy in a language they might not speak fluently (Wurnig, 2002, 127). That is, these children do not have the same basic requirements as their monolingual peers because written language structures have to be derived from communicative structures, as was also mentioned previously. Moreover, native-like oral competence in the L2 is presumably not sufficient, as exposure to written German (or the L2 in general) has been determined as one crucial prerequisite for emergent literacy (see above, De Carlo (2009, 83)). Yet, it is rather unlikely that immigrant children have been exposed to written German in abundance in their early childhood.

With respect to minority children, various studies have shown that literate competencies in L1 promote access to literate structures in an L2 (Knapp, 1997; Verhoeven & Aarts, 1998). It is widely accepted that both technical skills in writing (and reading) and literate competencies can be transferred from one language to another (Reich & Roth, 2002, 34). However, this assertion is in part too general. Maas (2008, 487) indicates that literate competencies may not be equated with linguistic structures as these in turn are language specific. Rather, the capability to utilize elaborate language structures can be transferred, but the specific language structures that represent such elaborate structures are language dependent. Also, standard structures of written language have to be learned for each language. Bialystok & Herman (1999, 37)

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<sup>9</sup>The pupils of this study indeed had literacy instruction in their L1 Turkish for two years, but it can be assumed that such a brief period of literacy instruction does not result in elaborate literate competencies in L1 as these have been described in section 2.4.1. This will also be addressed in section 5.2.5.

suggest that exposure to written language in early childhood especially fosters the access to corresponding structures in that particular language.

Bilingual children acquiring literacy in their L2 do not usually have recourse to literate structures in the L2 as they have not been exposed to corresponding written language. Moreover, they cannot transfer literate structures from their L1 either because they mostly have not acquired literacy in their L1. The studies of Knapp (1997) and Verhoeven & Aarts (1998) mentioned above compare literacy levels of migrant children who start primary school in the diaspora with lateral entrants, i.e., those who have acquired literacy in their home country but have been going to school in the diaspora for a number of years. Both studies show that lateral entrants generally perform better than their peers who have attended school in the diaspora from the first grade on. They apparently have recourse to the skills they have acquired in their L1 and succeed in utilizing them in their L2. In contrast, minority children receiving literacy instruction solely in their L2 do not have this possibility. They cannot have recourse to a connecting factor regarding their cognitive and linguistic state of development; rather, the new language practices they are faced with in school are detached from their earlier communicative experiences.

Regarding the transfer of literate competencies from one language to another, it may not be concluded that literate skills are only available in L2 if they have been acquired in L1. This was suggested by the (early) Interdependence Hypothesis in Cummins & Swain (1986), the significance of which is recently assumed to be limited (Reich & Roth, 2002, 33). Instead of ruling out the acquisition of literate competencies in L2 if comparable skills do not exist in L1, it is rather assumed that such capabilities in L1 are advantageous for their development in L2.

Consequently, immigrant children in particular seem to need support in order to gain access to the structures of written language in their L2. This needs to be emphasized since grammatical and lexical aspects are still prevalent in promotional programs for these children, although these aspects are not

solely problematic for immigrant children (Cantone & Haberzettl, 2009, 44).

In sum, literacy acquisition is generally fostered if children are able to develop protoliterate skills in their childhood, which are acquired by exposure to written language. Moreover, the development towards being a skilled writer benefits from a steady contact with written language. Generally, it is not agreed upon how writing skills are developed. Yet, it is assumed that writing involves several cognitive processes, whereas advanced writing implies all cognitively demanding processes (e.g., reflective thinking). With respect to literacy acquisition in an L2, the same prerequisites hold as with learning to read and write in L1. Furthermore, it is accepted that general literate competencies are transferable between languages, whereas this may not be confused with the actual language structures, that in turn are language specific.



# Chapter 3

## Data and methodology

The present data for the analysis encompasses spoken and written language of pupils, namely interviews with the pupils and three of their German class tests. At the point of elicitation, the pupils all went in the seventh grade of a comprehensive school located in the Ruhr area in Germany. The area is generally characterized by a high amount of migrants in the population and so is the respective part of the city where the school is located. The data was collected within the project *Literacy Acquisition in Schools in the Context of Migration and Multilingualism* (LAS).<sup>1</sup>

The analysis will include interviews and class tests of four pupils two of whom speak German as L1; the other two speak German as L2, with Turkish being their L1. The amount of four subjects will not allow to enunciate a general theory about the crucial points in literacy acquisition on the basis of the upcoming results. However, due to the very detailed analysis of the respective

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<sup>1</sup>The project is an interdisciplinary co-operation between the University of Osnabrück (IMIS), the Bilgi University Istanbul (Centre of Migration Studies), and the University of Potsdam (SVM, Centre of Language, Variation and Migration). It has been funded by the VW Foundation in the funding cycle “Study Groups on Migration and Integration” from 2007 to 2011. The project has investigated the process of literacy acquisition in schools considering sociological and linguistic aspects. Within the project, German (respectively Turkish) lessons had been observed in a first and a seventh grade by means of video documentation and field observations, the results of which were supported by several linguistic tests with the pupils.

texts, it will be possible to ascertain how spoken and written language structures produced by the pupils differ. Moreover, it will be investigated, where exactly the detachment from structures used in spontaneous speech prove to be problematic when writing a text. Thus, the low amount of subjects is in favor of the in-depth analysis that will allow to exactly determine, where difficulties emerge when writing a text, which is one of the central aims in this work.

### 3.1 Data elicitation

The analysis of spoken language refers to interviews with the pupils which were elicited in the project on literacy acquisition (LAS) mentioned previously. The interviews were conducted in one to one situations, i.e., one researcher interviewed one pupil, during the class time so that the pupils were not forced to spend extra time for this interview.<sup>2</sup> In order to be able to talk without interruptions, the researcher and the pupil went to another room in the school, which was mostly an unused classroom during the time the interview was carried on. Naturally, the conversation was recorded after the pupil had given his consent to it. In fact, it is highly likely that the local conditions in the classroom had an impact on the quality of the record. Consequently, it cannot be ruled out that the acoustic analysis for identifying IUs is partly impaired by this (see section 3.2.2).

Within the LAS project, the interviews mainly aimed for supplementary sociological data about each pupil. Accordingly, the questions of the interviewer are not supposed to evoke specific linguistic structures, but rather have to be seen as a mere sociological tool. As the interviews were conducted by a qualitative approach, a rather general guideline for questions was used since the course of the interview naturally depended on the answers given by each

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<sup>2</sup>The sections of these interviews which are the data basis for the analysis of the pupils' spoken language can be found in Appendix A. There, each section is divided into intonation units, which are numbered serially.

pupil. In order to roughly illustrate what kind of information was intended to receive by the interview, the guideline included among others the following questions:

- Does the pupil like to go to school?
- What kind of graduation does the pupil aspire?
- What might be a possible job he/she wants to carry out later?
- Does he/she like reading? Does he/she write anything else at home apart from homework (e.g., e-mails, journal)?
- How does he/she evaluate German lessons (in comparison to other lessons)? etc.

The sample of questions illustrates that the interview was mainly supposed to find out education-related aspirations of the respective pupil<sup>3</sup> as well as attitudes regarding literacy. Although the interview does not aim at specific linguistic patterns, this does not at all impair the output of the interviews being a rich source for linguistic analyses. Moreover, the interviews have to be regarded as a rather formal register of the pupils' spoken language. On the one hand, this arises from the interlocutor who is not very close to the pupils and a sort of person to be respected. On the other hand, an interview is a very specific type of conversation.

In fact, several characteristics distinguish interviews from a conversation the pupils would carry on with their friends. For example, the role of each interlocutor is obviously assigned so that it is most of the time obvious who takes the turn. Correspondingly, interruptions are rather rare in an interview, whereas they are very usual for an informal conversation. Furthermore, the particular topic of each utterance is predefined by the question of the researcher, which hardly results in a sudden change of the topic initiated by the pupil. This would also be different in other types of conversations. Generally,

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<sup>3</sup>Within the literacy acquisition project, interviews with the pupils' parents were also conducted so that for this purpose, it was also important to find out more about the pupil's aspirations and to align the possibly different statements of the pupil and his/her parents.

certain typical characteristics of conversations will probably not occur in these interviews (e.g., introduction of a new topic by means of a phrase dislocation).

With respect to the research question, the interviews are a suitable tool in order to analyze structures of spoken language that might be the basis for the production of written language. It is assumed that the pupils try to speak more elaborated and thus presumably make use of more literate structures than in an usual informal conversation. Thus, the language used in the interviews can be regarded as one of the more formal spoken registers of the pupils, although the language is produced spontaneously. Compared to narrations for example, spontaneous spoken discourse is characterized by fewer subordinations and a lower lexical variety (Miller & Weinert, 1998, 18).

Here, it should be pointed out that the researchers endeavoured to not only ask question after question, but rather tried to conduct the interview as a conversation in order to make the pupil feel comfortable and particularly in order to make him/her talk. This, however, did not always succeed to a preferable extent. Since the pupils had been knowing the researchers for one school year as they had been visiting their German lessons regularly once a week and additionally met them in other contexts (family interview at home, school yard, etc.), it was assumed that the pupils would not feel intimidated by the interview situation. As for the four pupils chosen for the analysis in this work, there is no obvious evidence that they feel uncomfortable or are inhibited during the course of the conversation. Otherwise, this would assumingly influence the pupil's willingness to talk. Moreover, the pupils have been videotaped once a week in their German lesson and have additionally been recorded several times in connection with the literacy project LAS. Thus, they are quite familiar with such a situation so that the recorder hardly intimidates them.

The difference in the pupils' demeanor also impacts on the selection of pupils that was made for this analysis. When the pupil did not feel entirely comfortable and seemed rather tensed, it cannot be ruled out that this sort

of tension might influence the language output. Accordingly, only those interviews were considered where the researcher can rather safely assume that the situation of elicitation does not inhibit the language output. Of course, this estimation is rather subjective, but the variations in the length of a turn (measured by the number of intonation units (IUs) in a row) support this kind of evaluation so that the selection of pupils is not solely based on purely subjective decisions. However, most of the answers given by the pupils are rather brief so that most of them hardly elaborate on the respective question. This, though, does not entirely hold for the selected pupils of this study.<sup>4</sup>

For the comparison of spoken and written language, three German class tests of each pupil are contrasted with the interviews.<sup>5</sup> These written products emerge from regular German lessons, where five to six class tests are written each school year. The elicitation took place in an usual class test situation. It is assumed that each pupil tries hard to write a good and coherent text since the grades resulting from these tests define the grade in the reports, presupposing that each pupil has a certain ambition. That implies that grades presumably put a certain pressure on the pupils to write as “good” as possible.<sup>6</sup> Thus, the written texts analyzed in this work are assumed to represent one of the most formal written registers produced by the pupils as other texts written by them mainly arise from more informal contexts, such as e-mails or chat.

And exactly this is the main interest of this work, namely revealing those areas where difficulties in writing formal texts occur as the use of literate structures turns out to be too demanding. More specifically, it is supposed to be analyzed in which linguistic domains the detachment from orate structures is successful in the written texts and where it is not.

The written data chosen for the orate-literate analysis in this work encom-

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<sup>4</sup>Further criteria for the selection of the subjects will be delineated in chapter 3.2.2.

<sup>5</sup>The class tests are in Appendix B.

<sup>6</sup>This assumption can be confirmed by the LAS project, where, with respect to orthography, many pupils achieved distinctly worse results in the tests conducted by the project, which had no impact on the pupils’ grades, than in their class tests, where the test was directly relevant to their grade.

passes three class tests, viz., one written at the end of the sixth grade (6.5), the other written in the middle of the seventh grade (7.3), and the last one written at the end of the seventh grade (7.6). In class test 6.5, the pupils had to elaborate a fairy tale regarding three different assignments. First, they had to write a short summary of this fairy tale. The second assignment aimed at an explanation of why the underlying text is a fairy tale by enumerating corresponding characteristics. Finally, the pupils had to create an end for the fairy tale. In class test 7.3, they had to give an account of an event that had taken place at their school, namely a reading competition of six graders, and prepare a newspaper account describing this event. Class test 7.6 referred to a young-adult fiction, which they had been reading during the regular German lessons. First, the pupils wrote a short summary of one chapter. Second, they had to analyze the development of the protagonists in the respective chapter.

One can see that the written data contains diverse text genres. A summary distinguishes itself distinctly from a text section that completes a fairy tale, which at the same time is highly different compared to a newspaper account. On the one hand, the data basis of the class tests does not provide enough text material of one single text genre. On the other hand, this work does not aim at the analysis of a specific genre. Rather, the focus is on identifying linguistic domains where the pupils are able to successfully detach from orate structures in written texts and where they do not - regardless of the text genre. Correspondingly, it seems obvious that the data basis for the analysis encompasses various text genres.

## 3.2 Methodology

### 3.2.1 Selection of subjects

The first step of the interview analysis included the selection of pupils for this study. Since 12 pupils had been interviewed in connection with the literacy project LAS, four pupils had to be chosen for this study in order to be able to

conduct the in-depth prosodic analysis and the explicit comparison of spoken and written language. As mentioned above, it is important to discard those pupils from the study who conveyed the impression during the interview of being intimidated and shy, for this demeanor influences the language output of the pupil to a presumably great extent.

Accordingly, one criterion for the selection of the pupils was that only those sections of the interview were included in this investigation that reflected a rather long turn consisting of at least eight IUs in a row. Drawing the line at eight IUs emerged from the data as ten IUs in a row would have excluded too many pupils, while five IUs in a row do not ensure a certain length of a turn. Thus, it is more or less ruled out that the prosodic analysis considers mere one-word or two-word utterances (e.g., brief answers to a question of the interlocutor) and short exchanges between the speakers. Instead, the analysis can focus on strings of utterances that most likely include units that are grammatically differently structured, i.e. simple discourse elements, truncated clauses, complete (and perhaps even complex) clauses. Schuetze-Coburn et al. (1991, 218) also suggest to calculate the turn length by means of the number of IUs per turn so that short turns containing only two or three IUs will not be considered here. The requirement of analyzing only sections with eight IUs in a row turns out to be a suitable criterion since some of the pupils did not answer very explicitly in the interview, with the answers often only consisting of three to five IUs.

On the one hand, this might indicate that the pupils' language output was impaired by the conversation's circumstances, when around one third of the pupils answered as briefly as possible. On the other hand, it is also surprising that these pupils did not answer to the questions more lengthily, be it due to the interview situation intimidating them or because they really encountered problems to produce coherent utterances in a more formal situation. However, as for the four pupils selected for this study, they produced several strings of utterances consisting of eight or more IUs in a row. At least in comparison to

most of the other pupils, their language output is not completely reduced in the interview situation.

A further criterion for the selection of pupils was their language background; two of the four pupils were supposed to speak German as L1 (GL1), whereas the other two pupils were supposed to speak a different language as native language and acquired German as L2 (GL2). Moreover, in each group (GL1 and GL2), one pupil that receives rather average marks in the German class tests was supposed to be chosen as well as one pupil that receives rather bad marks in the German class tests. Here, it is important to point out that the teacher's evaluation reflected by the grade does not play a role when analyzing the class tests and ranging them by means of the orate-literate scale. Rather, the grades of the class tests (and thus the teacher's evaluation) were a criterion in order to study different levels of pupils as they are seen by the school or particularly by this specific teacher, who, however, represents what is required by the school in German class tests in a seventh grade. After the interviews and the class tests had been roughly analyzed on the basis of these criteria, four pupils (coincidentally one boy and one girl in each group) were selected: PMO, CRA, DPO and HKA (see Table 3.1).

Since different kinds of social data had been elicited for each pupil by the LAS project, it is possible here to briefly outline background information about each case pupil. PMO comes from a medium educated family of the middle-class and apparently aims for a higher school degree, obviously supported by his parents. He speaks German as L1. After primary school, he received

class test level	GL1	GL2
+	PMO ( $\sigma$ )	DPO ( $\sigma$ )
-	CRA ( $\varphi$ )	HKA ( $\varphi$ )

Table 3.1: Selected subjects: average (+) or rather bad pupils (-) with German as L1 or L2 (GL1, GL2).

a recommendation for ‘Realschule’ (middle school) or comprehensive school.<sup>7</sup> CRA, the other pupil with German as L1, comes from a low educated family, with the mother being a single parent. Although CRA concedes that she wants to leave school with the highest school examination (in Germany: *Abitur*), two teachers who were asked to roughly estimate the pupils’ school career do not think she is capable of making the senior grades without problems. CRA was recommended to go either to ‘Hauptschule’ (lower secondary school) or comprehensive school after primary school.

Contrarily, DPO, his father and his two teachers being interviewed are all convinced that DPO will graduate from secondary school with the highest school leaving examination (*Abitur*), although he only had a recommendation for comprehensive school after primary school. His family background can be described as low/medium educated. According to his father, DPO began to learn German from the kindergarten on, whereas the language situation in DPO’s family is not entirely clear-cut. While both parents speak Kurdish as L1, the family languages are claimed to be Turkish and German. In fact, the LAS project ascertained for DPO a rather minor competence in Kurdish and native language competence in Turkish. Finally, HKA comes from a low educated family, where the parents speak Turkish with their children, while the four children partly speak German among themselves. HKA herself says that

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<sup>7</sup>In Germany, pupils are segregated after four years of primary school. Generally, the primary school makes a recommendation which secondary school type they regard as appropriate for the respective pupil. Eventually, the parents may decide to which school their child goes - even if it does not correspond to the school’s recommendation. There are four types of secondary schools: ‘Hauptschule’ (lower secondary school), ‘Realschule’ (middle school), ‘Gymnasium’ (academic high school) and ‘Gesamtschule’ (comprehensive school). The comprehensive school has a special status in the German school system as all types of school-leaving qualifications can be made at this school (from lower secondary school-leaving qualification to high school diploma). Accordingly, pupils with recommendations for ‘Gymnasium’ as well as pupils with lower secondary school recommendation go together to a comprehensive school. Practically, only very few ‘good’ pupils go to comprehensive school as the parents usually prefer to send their child to a ‘Gymnasium’, where the learning conditions are assumed to be better. This is reflected by the composition of the class of the selected pupils: there is no child with a recommendation for ‘Gymnasium’ in this class.

she learned to speak German properly only in the first and second grade of primary school as she had been going to kindergarten for only one year. Moreover, she had Turkish lessons in the first two years of primary school. While HKA herself casually claims to make the highest school leaving examination without having specific job aspirations, her class teacher rather considers her for an advanced O-level. She was recommended to go to ‘Realschule’ (middle school) by her primary school teacher, but the respective middle school refused to give her a place.<sup>8</sup>

### 3.2.2 Determining IUs

The interviews lasted between 40 and 65 minutes and had already been transcribed in the literacy project so that for this work, it was first of all important to locate those sections where the pupil produced eight or more IUs in a row. In order to consider the same amount of IUs for each pupil, around 150 IUs per pupil were analyzed. By this means, roughly 10 to 12 turns in each interview were chosen with different topics being discussed in the corresponding sections. Moreover, the amount of 150 IUs represents a number that most likely rules out the possibility that only equally structured IUs were selected. Rather, a certain variety of structures in the IUs can be expected.

After the respective sections had been chosen, IUs were determined by means of the software EMU Speech Database System<sup>9</sup>. It is possible to identify different prosodic characteristics that determine IU boundaries as it will be delineated below. At each boundary, not all prosodic characteristics can be found, but several cues are always indicative of setting an IU boundary: “[...], the more features that coalesce at any point, the stronger (‘more prototypical’) the boundary will be, but an IU boundary may also be perceived when only one or two features occur.” (Schuetze-Coburn et al., 1991, 227) In this section,

<sup>8</sup>This might corroborate that the respective comprehensive school might be seen as a refuge for pupils who did not find a ‘better’ school, which correlates with the class teacher’s estimation that the school does not exceed the level of a lower secondary school.

<sup>9</sup>For more information about this software tool, see <http://emu.sourceforge.net/>.

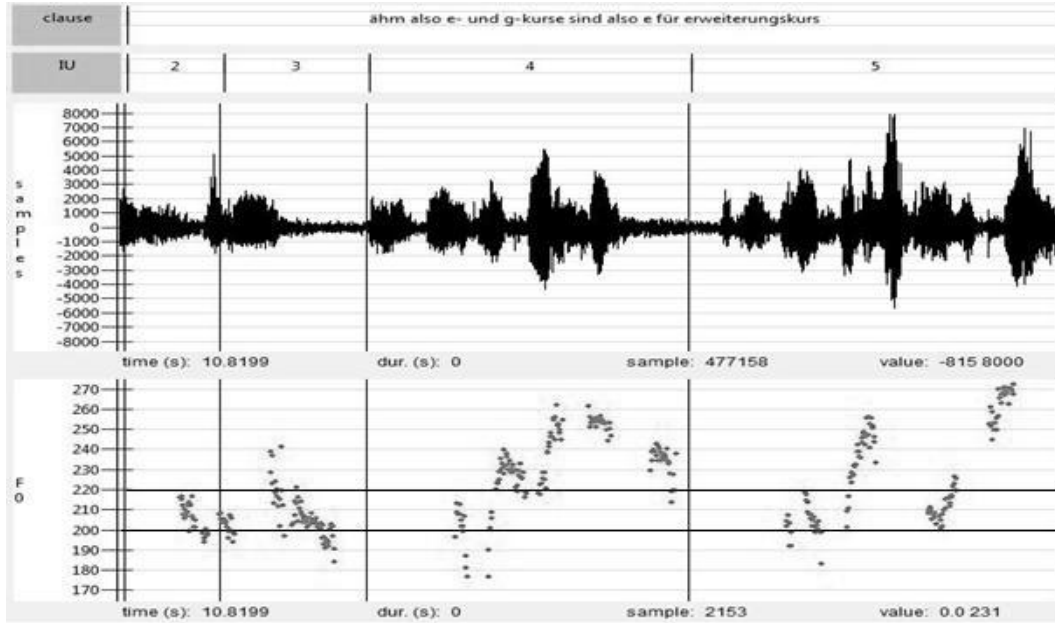


Figure 3.1: Example of pitch reset for speaker PMO in utterance A2-5, same for following figures.

each criterion for the division of IUs will be discussed and illustrated by an example of the study's data.

One of the most frequent and most distinctive features of an IU boundary is represented by **pitch reset** (Chafe, 1980, 14), i.e., an IU mostly begins with a frequency that is situated around the fundamental frequency of the respective speaker. Often, this coincides with an uprising of the fundamental frequency at the beginning of an IU in contrast to the end of the previous unit so that IUs tend to start with a higher frequency than they end. Figure 3.1 shows a sample of PMO, where each IU begins (vertical lines) within the frequency range of 200Hz to 220Hz, indicated by the two horizontal lines in the F0 track of the figure. Each example taken from the data is labeled by the respective acronym of each pupil which is followed by the label of the interview section, which is an upper case letter. The cardinal numbers indicate the IUs, which

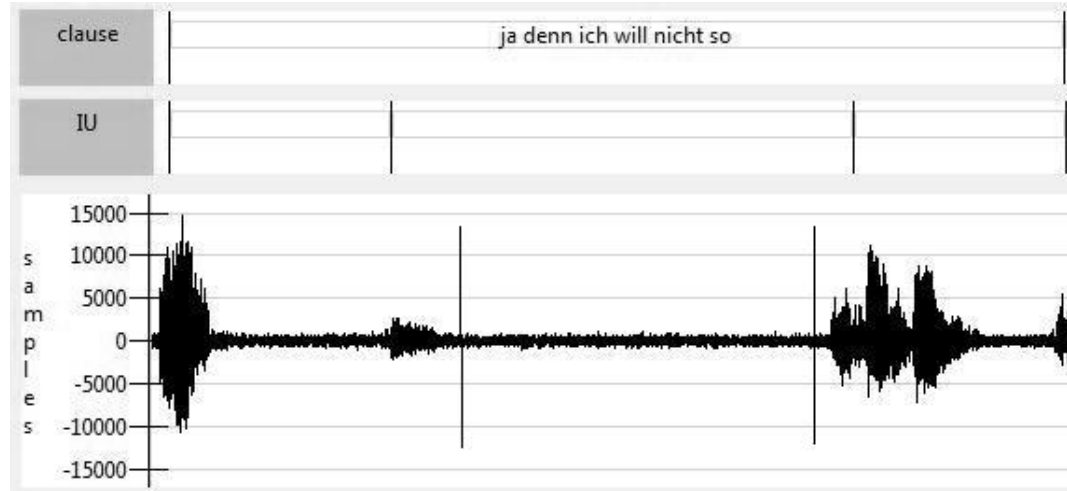


Figure 3.2: Long pause between IUs in DPO D1-3.

are consecutively numbered.<sup>10</sup>

In addition to pitch reset, **pauses** are also a very crucial indicator for IU boundaries, whereas the length of pauses varies considerably (Tao, 1996, 36). In Figure 3.2, the pause (indicated by the two vertical lines in the acoustic wave form) lasts around 2.2 seconds, where it is rather obvious that this indicates a boundary. According to Du Bois et al. (1993, 61), pauses that lasts longer than 0.7 seconds are long pauses in English, while they regard pauses with a length between 0.3 and 0.6 seconds as medium, and those shorter than 0.3 seconds as short pauses.

In most of the contexts, the pauses are much shorter and can only be identified by means of the acoustic signal displayed in EMU. But since adjacents IUs are always divided on the basis of several prosodic factors, short as well as long pauses are only one cue for a boundary. Moreover, it is noteworthy that not every pause is indicative of an IU boundary as “[...] pauses may occur unit internally [...] and sometimes there is no pause between two units” (Tao,

<sup>10</sup>In the following illustrations, there are few examples that do not have a label. Then, the example is not taken from the present data, but simply created by way of illustration.

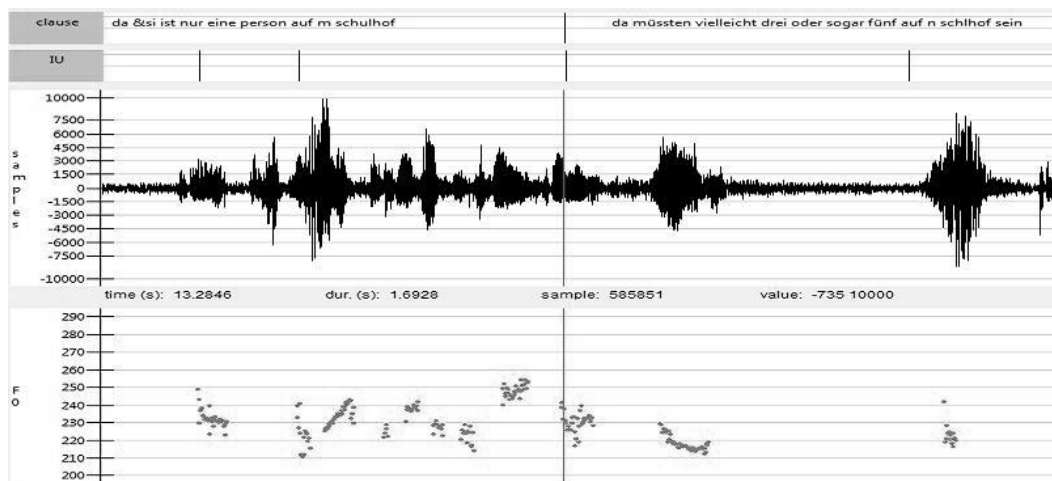


Figure 3.3: IU boundary without a pause in CRA G106-107.

1996, 38). While the latter occurs several times in the interviews, which is exemplified in Figure 3.3 with the vertical line in the acoustic wave form and the F0 track marking the boundary of two IUs not indicated by a pause, unit internally pauses cannot be found in the data of this investigation.

Two further important criteria for identifying IU boundaries are represented by the phenomenon of **anacrusis**, i.e., a sequence of unstressed, quickly spoken syllables at the beginning of an IU, and by **final syllables being lengthened** (Gilles, 2005, 5). Both features are indicators that occur frequently when dividing the IUs and are illustrated in Figure 3.4. Here, the numbers in the level *IU* indicate the number of syllables per section, whereas the first two sections with six and two syllables form one IU, which is followed by another IU consisting of eight syllables. The first section serves as an example of anacrusis, where six syllables are uttered in 0.766 seconds (*ja also ich fand das* ['ja.al.zo.ɪç.'fan.tas]). In contrast, the end of this IU (section marked by “2”) consists of two syllables articulated in 1.022 seconds (*schuljahr* ['ʃʊl.ja]), which is almost twice as much time as at the beginning of this unit, where, however, three times as many syllables are uttered. Thus, this IU can be

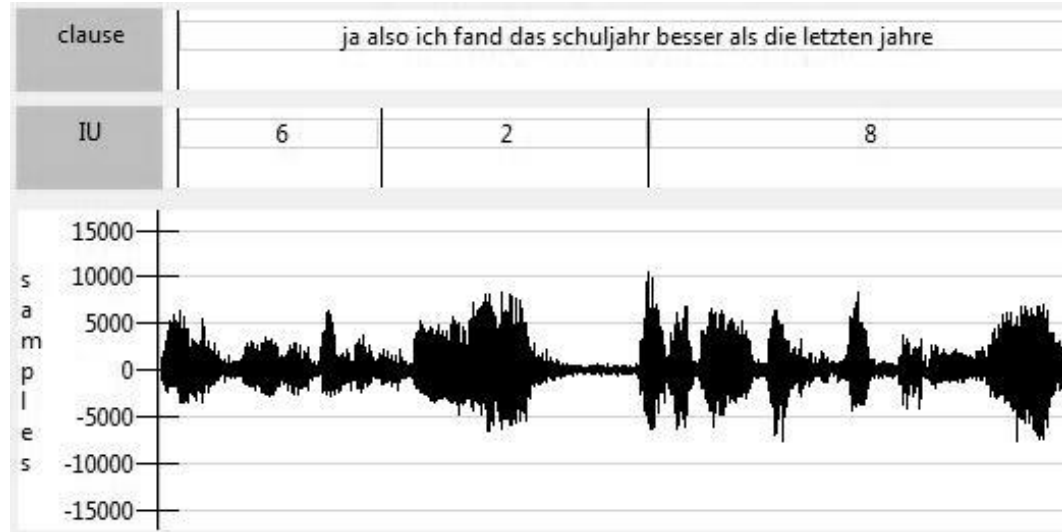


Figure 3.4: Anacrusis and lengthened final syllable in CRA A1.

seen as an illustrating example of anacrusis at the beginning of an IU and lengthened syllables at its end. For comparison only, the section consisting of eight syllables (*besser als die letzten jahre* ['bɛ.sɐ.alts.di.'lɛts.tɪ.'ja.ɐə]), lasts 1.718 seconds, which represents a rather average amount of syllables for its length. It becomes obvious that six syllables in 0.766 seconds and two syllables in 1.022 seconds are both extreme considering the speech rate in these two IUs.

Finally, another very important cue for identifying an IU is reflected by “a stretch of speech uttered under a single coherent intonation contour” (Du Bois et al., 1993, 47). The example in Figure 3.5 contains three IUs, of which the last two IUs are interesting here: the second IU (54) exemplifies a simple and short string with falling intonation, while the following unit (55) is longer and more complex in terms of the intonation with a rising-falling intonation contour.

As mentioned previously, not every criterion discussed above occurs at each IU boundary. However, a set of these criteria are usually found when determining the IUs. Pitch reset and an unified intonation contour are rather frequent,

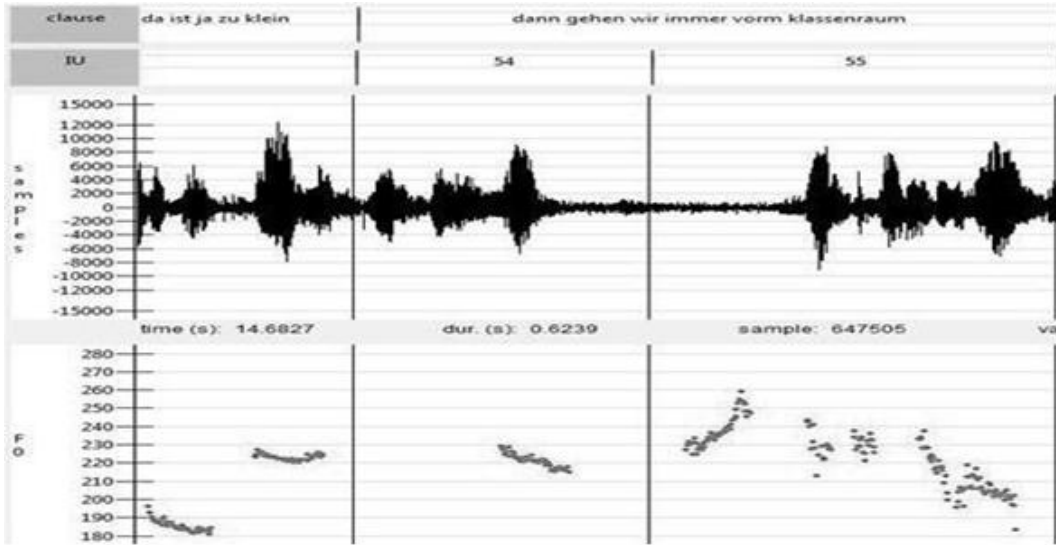


Figure 3.5: Pitch contours in HKA E54-55.

and thus a strong combination of factors for a prosodic boundary. After the IUs were identified in each interview, they were grammatically described by means of several IU categories, which will be outlined in the following section.

### 3.2.3 Grammatical structures in IUs

The analysis of grammatical structures in IUs complies with the methodology of Tao (1996). While the general approach is rather similar to that of Tao (1996), the categories do not completely coincide, not least due to the different languages (Mandarin and German) being described.

Before going into detail about the different grammatical structures in IUs, it has to be pointed out that the point of departure is the distinction between IUs containing a complete clause (clausal IUs) and those that do not contain a complete clause (non-clausal IUs). Thus, it is first of all important to clarify what determines a clause and what distinguishes it from a sentence. In this work, a clause is understood as a syntactic construction consisting of a predi-

cate, its core arguments, and potential adverbials. A clause is not necessarily independent as finite and infinite subordinate clauses also contain a predicate and core arguments; still, they are dependent on the main clause. In contrast, a sentence is always a syntactically independent construction (of course also containing a predicate and its arguments), that has its own illocutionary force. This reflects an aspect generally assumed in order to distinguish subordinate clauses from main clauses as subordinate clauses lack an illocutionary potential (Lehmann, 1988; Foley & Van Valin, 1984, 239).

The following list shows the different types of grammatical structures in IUs as they are classified in this work. Subsequently, each category is presented and illustrated by means of an example of the present data.

### 1. Clausal IUs

- (a) Full clausal IUs
- (b) Mixed clausal IUs

### 2. Non-clausal IUs

- (a) Prosodically split clausal IUs
  - Finite prosodically split clausal IUs
  - Infinite prosodically split clausal IUs
- (b) Phrasal IUs including NPs, PPs, AdvPs, Discourse elements, Hesitation elements, Connectives, and Others
- (c) Truncated IUs

**Clausal IUs** include all units that consist of a complete clause, i.e., the predicate with its arguments and potentially adverbials. Vice versa, this means that an IU with a predicate that misses at least one argument is not rated as a clausal IU. A clausal IU, however, is still classified as clausal, when related clausal adverbials occur in an adjacent IU. The nature of these adverbials will

then determine the IU type, which will be illustrated in the following paragraphs. In the samples, each line represents an IU to the end of which a punctuation mark displays if the intonation contour indicates a final (marked by a period), a non-final (marked by a comma), or a truncated IU (marked by two dashes: - -). For convenience, these transcribing conventions are adopted from Du Bois et al. (1993).

- (3.1) *wenn wir das nicht verstanden*  
 when 1PL PRO.DEM NEG understand.PTCP  
*hat-ten,*  
 have.PST-PST.1PL

*dann kam die immer zu uns.*  
 then come.PST.3SG PRO.DEM always to 1PL.DAT  
 ‘When we had not understood it, she always came to us.’

[HKA D42-43]

Sample 3.1 shows two **full clausal IUs**, each containing a complete clause. Here, the two prosodic units coincidentally form a complex sentence with a subordinate clause in initial position. **Mixed clausal IUs** differ from full clausal IUs in that they contain an additional element that syntactically does not belong to the actual clause. For example, this element can be another clause as in 3.2 or a conjunction initiating the following clause as in 3.3.

- (3.2) *natürlich schrei-en die manchmal wenn das*  
 of course yell.PRS-3PL PRO.DEM sometimes when PRO.DEM  
*zu schlimm ist.*  
 too bad COP.PRS.3SG  
 ‘Of course, they yell sometimes, when it is too bad.’

[HKA C35]

(3.3) *ich hab nur e-kurs-e denn,*  
 1SG have.PRS.1SG only advanced course-PL because

*das ist auch schwierig-er als*  
 PRO.DEM COP.PRS.3SG also difficult-CMP than

*g-kurs-e.*

basic course-PL

‘I only have advanced courses, because it is also more difficult than  
 basic courses.’

[DPO B18-19]

Thus, IUs containing a complete clause are either coded as full clausal or as mixed clausal IU. In case of the latter, IU internal elements belong to the adjacent unit. By contrast, IUs that do not contain a complete clause are generally labeled as non-clausal IUs, that are divided into prosodically split clausal, phrasal, and truncated IUs.

As opposed to Tao (1996, 60), who treats the structure of each IU separately so that two IUs forming one clause are not distinguished from other **non-clausal IUs**, in this study, those cases, where a clause spans two prosodic units, are considered in a particular category, called **prosodically split clausal IU**. On the one hand, it is more consistent to judge each prosodic unit separately with respect to its grammatical structure. On the other hand, the specific category of prosodically split clausal IUs reflects that the clause spans two or more prosodic units. Accordingly, this IU type does not convey the erroneous impression that the clause is uttered in one prosodic unit, but rather explicitly demonstrates the amount of clauses that are expressed in more than one IU. At the same time, they are not counted as clausal IUs. Moreover, in spoken language, it is simple for the addressee to perceive the parts of a clause split in two IUs as belonging together (Chafe, 1979). Hence, it seems to make more sense to treat prosodically split clauses in a specific category.

Still, it is important to distinguish the different parts of the clause from each other by defining two subcategories of the unit type prosodically split clausal

IU. One of the units forming a clause contains the predicate of the corresponding clause; as a consequence, the IU that includes the finite predicate (even if exclusively consisting of it) is determined as the **finite prosodically split clausal IU**. Due to the typical German brace constructions, the left brace containing the finite verb is frequently prosodically separated from the right brace with the infinite part of the predicate (see example 3.4). IUs that contain the infinite element of the predicate are classified as **infinite prosodically split clausal IU**; thus, the first line shows an example for a finite prosodically split clausal IU, while the second line represents an infinite prosodically split clausal IU.

(3.4) *ja und das hat mir,*  
       yes and PRO.DEM have.3SG.PRS 1SG.DAT

*besser gefallen.*  
 good.CMP like.PTCP  
 ‘Yes, and I preferred it.’

[CRA A7-8]

Other than that, there are also non-clausal IUs that do not include a verbal element. These IUs are classified as **phrasal IUs**, which include various subclassifications which are dependent on the element that is uttered in the corresponding IU. Hence, the subcategories are very diverse ranging from NPs to AdvPs to discourse elements or connectives. Example 3.5 shows a phrasal IU with the third IU representing the core of this utterance, i.e., a finite prosodically split clausal IU. The first line shows an IU that is classified as phrasal with a further specification to *hesitation element*. The second IU in 3.5 contains the subject of the following finite prosodically split clausal IU. Obviously, this IU is classified as a phrasal IU with the subclassification *NP*.

(3.5) *ähm,*  
       um

*die arbeit-en,*  
the.PL class test-PL

*war-en nicht so gut,*  
COP.PST-PL NEG so good  
'Um the class tests weren't that good.'

[DPO B20-24]

By means of this example, it also should be made clear that the type of phrasal IUs is determined by the form, rather than the function of the phrase. Accordingly, there are up to seven (five further distinctions apart from the hesitation element and the NP) different phrasal IU types in the data, each of which is exemplified in the following examples. Thus, example 3.6 shows a phrasal IU containing a PP in line four.

(3.6) *und dann hat dann,*  
and then have.PRS.3SG then

*hab ich,*  
have.PRS.1SG 1SG

*einwurf gemacht,*  
throw-in do.PTCP

*bei-m fußballspielen.*  
at the-DAT.SG.N play soccer.NMLZ  
'and then has, then I had a throw-in when playing soccer.'

[PMO E103-106]

A phrasal IU that contains an AdvP can be found in the following example in the first line.

- (3.7) *dann,*  
then

*werd*                      *ich*    *wach,*  
become.PRS.1SG   1SG   awake  
'then, I wake up.'

[PMO F142-143]

Moreover, there are IUs that simply consist of a *discourse element*. Due to the interview situation, these elements predominantly occur at the beginning of a turn, as it is illustrated in the following example.

- (3.8) *ja,*  
yes

*ich*    *kauf*                      *immer meistens von der*  
1SG buy.PRS.1SG   always   mostly   from   the.DAT.SG.F  
*cafeteria,*  
cafeteria.F

*brot*    *oder*    *wasser.*  
bread   or   water  
'Yes, I always mostly buy a sandwich or water from the cafeteria.'

[HKA L130-132]

Another frequent category is reflected by IUs that merely consist of a *connective*, such as in 3.9, line two.

- (3.9) *ich*    *muss-te*                      *ja*            *erst freund-e*    *und so find-en,*  
1SG   have-PST.1SG to   PTCL   first   friend-PL   and   so   find-INF

*und,*  
and

*ja hab ich auch schnell gefunden,*  
 well have.PRS.1SG 1SG also quick find.PTCP  
 ‘I firstly had to find friends and well, I found [them] quite quickly.’

[CRA B21-23]

While these non-clausal IU types occur frequently across the data, there are also four instances that rarely occur or that do not fit into one of the categories discussed so far. These IUs are collected in the category *Others* including adjective phrases, a hedge, an interjection, one disconnected verbal phrase, and a particle of a particle verb.

The final category of non-clausal IUs are **truncated IUs**. In example 3.10, CRA truncates the IU in line one in the middle of the word, which is indicated by the ampersand.

(3.10) *wenn man jetzt zum beispiel nach &Engla - -*  
 when one now for the.DAT.SG example to &Engla

*also wenn man ja jetzt englisch hat,*  
 well when one PTCL now English have.PRS.3SG  
 ‘When you for example [go] to &Engla- - well when you have English  
 now, you know [...]’

[CRA C34-35]

By means of the different IU types, the various grammatical patterns within the IUs can be described and classified rather explicitly, whereas, of course, certain generalizations take place. For example, it is not possible to distinguish between the different types of NPs (e.g., NP with a lexical vs. NPs with a pronominal head) occurring in a non-clausal IU classified as NP. However, this more general classification is in favor of clarity by not making too many subclassifications and also, it is sufficiently explicit in order to distinguish the different types of phrases. Moreover, NP types will be considered more explicitly during the orate-literate analysis, which is discussed in section 4.1.

### 3.3 Statistical analyses

The basic statistical analysis refers to the description of the results by means of tables and charts. The tables simply show the absolute numbers or/and the percentage values of the respective analysis categories. The charts show the percentage values of an analysis category in order to estimate to what extent a pupil makes use of a category compared to the other categories. In doing so, it is also possible to compare the pupils with each other and to determine which category is used most frequently.

Certain aspects of the analysis also require inferential statistics. Basically, it can be scrutinized if the distribution of linguistic features in one linguistic domain is random or not. If it is not, it can be stated that the use of linguistic features is dependent on the register, when considering the different distributions in the spoken and the written data. Moreover, it will be proved if the pupils produce orate and literate structures to a statistically significant extent by comparing the pupils with each other. For these purposes, the chi-square test will be used. The alpha level is set to 5%, which is generally accepted in linguistic investigations; thus, the alpha level is  $p < 0.05$ . The corresponding degree of freedom is given by  $df$ . For the calculation of chi-square, the calculator of Preacher (2001) is used in this study.



## Chapter 4

# The concept of an orate-literate scale

After the basic prosodic analysis of spoken data had been discussed in chapter 3, here, the more profound structural analysis of spoken and written data will be illustrated. The overall aim of developing a tool for analysis is to systematically compare structures in spoken and written language.

The pivotal theoretical framework for the model of analysis illustrated here harks back to the terms ‘orate’ and ‘literate’ as they have been shaped by Maas (2008, 2010). Before expanding on the two central categories ‘orate’ and ‘literate’, it is important to point out that other influential studies that have influenced research on the nature of spoken and written language will also be considered here (see also chapter 2). Only when interweaving the various strings of research in this field and their corresponding insights will it be possible to meet the multi-layered dimensions of spoken and written language in terms of a systematic comparative approach. However, the basis for this approach is given by the scale of orate and literate structures the constitution of which will be outlined in the following two sections.

## 4.1 The categories *orate* and *literate*

The model exemplified in chapter 2 with its crucial differentiation of *medium*, *function*, and *structure* reveals the different domains that have to be considered when analyzing language practices. The categories *orate* and *literate* refer predominantly to the structural part of this model, although their concepts are much more multi-layered. The various strings that Maas (2010) considered when developing these concepts will be outlined here in order to demonstrate that the terms *orate* and *literate* and particularly what is behind them represent an ideal framework for the analysis and the comparison of spoken and written language.

As usual, everything begins with language acquisition, which always takes place within the terms of social interaction. The development of language skills goes hand in hand with broadening the social space where the individual interacts. As a consequence of various social interactions, the individual is faced with different language registers which are dependent on the corresponding domain: the intimate register in the family characterized by orate structures vs. the formal register in public institutions, where literate structures predominate language practices. The broader scope of social interactions leads to a decentered language practice, which requires the elaboration of the acquired language resources entailing the use of literate structures (Maas, 2010, 13).

Against this backdrop, the specific social interaction determines whether the individual has recourse to orate or to literate structures. Thus, the differentiation between orate and literate is a matter of the social conditions of communication. In other words, language structures are “socially specific” (Maas, 2010, 14) as they are closely related to ongoing social interaction. This has to be seen in terms of what the particular communication conditions entail since oral on-line language production of course strongly deviates from the process of writing, which allows the writer to edit his wording as frequently as he regards it as necessary. Hence, orate and literate structures hark back to constraints or possibilities that communication conditions imply. While orate

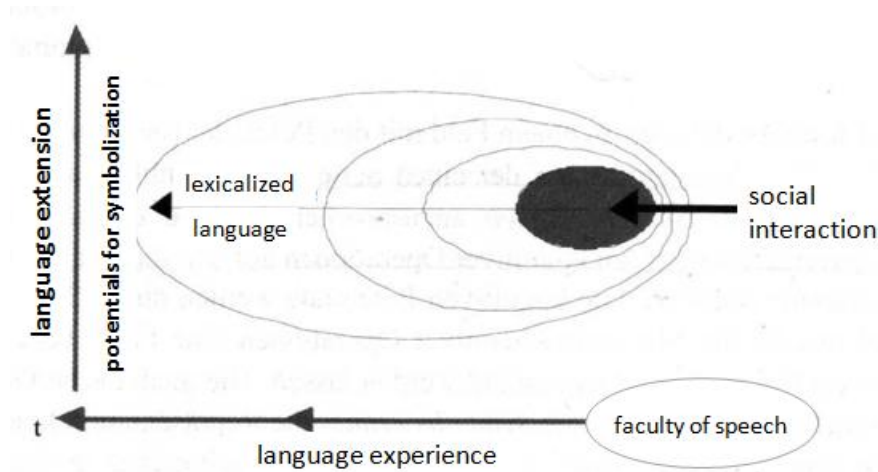


Figure 4.1: Language elaboration, adopted from Maas (2008, 266).

structures are associated with the interaction with a specific counterpart, i.e., the interlocutor, literate structures generally have to enable an unknown reader to understand the text.

The term *language elaboration* (German: Sprachausbau) plays a central role in this line of argument since it is inextricably connected with the acquisition of literacy, i.e., elaborate (and correspondingly literate) structures are developed in the context of literacy acquisition (see Figure 4.1). Thus, literate structures represent the resource of language use that enables a speaker to make use of structures that are independent of the situation. Still, these communicatively independent or decontextulized structures have to be developed from communicative structures; in other words, complex language structures are *booted* from simpler ones. The metaphor *booting* is used by Maas (2008) in order to illustrate that the recourse to literate structures is dependent on communicative language structures that are acquired before and during the process of literacy acquisition.

Correspondingly, the concept of *booting* in terms of language elaboration is tightly connected with language acquisition, whereas it is important to treat

literate articulation as a separate dimension in the development of language skills, rather than as a phase in this development. According to Maas (2010, 61), children of five or six years of age do not possess resources that would allow them to *boot* complex literate structures, not even in oral language use. Rather, this ability has to be developed during the years at primary school, i.e., between the ages of six and ten. Moreover, the studies in Strömquist & Verhoeven (2004) indicate that certain literate structures are only fully developed after puberty, which is a very interesting and important finding for this study that should be kept in mind throughout the entire analysis. The fact that literate structures need to be acquired by each child or adolescent also implies that the term *literate* has to be regarded as relative since the text structure is literate, when it exhausts the accessible literate resources to the maximum (Maas, 2010, 62). Emphasizing that literate structures have to be acquired within the development of general language skills, this also means that a primary-school pupil cannot possess the same literate structures as an adult.

Based on the possibility of elaborating language structures, it makes sense to grasp literate structures as a scalar dimension, which also represents the pivotal approach of this study. The scalar characteristic of literate structures is also reflected by the fact that literate structures represent structures of the symbolic field as it was shaped by Bühler (1934) (see section 2.1): The recourse to literate structures is facultative for each utterance as well as the extent to which one makes use of these structures. Accordingly, language elaboration implies different levels of complexity with respect to literate articulation. However, it is first of all important to pinpoint the difference between orate and literate structures.

As mentioned previously, the conditions of communication crucially determine the constitution of language structures that are independent of the medium. Thus, orate structures are characterized by the interaction with a specific counterpart, the conditions being subject to the restrictions of on-

line language production and reception. The situation in which a particular conversation is conducted basically predefines the shared knowledge of the interlocutors. These three dimensions are reflected by the language structures that are used in the specific context. For example, it can simply be referred to the knowledge the individuals who are interacting have in common by means of deixis and anaphora. Biber & Conrad (2009, ch. 2) determine situational characteristics that have to be considered when describing register differences as each communication situation impacts on the language structure (see also below in the discussion of Table 4.1).

The decisive difference between *orate* and *literate* structures is the syntactic form of a sentence; *literate* structures are uttered in the form of sentences, *orate* ones are not. Transferring this basic characteristic to the process of analysis, this means that *literate* structures are segmented on the basis of syntactic patterns, while the segmentation of *orate* structures rests upon prosodic cues (see section 3.2.2). Moreover, *orate* structures are also characterized by a restricted processing capacity: “[...] an intonation unit will express no more than one new concept.” (Chafe, 1987, 49) Consequently, this finding impacts on fundamental structural aspects as *orate* structures are characterized by the fragmentation of language, whereas *literate* structures integrate several pieces of information into one syntactic structure. Chafe (1982) refers to this phenomenon as the *fragmentation* vs. the *integration* of language structures.

Reflecting the different levels of syntactic complexity, the extent to which information is integrated into a syntactic unit can vary. Equally, this applies to the concept of the symbolic field which the speaker can also have recourse to in varying degrees. This underlines that the concept *literate* has to be regarded as a scalar one. At the same time, this implies that *orate* structures are not reduced, but rather that *literate* structures represent elaborate ones. *Literate* structures obligatorily occur in the form of sentences, that can optionally be elaborated by integrating information.

Table 4.1 illustrates a highly simplified overview of the decisive character-

	<b>orate</b>	<b>literate</b>
Syntax	- sentence	+ sentence (optionally various literate elaboration levels)
Function	communicative	depicting
Language dimension	deictic field	symbolic field
Typical communication conditions	interacting with a specific counterpart	recipient is an unknown reader; no interaction
	on-line language production and reception	diverse editing is possible
	context bound communication	context independent verbalization

Table 4.1: Comparative Overview of the concepts *orate* and *literate*.

istics of orate and literate structures for the sake of clarity and thus, it by necessity cannot be absolutely precise. As a consequence, the table refers to “extreme values” that clearly point out the differences between orate and literate structures. The dimensions of this overview listed in the left column focus on those aspects that are particularly crucial for the distinction of orate and literate structures. Each of them has been discussed by previous research on spoken and written language.

To begin with, Maas (2010, 118) points out that the syntactic form of sentences makes a decisive difference between orate and literate structures, with orate structures not consisting of sentences. Moreover, he also refers to the varying functions of orate and literate utterances: While orate utterances are generally supposed to establish or maintain communication, literate utterances always convey information and are thus interpreted as depicting (Maas, 2010, 27). The aspect of the language dimension was taken into account early by Bühler (1934).

Finally, the communication conditions impact on many linguistic aspects

when describing register differences. Biber & Conrad (2009, 33) point out that the identification of situational characteristics is crucial for the analysis of registers as “[...] linguistic differences are functionally associated with situational characteristics [...]”. They developed a framework containing fundamentally important characteristics of communication situations (Biber & Conrad, 2009, 40). Expanding on their framework would go beyond the scope of this work, but in order to give an example, they focus on the participants involved and their relationship, on the production circumstances (real time vs. planned or edited) and the communicative purposes. Altogether, these aspects determine how the addressor structures his utterances. In Table 4.1, the examples given for typical communication conditions are rather generalized characteristics in order to emphasize the specific differences between the extremes of orate and literate communication.

## 4.2 The orate-literate scale

The pivotal assumption of this work is that the categories ‘orate’ and ‘literate’ build a scale in which the different language structures can be ranged. Maas (2010, 46) also claims that the category ‘literate’ is scalar, whereas he focuses on syntactic characteristics. The approach of this investigation, however, is not supposed to solely consider syntax, but rather will be broadened regarding further important structural aspects, that are crucial for the distinction of orate and literate structures. All these aspects have been discussed by many linguistic studies on spoken and written language. In this respect and in addition to Maas (2010), the studies of Tao (1996), Chafe (1982), and particularly Biber (1988) and Miller & Weinert (1998) represent the basis on which different linguistic categories are ranged in a corresponding scale.

The subsequent analysis regards three linguistic domains, i.e., *referents*, *clause structure*, and *linking devices*, each of them is assumed to be responsible for another area revealing the differences between orate and literate structures.

In the following sections, each characteristic will be discussed, justifying its relevance for the orate-literate analysis. Moreover, each section will explain in more detail how different linguistic forms are classified in the orate-literate scale.

The analysis of different registers could consider various other linguistic features, e.g., word classes, verb-associated features with their diverse inflectional categories of tense, mood, etc. Biber & Conrad (2009, 78-82) give a very comprehensive list of aspects that might be analyzed while comparing two registers. In this work, however, the categories *orate* and *literate* are central in the analysis so that the focus is on structural aspects. In this respect, referents, clause structure, and linking devices represent ideal linguistic domains, which will be shown in the following sections.

### 4.2.1 Referents

One of the most decisive differences between speech and writing that has been discussed in various scientific works is reflected by the different linguistic means that establish reference. Lambrecht (1994, chap. 3) elaborates on different linguistic expressions by which the speaker refers to an entity. The choice of the linguistic device is closely linked with the mental state of the corresponding referent in the interlocutors' minds, i.e., the information states. Two categories in particular have a bearing on the choice of linguistic expression, namely *identifiability* and *activation*. By means of the former, the speaker assesses whether the referent can be identified by the hearer or not; the latter, though, reflects the speaker's assessment of whether the referent is activated or has to be activated in the addressee's mind (Lambrecht, 1994, 76). Both aspects, thus, determine how the addressor linguistically codes the referent.<sup>1</sup>

Generally, various types of phrases and clauses establish reference. Since in

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<sup>1</sup>Further elaborations on information states can be found in Chafe (1987, 1994) or Lambrecht (1994) as a detailed illustration would go beyond the scope of this discussion. More recently, Baumann (2006) and Baumann & Riester (submitted) refine this approach particularly considering intonational aspects.

the present data of this study, only NPs are used for this purpose, the analysis will only consider the different forms of NPs varying from NPs with a full lexical noun to NPs with a pronoun as head. Chafe (1994, 75) points out that an inactive concept or any new information requires an increased cognitive effort with respect to its coding. Thus, it is often implemented as an NP with a lexical head. In contrast, the information given is typically associated with pronominalization and a deaccented intonation.

Here, it is of particular interest in which form the addressor establishes reference since the starting situation is very different for speakers and writers. In other words, the specific communication situation predefines the linguistic means by which the addressor refers to the entity he wants to convey information about so that the addressee is able to easily identify it.

Thus, the resources to establish reference are dependent on the situational characteristics. This means that a speaker in an informal face-to-face conversation has diverging resources to establish reference in comparison to a writer and vice versa. For example, a speaker can make reference to a particular situation in which the conversation takes place by means of demonstrative or *exophoric* reference. This “[...] is essentially a form of verbal pointing. The speaker identifies the referent by locating it on a scale of proximity” (Halliday & Hasan, 1976, 57). It distinguishes a participant or a temporal or spatial circumstance, which can either be close or distant from the speaker’s perspective. In contrast, personal reference establishes text internal or *endophoric* reference, which can be divided into the speech roles, i.e., 1st and 2nd person pronouns, and other roles (usually 3rd person pronouns or indefinite pronouns (Halliday & Hasan, 1976)).<sup>2</sup> With respect to this division, speech roles, thus, also establish situational reference, whereas 3rd person pronouns mostly refer to a person named text internally, which is generally anaphoric.

So, a specific communication situation associated with the information

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<sup>2</sup>However, German *es* ‘it’ as well as *it* in English can also refer to an entire process or fact.

states of the referents predefines the linguistic means by which reference is established. These linguistic forms vary distinctly in structure and particularly in the complexity of NPs between spontaneous spoken and written language, which has been investigated by various linguistic studies. For example, Miller & Weinert (1998, 133) found similar structures in three different languages (Russian, English, and German), which indicates that it is not a language-specific phenomenon. Still, the results of their study are restricted to Indo-European or more specifically to Germanic and Slavic languages. In the following sections, the findings of three different studies will be linked to each other and related to the concepts ‘orate’ and ‘literate’ of Maas (2008, 2010), who also refers to the complexity of NPs as a critical factor in the distinction between orate and literate structures. Here, it is argued that not only the complexity, but also the form of the referent is assumed to be ranged in an orate-literate scale, as will be outlined in the following.

### **Form of referents**

Several studies reveal that referents in orate structures are to a great extent expressed by pronouns. Miller & Weinert (1998, 140) refer to studies on English and German where between 40% and 50% of the NPs in spoken language consist of personal pronouns, while only around 10% of the NPs in written texts are personal pronouns. In the Russian data, the numbers are not that obvious as Russian is a pro-drop language that allows zero subjects. However, the percentage of pronouns in spoken Russian data is almost twice as high as the amount found in written texts. The comparison of these languages is supposed to underline the fact that the evaluation of reference is not only based upon evidence from German, but rather that similar results can be found in other languages as well. Moreover, Miller & Weinert (1998, 140) also point out that “[...] an even higher proportion of noun phrases consists of a single constituent”, i.e., numerals, demonstrative pronouns, and quantifiers can often be found as part of an orate structure.

In Biber (1988), various pronouns (1st and 2nd person pronouns, demonstrative pronouns, demonstratives, indefinite pronouns, and the pronoun IT) achieve high values in the strongest factor of his study, i.e., ‘informational vs. involved production’, while nouns reach the largest negative value of this factor.<sup>3</sup> This means that different pronouns are characteristic for non-informational, interactive discourse (e.g., an informal conversation), while nouns are more or less absent (Biber, 1988, 107). Naturally, the use of 1st and 2nd person pronouns is restricted to the type of discourse where the interlocutors interact with each other. According to Chafe (1982), pronouns indicate involvement in speaking, which he assesses as one of the crucial aspects of how spoken and written language differ from each other.

In contrast, a high frequency of nouns suggests condensed information content as nouns bear the primary referential meaning in a text. Chafe (1982) denotes the phenomenon of a higher information density in written language as *integration* opposed to *fragmentation*, which is characteristic for spoken language. Integrated structures are established by means of various devices that incorporate additional information into an utterance, which will be discussed in more detail in section 4.2.2. Here, it is particularly important to emphasize that nouns generally increase the degree of information content.

The variety of pronouns in German requires a more detailed approach than simply linking all of them with orate structures. This is reflected by another factor in Biber’s investigation, viz., the second strongest factor ‘narrative vs. non-narrative concerns’. Here, 3rd person pronouns achieve a large positive value, i.e., they frequently occur in narrative texts. Moreover, 3rd person pronouns are not part of the factor ‘informational vs. involved production’. Obviously, they can be found frequently in genres where 1st and 2nd person

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<sup>3</sup>A large positive value points to a frequent co-occurrence of two linguistic features in Biber (1988), whereas a large negative value indicates that the two factors hardly co-occur in the same text. Generally, the factor ‘informational vs. involved production’ is the strongest of the six different factors he ascertains and thus, it is a rather powerful indicator for the genre distinction (see also chapter 2).

pronouns play a minor part. This finding can be confirmed when looking at text types which are typical of the factor ‘narrative vs. non-narrative concerns’, where various kinds of fiction represent common genres to which this factor is applicable. In opposition to this, telephone conversations (the most typical representative of the first factor) clearly achieve a negative value in the dimension of narrative registers. This type of conversation, thus, can be regarded as a non-narrative register.

Against this backdrop, the correlation of pronouns and orate and literate structures has to be co-ordinated clearly as 3rd person pronouns do not co-occur as frequently with orate structures as 1st and 2nd person pronouns. Since 3rd person pronouns are not dependent on the context, they are not evaluated as orate, but as literate. In contrast, demonstrative pronouns are typical of orate structures. On the one hand, this is associated with the underlying deictic function of this word class. On the other hand, normative aspects come into play here. In spoken language, demonstrative pronouns rather often substitute 3rd person pronouns, whereas the anaphoric reference is more decisive than the deictic one. However, they are completely uncommon in written language, which is not functionally motivated, but rather results from normative defaults. Correlating this with Biber (1988), demonstrative pronouns occur in the factor ‘on-line informational elaboration’, which indicates that they can be found frequently in informal and unplanned discourse.

### **Complexity of NPs**

In the previous section, it has been outlined that NPs with a full lexical noun as head can be correlated with literate structures. Moreover, it has been delineated that literate structures can be elaborated, which also applies to NPs as they can be modified by different types of attributes. These kinds of attributes vary in terms of their form and their complexity, which will be aligned with the scale of literate structures. The basis for this alignment is once again provided by previous research by Biber (1988) and Miller & Weinert

(1998).

Even attributes that are rather simple in structure (PPs or attributive adjectives, compared to more complex attributes, e.g., a relative clause), occur far less frequently in spontaneous spoken speech than in written texts (Miller & Weinert, 1998, 142). According to the factor analysis in Biber (1988), both features have a negative value in the factor ‘informational vs. involved production’. It indicates that PPs and attributive adjectives have a high informational potential because they integrate and elaborate nominal information. More complex attributes, namely relative clauses or particularly English attributive participial phrases, are more frequently found in written registers. Moreover, relative clauses are linguistic characteristics establishing explicit reference as the identification of the referent becomes extremely precise (Biber, 1988, 110). Although relative clauses also occur in spoken language, their structure crucially varies dependent on the register. Relative clauses in spoken discourse are less complex; in spoken English, for example, they mainly consist of a verb and a temporal or spatial modifier. As opposed to that, the structure of relative clauses in written English often contain direct objects or coordinated clauses. This also applies to written German, as the following example illustrates, where the relative clause contains a coordinate structure, which is a quite complex NP structure.

- (4.1) *ein-e      Injektion,    die            Leben   rett-en    soll-te,            aber*  
          a-SG.F   injection    that.SG.F   life        save-INF   shall-PST.3SG   but  
          *durch    ihr-e        Verunreinigung   Menschenleben   forder-te*  
          through   her-SG.F   contamination   human life.PL   claim-PST.3SG  
          ‘an injection that was supposed to rescue life but instead claimed  
          human life due to its contamination’

Furthermore, the combination of two or more modifiers is highly unusual in spoken discourse, but can be found in written texts (e.g., an NP is modified by an attributive adjective and a relative clause). While most of these findings refer to studies of English, more or less the same applies to German.

Attributive adjectives and PPs occur more often in written than in spoken language, with the variety of prepositions being even higher in written texts than in spoken discourse (Miller & Weinert, 1998, 171).

Miller & Weinert (1998, 144) compiled a list of English NP types that, according to them, illustrates frequent and less frequent occurrences in spontaneous spoken language (the frequency decreases with increasing number). Interestingly, this list also correlates with the degree of NP complexity:

1. Noun or personal pronoun
2. Noun plus determiner
3. Noun plus one or more adjectives
4. Noun followed by a prepositional phrase
5. Noun followed by a relative clause
6. Noun followed by a participial phrase

### **The orate-literate scale for referents**

On the basis of this list and the findings in the studies mentioned above, referents of the pupils' spoken and written language are ranged along an orate-literate scale. On the one hand, this scale is guided by the degree of decontextualization, which is increased with the descending arrow in Figure 4.2. Thus, the identifiability of the referent is less dependent on the context, when the referent is expressed by an NP with full lexical noun and attributed by an adjective than when a demonstrative pronoun is used instead. On the other hand, the scale considers the structural complexity of the NP. It has been delineated that literate structures are particularly characterized by relatively complex NPs in contrast to orate structures. Vice versa, NPs consisting of a single constituent, primarily pronouns, can more often be found in orate than in literate structures.

Generally, the orate-literate scale has five levels: the orate level and four literate levels that reflect the degree of language elaboration. In order to

verbally differentiate between these degrees, each level is assigned with a label. In Table 4.2, each level is associated with its specific label, as it will be used during the entire analysis in this work. The three highest levels in the orate-literate scale are often considered together by means of the label *upper literate*. These labels will also be used in terms of the scales that regard the clause structures and the linking devices.

In the orate-literate scale for referents, orate structures are predominantly characterized by referents in the form of 1st and 2nd person pronouns as well as demonstrative pronouns because these types of pronouns usually occur in spontaneous spoken language. Moreover, 1st and 2nd person pronouns are always situation dependent. Demonstrative pronouns, however, are evaluated as orate due to normative aspects. Since 3rd person pronouns, indefinite pronouns, and simple NPs with a full lexical noun as head belong to the group of non-modified NPs, they are ranged at the beginning of the literate forms. At the same time they differ from the typical referents in orate structures by not solely making reference to the actual context, i.e., the here and now.

NPs modified by a PP, an attributive adjective or a genitive attribute all contain a phrasal attribute. On the one hand, the structural complexity is increased compared to the basic literate NP types. On the other hand, the referent is also easier to identify, which increases the degree of decontextualization. Furthermore, NPs followed by a relative or complement clause are more complex than NPs attributed by a PP. Thus, they are classified as more literate

Orate-literate level	Label
orate	orate
literate	basic or simple literate
literate +	developed literate
literate ++	enhanced literate
literate +++	highly literate

Table 4.2: The labels of the orate-literate levels.

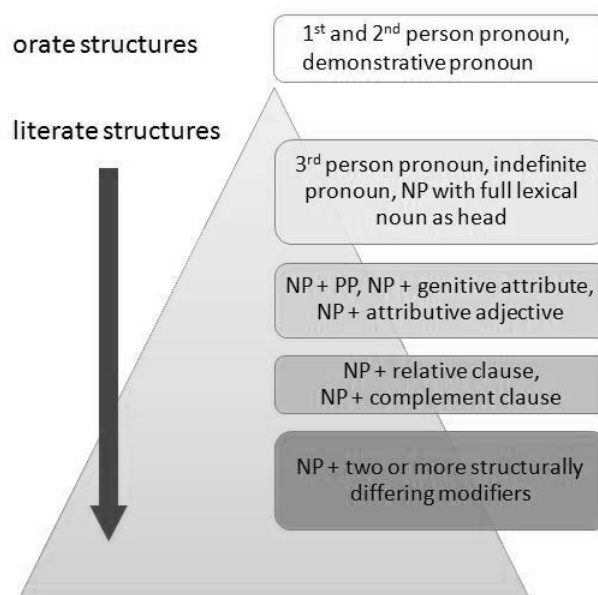


Figure 4.2: Orate-literate scale for referents.

in the scale. Finally, NPs that are modified by a combination of two or more attributives occur rather rarely in spontaneous spoken language, which provides the basis for the assumption that these NP types can almost exclusively be found in highly literate structures.

The referents in the pupils' interviews and class tests are evaluated and compared along the scale shown in Figure 4.2<sup>4</sup>. The crucial aspect of this analysis will be to scrutinize whether the pupils succeed in sufficiently de-contextualizing the referents in the written texts and which NP types they predominantly make use of. Correspondingly, it will also be possible to ascertain how complex the NPs are. Before going into detail about the analysis, the clause structure will be illustrated with reference to the orate-literate scale.

<sup>4</sup>In this figure, 'NP' always refers to an NP with full lexical noun as head.

### 4.2.2 Clause structure

The analysis of the clause structure in terms of the categories ‘orate’ and ‘literate’ has to consider several aspects. Orate structures are generally characterized by being structurally less complex, which can primarily be ascribed to the constraints of real-time production involving a reduced processing capacity among other things. Yet, syntactically complex structures, such as subordinate clauses, frequently occur in spontaneous spoken language. Thus, sentence complexity cannot solely differentiate between the different levels in the orate-literate scale for clause structures. The notion of Chafe (1982) that different pieces of information are integrated into one coherent structure in written language sheds light on how to grasp this apparent inconsistency. Accordingly, the information content or the information density of an utterance is the crucial factor for the classification of the different structures along the orate-literate scale. However, syntactic complexity is also regarded during the analysis of the clause structure as will be seen in the following.

Table 4.1 in section 4.1 indicated that a central difference between orate and literate structures arises from the syntactic form in which the speaker/writer produces his utterances. Hence, literate structures are expressed in sentences and clauses, while orate ones are not.<sup>5</sup> Miller & Weinert (1998, 40) also emphasize that “spoken language is organized into discourse units which cannot always be captured syntactically.” This distinction is also reflected in the approach of this study, where the units in the spoken data, namely the interviews, are identified by means of prosodic criteria, whereas the written class tests are analyzed in terms of syntactic units. These syntactic units, particularly their capability to be elaborated, will be delineated in this section. The primary dimension along which the different means of syntactic elaboration are ranged is the information density of the clauses, i.e., how much information is integrated into one syntactic structure.

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<sup>5</sup>In section 3.2.3, the terms clause and sentence have already been defined as how they are understood in this work.

However, first of all it should be pointed out that literate structures, viz., syntactically complete clauses, can also coincide with prosodic units in spoken language. In chapter 5, it will be shown that a considerable amount of IUs contains complete clauses. This, for example, has also been ascertained by the studies of Chafe & Danielewicz (1987, 95) for English, Matsumoto (2000) for Japanese, and Tao (1996) for Mandarin. Thus, it must not be assumed that spoken language only consists of orate structures; literate structures occur in spoken language as well which also depends on the respective register (see chapter 2). Orate structures are merely distinctive for spoken language, which will also be seen in the analysis of the present data.

The decisive syntactic feature of literate structures is that they are uttered in the form of syntactically complete clauses (Maas, 2010, 64). In the orate-literate scale, this aspect in particular distinguishes orate and literate structures, the latter of which can be elaborated by integrating an increased amount of information into one syntactic unit. Orate structures, though, are characterized by syntactically incomplete utterances. Applying this to the aspect of conveying information, information is not wrapped up in syntactically independent structures, but is passed on by fragmented structures. These units generally contain only one new information (see section 4.1). This characteristic is exemplified by 4.2, where the information of the entire utterance is separated into four IUs: the first represents the topic (as well as the grammatical subject), which is topicalized by being prosodically separated from the rheme - the second IU. Line three of this example contains a postponed structure by which DPO underlines that he is talking about *his* class tests. In the final IU, DPO specifies what is meant by *nicht so gut* 'not so good' in line two by referring to grades.<sup>6</sup> Incidentally, none of the IUs contains a syntactically complete unit.

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<sup>6</sup>Note that this utterance is also characterized by a typical lexical phenomenon of spontaneous spoken language, viz. implicit expressions or hedges, which are briefly addressed in section 4.2.4.

(4.2) *die arbeit-en,*  
the test-PL

*war-en nicht so gut,*  
COP.PST-PL not so good

*also von mir,*  
well from 1SG.DAT

*so vier und drei.*  
well four and three

‘The class tests weren’t that good, well my tests, about (grade) four and three.’

[DPO B21-24]

Here, it is important to emphasize that the first two IUs form a simple clause, which is also evaluated as such in the syntactic analysis, albeit it is split into two IUs. Although this contradicts the aspiration of this work which is to analyze spoken language solely in terms of prosodic cues, the consideration of syntactic structures is required in order to be able to compare them with those used in the written data. Still, the entire analysis regards how grammatical structures are distributed in the IUs as corresponding insights are gained by the previous evaluation of grammatical structures in IUs (see section 3.2.3). While the first two lines form a simple clause, the last two lines provide additional information which is not syntactically integrated into the clause. As this reflects the fragmentation of spoken language, these units are counted as orate structures.

With respect to the clause structure labeled as basic literate in this work, Maas (2010, 83) makes use of the terminology from traditional grammar and denotes the basic syntactic clause as a *naked clause* (see example 4.3), which only contains the arguments required by the predicate.

- (4.3) *Paul geh-t in die Uni.*  
 Paul go.PRS-3SG in the.SG.F university.  
 ‘Paul goes to the university.’

In the spoken data in this study, the majority of IUs contains such a simple clause, whereas conversational fillers, e.g., modal particles, shading expressions, etc. such as *ja*, *halt*, *schon*, are not regarded as increasing the information content or the syntactic complexity of the utterances. Although they might partly give the clause a specific meaning, they are always dependent on the situational context. Thus, clauses merely consisting of the predicate, its arguments, and such conversational fillers are classified as ‘naked’ clauses. The following clause exemplifies a similar structure, where *nicht jetzt so richtig* ‘not really actually’ is rated as a shading expression; otherwise, the clause only contains the arguments (subject and predicative) required by the copula.

- (4.4) *aber sie ist nicht jetzt so richtig gläubig,*  
 but 3SG COP.PRS.3SG NEG now so really believing  
 ‘But she is not really religious’

[DPO J145]

Clauses that contain propositional arguments are ranged at the third level in the orate-literate scale, viz., developed literate. Compared to the ‘naked’ clause, a compound sentence is syntactically more complex. In example 4.5, the subject of the clause is a subordinate clause, which is embedded in the matrix clause with the copula construction. Embedded clauses can never function as adverbials (Matthiessen & Thompson, 1988).

- (4.5) *Dass Paul in die Uni geh-t, ist*  
 That Paul in the.SG.F university go.PRS-3SG COP.PRS.3SG  
*bemerkenswert.*  
 remarkable.  
 ‘That Paul goes to university, is remarkable.’

Adverbials can also be expressed propositionally, which on the one hand provides additional information compared to a ‘naked’ clause, even if the argument is in the form of a clause; on the other hand, the additional information is not integrated into the structure of the clause, but is subordinate to its matrix clause. Thus, this form of subordination does not increase the information density of the main clause and is consequently also ranged at the third level of the orate-literate scale of clause structure. The phenomenon of *subordination* has been widely discussed in the literature and there are various conceptions of what determines subordinate clauses.<sup>7</sup> Here, the elaborations from Lehmann (1988) are crucial and insightful for the orate-literate scale of clause structure.

Lehmann (1988) names six parameters that are characteristic for subordinate clauses. Two of these parameters are of particular interest for classifying subordinate clauses in the orate-literate scale, namely *integration* and *reduction*. *Integration* implies the degree to which the construction is dependent on its matrix clause, i.e., an ‘independent clause’ represents one end of the continuum of ‘hierarchical downgrading’, while a ‘governed clause’, which is always embedded, is at the other end of this continuum. Thus, the ‘hierarchical downgrading’ is a crucial criterion in determining subordination as “a clause not affected by it is not called subordinate.” (Lehmann, 1988, 189) This hierarchy reflects the different grading of parataxis as basic literate and embedded clauses (or propositional arguments) as developed literate. The latter is at a more integrated level in Lehmann’s continuum, which the orate-literate scale of clause structure takes into account by a more literate classification of embedded clauses.

The other parameter - *reduction* - correlates with the more literate classification of phrasal adverbials compared to subordinate clauses. Lehmann (1988, 193) describes a process of *desententialization*. According to this, a subordinate clause can be reduced to varying degrees, which finally results in the loss

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<sup>7</sup>Particularly, Haiman & Thompson (1988) discuss several aspects with respect to subordination, where additional references can be found.

of its clausal character.<sup>8</sup> At the same time, the nominal character of the clause increases. Consequently, the continuum spans from sententiality at one end to nominality at the other. In other words, the process of desententialization transitions into the process of nominalization: A clause becomes a nominal or an adverbial constituent of the matrix clause. In the orate-literate scale, this adverbial constituent is more integrated into the matrix clause. Thus, it bears more informational content which is classified as more literate.

Besides these elaborations, it is important to point out that subordinations are anything but restricted to formal planned discourse, although the syntactic complexity is increased by them. In this respect, Maas (2010, 54) points out that spoken language often makes recourse to ‘ready-made chunks’, which do not require much cognitive capacity during on-line language production. This partly applies to certain types of subordinate clauses, which are discussed in section 5.1.3. As a consequence, the decisive difference between the different levels of literate structures is the extent to which information is integrated into a syntactic structure (see section 4.1, where Chafe’s differentiation between integration and fragmentation is discussed).

In Beaman (1984) and Biber (1988), subordination can also be found in spoken registers, which underlines that it cannot simply be connected to a particular register. Rather, subordination has to be evaluated in more detail in order to distinguish the different kinds of subordination that might frequently co-occur with other linguistic features. Accordingly, Biber (1988, 102-103) found that certain kinds of subordination occur in spoken language produced under real-time constraints. In his study, frequent types of subordinations are complement clauses initiated by an interrogative word, causative and conditional clauses. Moreover, embedded clauses (here clauses as verb or adjective complement initiated by the complementizer *that*) also occur in informational elaborations that are produced on-line (e.g., speeches or inter-

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<sup>8</sup>Of course, the analysis always considers a specific syntactic form, which is not changed or reduced as it is described here. Still, Lehmann (1988) regards the gradual loss of sententiality as a process so that the description here closely adheres to his illustration.

views). In contrast, adverbial clauses are characteristic for texts that convey abstract information, such as academic prose or official documents.

This illustrates that subordination is not restricted to written texts, but rather that it, though dependent on the type, also occurs in spontaneous spoken language. Still, certain types of subordination seem to occur exclusively in written texts. The two following examples illustrate that the structure of subordination in spoken and written language varies distinctly.<sup>9</sup>

(4.6) *ja deswegen geh ich da jetzt auch nicht*  
 yes that's why go.PRS.1SG 1SG there now also not  
*mehr,*  
 anymore

*ähm,*  
 um

*oft hin,*  
 often PTCL

*wenn da kloppe ist.*  
 when there rumble COP.PRS.3SG  
 'Yes, that's why I now don't go there um anymore, when there is a rumble.'

[CRA E83-86]

(4.7) *Als die zehn best-en Leser vorgelesen*  
 once the ten good.SPL-PL reader.PL read out.PTCP  
*hat-ten,*  
 have.PST-PST.3PL

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<sup>9</sup>In examples from the class tests, spelling mistakes are marked by underlining the wrong word. In Appendix B, the correct spelling is added in parentheses.

*zog die Jury sich zurück,*  
 pull.PST.3SG the.SG.F jury REFLPRO back

*um das Ergebnis von Herr-n W preis geb-en zu*  
 to the.SG.N result from Mr-DAT W announce-INF to  
*lass-en.*  
 let-INF

‘Once the ten best readers had read out, the jury gave ground in order to let Mr W announce the result.’

[PMO 7.3, 7-9]

In the example from the interview with CRA, there is one conditional subordination (line five) following the main clause. According to Beaman (1984) and Biber (1988, 107), conditional clauses are typical of spontaneous discourse. Moreover, Chafe (1984, 446) also ascertains that a common type of adverbial clause in spoken language is ‘postposed’ to its main clause, when “it adds something to the assertion which has just been made.” Example 4.7 from PMO’s class test<sup>10</sup>, however, contains two subordinate structures: The first, a temporal one, precedes the main clause, which is followed by an indefinite adverbial subordination (expressing the purpose), which Biber (1988, 112) associates with conveying abstract information. The proper noun in this example is abbreviated by the initial letter, which will also be found in following examples.

As opposed to subordination, adverbial constituents in a sentence, which, according to Lehmann (1988), can be regarded as resulting from a ‘desententialized’ subordinate clause, increase the information density of the clause. Correspondingly, they are ranged as more literate than adverbial clauses (see example 4.6); they are enhanced literate structures in the orate-literate scale. Clauses which are elaborated by integrated adverbials are classified as *dressed*

<sup>10</sup>The label for the class tests consists of the pupil’s acronym, the class test number and the clause numbers.

*clauses* - contrary to ‘naked’ clauses, the basic level of literate structures. The basic form of adverbials are those that are dependent on the predicate (see *schleichend* ‘creepingly’ in example 4.8). These attributes are called depictives (for an explicit discussion of depictives, see Geuder (2004)).<sup>11</sup>

- (4.8) *Paul geh-t schleich-end in die Uni.*  
 Paul go.PRS-3SG creep-PTCP.PRS in the.SG.F university.  
 ‘Paul goes to the university creepingly.’

Other adverbials are elaborating elements that are independent of the predicate, but which are also integrated into the structure of the main clause, see example 4.9. Concerning the clause’s information content as well as the structural complexity, these types of adverbials do not differ from depictives and are an example of a ‘dressed’ clause. In terms of the orate-literate scale for clause structures, they are consequently ranged at the same level as depictives, namely the enhanced literate level.

- (4.9) *Paul geh-t jeden Tag in die Uni.*  
 Paul go.PRS-3SG every day in the.SG.F university.  
 ‘Paul goes to the university every day.’

Finally, there are coordinate structures that impart additional information to the preceding main clause. Here, only structures that are integrated by means of constituent reduction (see example 4.10) or gapping (see example 4.11) are considered as simple coordinations are addressed in section 4.2.3. These types of coordination differ from ‘simple coordinations’ in that the two clauses are more closely linked to each other as the subject of both clauses is the same and can thus be deleted.

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<sup>11</sup>Other forms of attributes are secondary predicates elaborating nominal constituents. These types of attributes are discussed in section 4.2.1 and play only implicitly a role in the clause structure, although they of course impact on the information density of a clause.

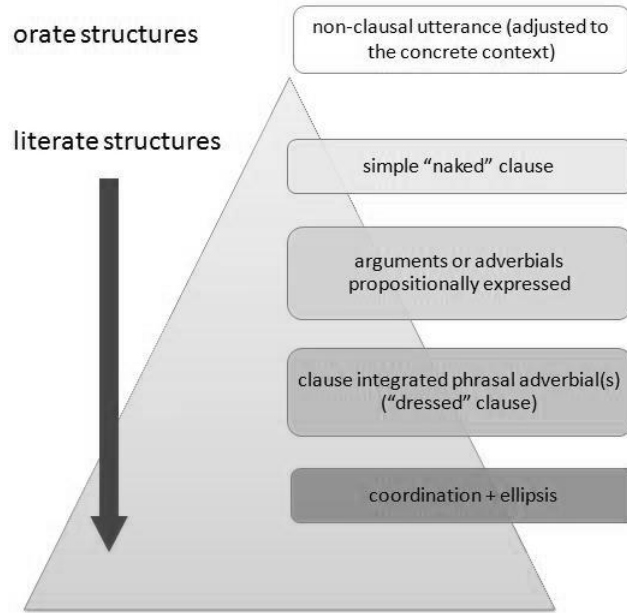


Figure 4.3: Orate-literate scale for clause structure.

- (4.10) *Paul geh-t in die Uni und [Paul, er]*  
 Paul go.PRS-3SG in the.SG.F university and [Paul, he]  
*iss-t in der Mensa.*  
 eat.PRS-3SG in the.DAT.SG.F canteen.  
 'Paul goes to the university and eats in the canteen.'

Also, the finite verb can be omitted (*gapping*), both when the subject is the same and even when the second subject differs from the first one:

- (4.11) *Paul geh-t in die Uni und Anna*  
 Paul go-PRS.3SG in the.SG.F university and Anna  
*ins Theater.*  
 to the.SG.N theater  
 'Paul goes to the university and Anna to the theater.'

In sum, Figure 4.3 illustrates the different levels of the orate-literate scale with regard to the clause structure. The syntactic analysis of the clause struc-

ture in the interviews and the class tests rests upon this scale, ensuring a systematic comparison.

### 4.2.3 Linking devices

Besides the structure of referents and clauses, the evaluation of orate and literate structures considers the different means of linking two prosodic or syntactic units. These linking devices contribute to the text coherence, which is expressed differently in spoken and written language. By developing an orate-literate scale for linking devices, it will thus be possible to systematically compare the differences in this domain of analysis. Moreover, the pupils' data can be investigated in order to reveal, how the pupils predominantly establish textual coherence.

One of the different types of linking has already been discussed in the previous section, i.e., clause linking through subordination. In the preceding section, subordinations are analyzed in terms of their characteristic to increase the sentence's information density or syntactic complexity. Here, their linking potential is considered as on that score, they also contribute to an increased textual coherence. Hence, in this section, intonation and subordinating and coordinating connectives<sup>12</sup> are rated as means by which relations between prosodic or syntactic units are expressed. Generally, anaphoric pronouns as well as deictic expressions contribute to the linkage of clauses and to the textual coherence; here, however, only overt phenomena of linking will be considered.

Linking devices in spoken and written language differ substantially from each other in that spoken language uses prosody beside paralinguistic and lexical devices in order to connect IUs (Tannen, 1981, 3). In this respect, prosody has to be regarded as functionally highly restricted. While a falling intonation contour signals the closure of an IU and often of a turn as well,

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<sup>12</sup>Here, connectives refer to conjunctions, adverbs, and PPs that overtly mark a linkage between IUs or clauses.

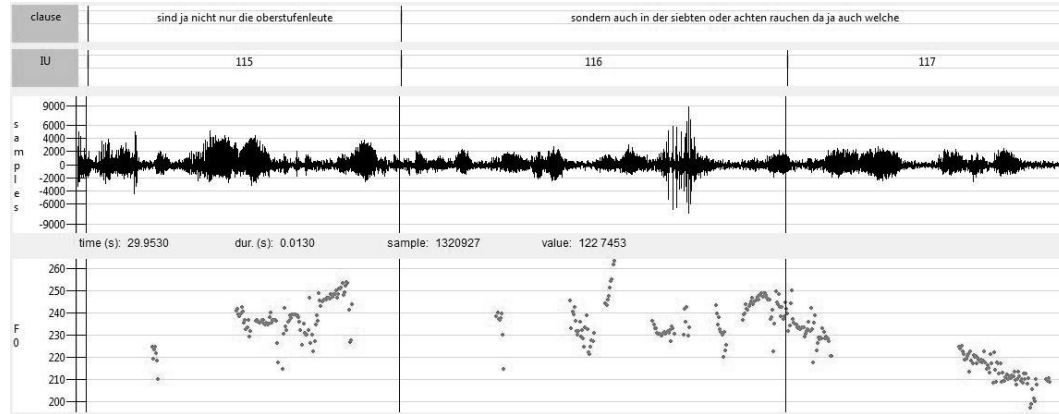


Figure 4.4: Falling intonation contour at the end of a turn in CRA G115-117.

other possible types of intonation contours, viz., rising, falling-rising, level continuation, or partial fall, signal the continuation of the idea. This functional evaluation of the different intonation contours applies to German as well as to English (see also section 2.3.2). Chafe (1988, 6) refers to the former as *period intonation* (Figure 4.4) distinguishing it from the latter, namely *comma intonation* (Figure 4.5). The final unit in Figure 4.4 (117) clearly illustrates a falling intonation contour and signals at the same time the end of the turn. Following this utterance the interviewer begins to speak. As in the two initial units in Figure 4.4, the first unit in Figure 4.5 (43) is rising which is associated with continuation. The two IUs of this sample are solely connected by means of the intonation contour since any connective is missing. This type of linking in particular is ranged orate in the orate-literate scale: linking through comma intonation with no lexical connective being used.

Prosodic or syntactic units that are strung together after an IU with closing or period intonation (in case of the spoken data) and without a lexical connective are ranged basic literate. This type of (in fact non-existent) linkage is called *asyndesis*, where the two successive units are not overtly related to each other. Moreover, IUs or clauses can be connected by rather simple connec-

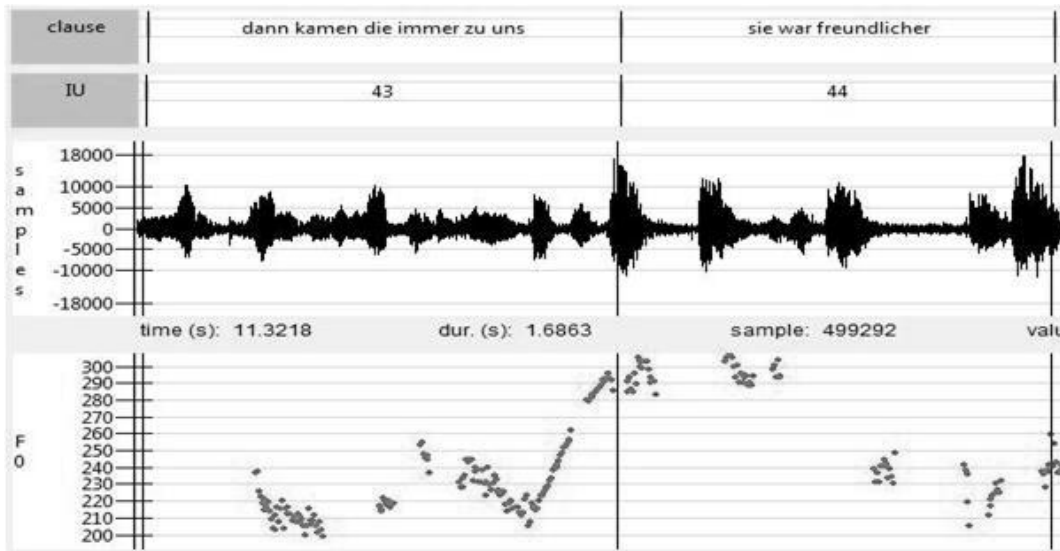


Figure 4.5: Rising intonation contour indicating continuation in HKA D43-44.

tives such as *und* ‘and’, *oder* ‘or’, and *but* ‘but’, which maintain the semantic relation between the two units fairly unspecific. *Und* ‘and’ simply joins two clauses in chronological order; *oder* ‘or’ generally represents another option to the one mentioned previously, whereas *aber* ‘but’ expresses a contradiction to the preceding clause.<sup>13</sup> Since the relation between the two units linked by these conjunctions is semantically and even syntactically rather loose as clauses initiated by *und*, *oder*, *aber* are always independent clauses, this type of linkage is also ranged basic literate in the orate-literate scale. Functionally, they do not distinctly differ from asyndesis so that these two types represent basic literate linking devices.

The next level in the orate-literate scale for linking devices refers to connectives that express a more specific relation between two linked clauses than a simple *und* ‘and’, for example. The majority of these connectives are subordinators, such as *als* ‘when’ or *weil* ‘because’. However, there are also some

<sup>13</sup>All three conjunctions can also be used in order to connect words or phrases; here, however, only their clause linking function is considered.

coordinating conjunctions, e.g., *denn* ‘since’ or *doch* ‘but’. By means of connectives that verbalize specific relations between two units, the different pieces of information conveyed by the addressor are explicitly linked to each other, which at the same time enhances textual coherence (Fabricius-Hansen, 2000).

Connective adverbs are assumed to link two clauses even more closely to each other than subordinators as they express a rather specific relation between the two clauses. Moreover, connective adverbs exclusively link two independent clauses, e.g., *dementsprechend* ‘accordingly’. Biber (1988, 239) describes connectives, for example *alternatively*, *similarly*, *therefore*, *in comparison*, *as a result*, *etc.* as those expressions that “explicitly mark logical relations between clauses, and as such they are important in discourse with a highly informational focus.” Accordingly, they co-occur with features such as passive voice in his corpus analysis, both being referred to as conveying abstract information, that for example, is typical of academic prose.

On top of the orate-literate scale for linking devices are linking PPs. They are assumed to establish a linkage between two units even more explicit than connective adverbs. As they generally contain an anaphoric element, such as *diesem* ‘this’ in *aus diesem Grunde* ‘for this reason’, they revisit the topic of the preceding clause. Moreover, their complexity as well as their referential explicitness increases when the anaphoric element of the PP is replaced by its actual reference, for example in the form of an NP (such as *diesen Adverb-en* ‘these adverbs’ in 4.12).

- (4.12) *Verbindend-e*                      *Adverb-en*    *erhö-h-en*                      *die*  
           connect-PTCP.PRS-PL    adverb-PL    increase-PRS.3PL    the.F  
*Kohärenz*    *ein-es*    *Text-es*.  
           coherence    a-GEN    text-GEN

*Im*                      *Gegensatz zu dies-en*    *Adverb-en*    *trag-en*  
 in the.DAT    contrast    to this-PL    adverb-PL    carry.PRS-3PL  
*asyndetisch*    *aneinandergereiht-e*    *Sätze*                      *nicht zur*  
 asyndetic    juxtapose.PTCP-PL    sentence.PL    NEG    to the.DAT

*Textkohärenz* bei.  
text coherence PTCL

‘Connecting adverbs increase a text’s coherence. In contrast to these adverbs, asyndetically juxtaposed sentences do not contribute to textual coherence.’

Generally, linking intonation or syntactic units by means of connectives is also described as *syndesis* as opposed to *asyndesis*, which refers to a succession of two syntactic units which are not linked by a connective device. In this respect, Lehmann (1988, 213) developed a continuum from the most explicit syndesis (according to him: an anaphoric subordinate clause) to asyndesis. In his continuum, simple conjunctions (evaluated as basic literate in the classification above) represent a slightly more explicit syndesis than asyndesis, being followed by simple connective adverbs, which also corresponds to the evaluation of this investigation. Moreover, he evaluated PPs as even more explicit than connective adverbs. The scale for linking devices as it is established here, thus, corresponds to Lehmann’s continuum.

Apart from the difference that units in spoken language are also linked by means of intonation, which written language naturally lacks, Chafe (1988) found that the types of connectives used in either discourse vary considerably. According to his study, simple conjunctions, such as *and*, *or*, *but*, predominantly occur at informal dinner conversations, whereas the written data favors more specific connectives, viz., *although*, *before*, *at which point* etc. Schiffrin (1987, chap. 6) also analyzed frequent conversational discourse markers including the simple conjunctions *and*, *but*, *because* and confirms Chafe’s finding as in her data, more specific connectives hardly occur either.

Considering that spoken language generally tends to favor rather unspecific connectives, if they are used at all, the sequences in spoken language can also be described as stringing together utterances without overtly relating them to each other as non-falling intonation often is the only device connecting IUs. Only by means of the actual situation of conversation is the listener able to interpret these chunks which are not connected by a syntactic linkage (Miller &

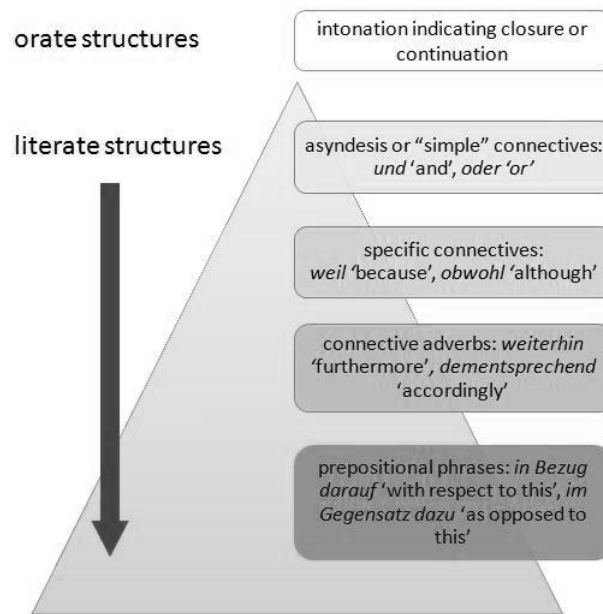


Figure 4.6: Orate-literate scale for linking devices.

Weinert, 1998, 60). In contrast, literate structures enable context-independent linkages between clauses by explicitly expressing their relations so that a text organized coherently is easily accessible to the reader.

Figure 4.6 illustrates how the different means of linking two IUs or clauses can be ranged in the orate-literate scale. The explicitness of the linking devices as well as the tightness of the two units that are connected increases from the top (representing orate structures) to the bottom (reflecting highly literate structures) of the figure. The linking devices in the present data are evaluated on the basis of this scale (see section 5.1.4 and 5.2.3). Aligning the analysis scale with the order of how learning writers make use of these items, Feilke (1996, 1184) ascertained that after an increased use of connective adverbs and PPs, experienced writers tend to establish coherence less obviously. These writers generally expect adept readers who are capable of fulfilling a more active role in deducing the text's coherences. Even in writing, the text only needs

to be as explicit as necessary. Therefore, obvious linkages are less frequent in a text of an adept writer as he is able to substitute them by macrostructural means. Yet, the scale for linking devices reflects the increase of obvious linkages. These developmental stages need to be passed through, before one is able to establish coherence on a macrostructural level.<sup>14</sup>

#### 4.2.4 Miscellaneous aspects

While the previous sections discussed the pivotal framework of this study, further differences between spoken and written language are only briefly illustrated here. Most of them relate to lexical differences or/and evidently result from different production conditions as mentioned in chapter 2. Thus, one of the most characterizing features of spontaneous discourse can be attributed to *hesitation elements* or pauses reflecting on-line production constraints since the consciousness of the speaker can only focus on a limited amount of information. At the same time, they have to plan the ongoing discourse, which of course also requires cognitive capacity so that speakers often (have to) pause while speaking. In order to signal that the turn is not yet complete, speakers often fill such a pause with a hesitation element. Naturally, hesitation elements do not occur in literate structures as a writer is not forced to produce language ‘under pressure’, but can rather carefully phrase his utterance.

Moreover, orate and literate structures differ from each other with respect to the lexis. On the one hand, the variety of vocabulary is much higher in literate structures (Chafe & Danielewicz, 1987), which is mostly measured by the type/token ratio of words, i.e., the number of different words (type) divided by the total number of words (token) in a text. Again, this is closely linked with the different production conditions. On the other hand, the ‘vocabulary level’ varies with regard to spoken and written language. First, Chafe

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<sup>14</sup>Considering macrostructures of texts would go beyond the scope of this investigation as the respective analysis would involve diverse categories, that are not directly linked with the differentiation of orate and literate structures.

& Danielewicz (1987, 92) roughly distinguished between three lexical levels, viz., colloquial (*kid, awesome*), literary (*ascertain, despite*), and neutral (*show, try*), and found that the two extremes, colloquial and literary, distribute in diametrical opposition. Second, speakers, in contrast to writers, often avoid being explicit as precise lexical differentiations require additional cognitive capacity. By making use of *hedges*, such as *sort of*, speakers can elude this explicitness. Contrarily, writers are expected to be explicit. Since the on-line production constraints do not hold for them, shading expressions are generally avoided in formal written registers (Maas, 2010, 48).

Since lexical differences are fairly obvious and more easily accessible for young writers than the structural aspects considered in the different orate-literate scales (Maas, 2010, 48), the analysis will focus on referents, clause structure, and linking devices. Moreover, evaluating words according to different lexical levels (see above) is always rather subjective and cannot be conducted systematically. As the orate-literate scales build the framework for analysis, corresponding hypotheses of the analysis will be presented in the following section.

### 4.3 Hypotheses based on the orate-literate scale

The orate-literate scales enable a systematic approach for the comparison of the pupils' spoken and written data. Similarly, the hypotheses of the respective analysis are based on the scales of the different linguistic domains, whereas various findings of the relevant research, that have been discussed so far, contribute to the following hypotheses as well. The verification of each hypothesis is subsequent to the corresponding analysis, as soon as it is complete.

**Hypothesis A** *Orate and simple literate structures predominate in the interviews.*

The interviews are assumed to be characterized by orate structures as they occur in each of the different scales. At the same time, it is highly likely that simple literate structures occur in the interviews as well since the register can be seen as a rather formal communication situation, when comparing it with more informal conversations, e.g., a conversation among friends. Due to the pupils' age, it is unlikely that they will make use of highly literate structures in the interviews as they are still in the process of literacy acquisition (see section 2.4).

**Hypothesis B** *The amount of literate structures in the class tests is higher than in the interviews, whereas the degree to which the structures are elaborated depends on the domain of analysis (referents, clause structure, and linking devices).*

Presumably, pupils come naturally to use specific literate structures in their texts, while they disregard other structures. By means of the systematic comparison through the orate-literate scales, it will be possible to ascertain which of the different domains is naturally extended by the pupils and which domain requires specific attention during literacy instruction.

**Hypothesis C** *The pupils will hardly exhaust the scale of literate structures in their class tests, but will rather maximally use enhanced literate structures.*

This hypothesis is partly embedded in **Hypothesis B**, but refers more explicitly to the process of literacy acquisition which among other things is focussed in Strömquist & Verhoeven (2004), where it is revealed that certain structures are only acquired after puberty. The pupils of this study are between 12 and 13 years old so that each of them is still acquiring structural aspects in the long and possibly never ending process of literacy acquisition.

**Hypothesis D** *A higher amount of clausal IUs and of literate structures in general in the interviews corresponds with more literate structures in the class tests ('booting').*

It is assumed that a speaker who produces a comparatively high amount of clausal IUs and of literate structures in the three domains of analysis also uses more literate structures in his texts. This hypothesis can be ascribed to the concept of 'booting', which purports that syntactically elaborate structures are 'booted' from simple or orate structures (Maas, 2008, 331). A pupil who uses literate structures in spoken language presumably has easier access to elaborate structures than a pupil whose interview is predominantly characterized by orate structures. Consequently, the access to literate structures comes naturally to the 'literate speaker', when he is writing a text. As opposed to this, the use of literate structures in a text is more difficult for the 'orate speaker'.

**Hypothesis E** *Bilingual pupils who did not learn to distinguish between registers in their L1 will have more problems making register differences in their L2 than native speakers or those that acquired literacy in their L1.*

This hypothesis refers to the different linguistic backgrounds of the pupils, two of whom speak German as L1 (CRA, PMO), while the other two pupils speak Turkish as L1 (DPO, HKA). It will be analyzed if native speakers and L2 pupils differ with respect to the elaborate structures used in their texts. Maas (2008) claims that (adult) L2 learners who did not acquire literacy in their L1 will have considerable difficulties in distinguishing between registers in the L2. It will be interesting to see if this also holds for non-native speakers who began to acquire their L2 comparatively early, viz., at the age of three to five years. Since the two pupils with Turkish as L1 were born and have been growing up in Germany, it can be assumed that both have not acquired comprehensive literacy skills in Turkish, which represents the basis for **Hypothesis E**. This assumption, however, needs to be verified, which will be part of section 5.2.5.

# Chapter 5

## Data analysis

The data will be analyzed on the basis of the corresponding orate-literate scales. Firstly, the interviews will be examined with respect to the IU types (see section 5.1.1), which is followed by the discussion of the form of referents (see section 5.1.2). Subsequently, the structure of the clauses (section 5.1.3) as well as the linking devices (section 5.1.4) in the interviews are evaluated. Afterwards, the class tests will be analyzed (section 5.2), with referents, clause structure, and linking devices being separately discussed in the subsections 5.2.1 to 5.2.3. At the end of section 5.2, Turkish literacy skills of the two bilingual pupils will be briefly evaluated in order to be able to verify **Hypothesis E**. After the analysis of the spoken and written data, the two different text types will be compared in section 5.3.

The elaboration levels of the scales are assumed to indicate to which degree the pupils make use of literate structures in a rather formal conversation, such as the interviews of this study, compared to written data. Generally, it is not intended to make a statement about the pupils' language competence as the data basis is much too small for a comprehensive evaluation. However, analyzing the use of orate and literate structures in these two text types allows assumptions on how the pupils distinguish between the registers. Moreover, it can be scrutinized to what extent the pupils succeed in detaching from orate

structures in their written texts.

## 5.1 The pupils' spoken language: the interviews

The data basis for the pupils' spoken language consists of interviews with the pupils. The interview guideline mainly referred to topics such as the pupils' attitudes towards school, learning behavior, and literacy. As has been discussed in chapter 3, interviews are generally a very specific type of spoken language that clearly distinguishes itself from other spoken registers. For example, the roles of speaker and listener are given as the interviewer passes the role of the speaker to the interviewee as soon as he has asked the question. Usually, the interviewee does not need to claim the speaking part as the interviewer is interested in detailed answers. Consequently, interviews are characterized by few interruptions. Furthermore, interviews have to be regarded as rather formal spoken language since the communication situation differs from informal types of conversations regarding the relationship between the interlocutors, the talking point, etc. As a matter of course, these interview characteristics have to be taken into consideration during the entire analysis.

However, it does not necessarily mean that natural conversations should be favored regarding the research questions at hand. On the contrary, assuming that the pupils speak more formally in interviews compared to chatting with their friends<sup>1</sup>, it is an opportunity to examine the more formal register of the pupils. Interview situations make the pupils produce some utterances at a stretch in order to elaborate the respective answer. Thus, the IUs produced in the interviews contain comparatively many syntactically complete clauses, when comparing them with informal conversations.

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<sup>1</sup>Partly, this can also be attributed to the relationship between the interviewee and the pupil, which can be described as rather formal (see section 3.1)

### 5.1.1 Grammatical structures in the pupils' IUs

Several prosodic cues have been used in order to identify IUs. Subsequently, the IUs have been classified with respect to their grammatical structure (see sections 3.2.2 and 3.2.3). In Table 5.1, the quantitative distribution of the five different major grammatical IU types is presented, without distinguishing between the pupils.

<b>IU category</b>	<b>Number</b>	<b>%</b>
<b>Clausal IUs</b>	<b>268</b>	<b>43.9</b>
Full clausal IUs	215	35.2
Mixed clausal IUs	53	8.7
<b>Non-clausal IUs</b>	<b>343</b>	<b>56.1</b>
Prosodically split clausal IUs	106	17.3
Phrasal IUs	218	35.7
Truncated IUs	19	3.1
<b>TOTAL</b>	<b>611</b>	<b>100</b>

Table 5.1: Distribution of grammatical IU types.

As systematic studies on IU structures in German are missing, it is only possible to compare these results with studies on other languages. In this respect, the amount of clausal IUs seems considerably low with around 44%. The reason for that finding might be related to two facts. First, these studies investigate other languages: Chafe (1987) ascertains for English that around 60-70% of the IUs correlate with a syntactically complete clause. Tao (1996) finds that roughly 48% of the IUs contain a full clause in Mandarin conversations. In Japanese, the number of clausal IUs (68%) also clearly exceeds the result of this study (Matsumoto, 2000, 67). Second, data from different subjects has been examined. While the data of these studies are informal

conversations between (prospective) academics, this study investigates the language of 13-year-old pupils (partly with German as L2) from low to medium educated families. It is generally assumed that age and social background substantially influences the language output (Bialystok (2001, 158), Biber & Conrad (2009, 41)). Accordingly, it is not possible to draw conclusions regarding the general grammatical constitution of IUs in spoken German because the data only allows conclusions concerning this particular group.

With respect to the distribution of the grammatical IU types, the percentage of those IUs that do not contain a complete clause amounts to 56.1%, including prosodically split clausal IUs (17.3%), phrasal IUs (35.7%), and truncated IUs (3.1%). More than half of the non-clausal IUs are phrasal IUs. The second largest group of non-clausal IUs are prosodically split clausal IUs, i.e., they contain a finite or/and an infinite verb, but one (or more) corresponding argument(s) is (are) prosodically separated from its predicate. Thus, only together with another IU, namely a phrasal one, do they form a clause; approximately 50% of the 218 phrasal IUs contain a complement of the 106 prosodically split clausal IUs. Truncated IUs play a marginal role in the interviews as only 3.1% of the IUs are classified correspondingly. It is likely that this is attributable to the characteristics of the chosen genre, i.e., an interview.

Interpreting the amounts of the different IU types not as rigidly in terms of the prosodic classification as above, one can see that the prosodically split clausal IUs also represent a potential clause. Only an argument or an adjunct is prosodically separated from the part containing the predicate. Disregarding the prosodic separation for a moment, the amount of clausal IUs increases by 17.3% to a total amount of 61.2%. This finding corresponds with the findings of Chafe (1987) and Matsumoto (2000) (60-70% clausal IUs) and exceeds the figures of Tao (1996) (48% clausal IUs). However, this section focuses on the rigid prosodic approach since only in doing so is it possible to systematically correlate syntactic and prosodic structures.<sup>2</sup>

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<sup>2</sup>Section 5.1.3 will consider the syntactic structure of clauses where the prosodic division

To sum up the findings tabulated above, it can be stated that the clause does not dominate the IUs of the pupils' spoken data, although it plays an important role as more than one third of the prosodic units correlates with the syntactic structure of a clause.<sup>3</sup> As mentioned previously, studies on grammatical structures in IUs in German have not been conducted so far. Therefore, it can only be assumed that the number of clausal IUs in German would be exceeded by conversations between (academic) adults. This would also give the opportunity to evaluate the pupils' performance more explicitly. As a consequence, only the comparison to informal English, Mandarin, and Japanese is possible here. However, general conclusions regarding spoken German are not focused on, not least because the data basis does not allow generalized assumptions. The focus of this research, however, shall be the comparison to the pupils' written texts.

### Comparison of the pupils' grammatical structures in the IUs

The distribution of the different IU types is presented in Table 5.2, considering each pupil separately. The differences between the pupils are quite remarkable, with the amount of clausal IUs ranging from 51.3% (PMO) to approximately 37% (CRA). The chi-square tests shows that the variation of clausal and non-clausal IUs is significant ( $\chi^2 = 10.4$ ;  $df = 3$ ;  $p < 0.05$ ). Comparing the results with the relevant studies of Chafe (1987), Tao (1996) and Matsumoto (2000), all values of clausal IUs are substantially lower than those found for English (Chafe) or Japanese (Matsumoto). The lowest amount of 36.6% is even clearly lower than the comparatively low percentage of clauses in Mandarin IUs, whereas the top value of 51.3% clausal IUs in this study corresponds with the one found in Mandarin conversations.

Thus, the distribution of clausal and non-clausal IUs tends to vary con-

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plays a minor part.

<sup>3</sup>It has to be taken into account that this number only represents an average amount of the four pupils. In the following subsection, it will be seen that the actual distribution of IU types varies considerably with respect to each pupil.

IU category	L1		L2	
	CRA	PMO	DPO	HKA
<b>Clausal IUs</b>	<b>56 (36.6%)</b>	<b>78 (51.3%)</b>	<b>56 (38.1%)</b>	<b>78 (49.1%)</b>
Full clausal IUs	46 (30.1%)	66 (43.4%)	44 (29.9%)	59 (37.1%)
Mixed clausal IUs	10 (6.5%)	12 (7.9%)	12 (8.2%)	19 (11.9%)
<b>Non-clausal IUs</b>	<b>97 (63.4%)</b>	<b>74 (48.7%)</b>	<b>91 (61.9%)</b>	<b>81 (50.9%)</b>
Prosodically split clausal IUs	35 (22.9%)	24 (15.8%)	30 (20.4%)	17 (10.7%)
Phrasal IUs	59 (38.6%)	44 (28.9%)	58 (39.5%)	57 (35.8%)
Truncated IUs	3 (2.0%)	6 (3.9%)	3 (2.0%)	7 (4.4%)

Table 5.2: Distribution of IUs comparing the pupils.

siderably in the present data. This has also been found by Tao (1996), who ascertains an amount of clausal IUs ranging from 39% till 56%. It is highly likely that the percentage of clausal IUs not only varies between the pupils, but also that the individual pupil would produce less clausal IUs in a more informal and/or more interactive context (for further discussion of the register's impact on the language output, see chapter 2 and section 3.1).

Regarding the composition of clausal IUs, the clear majority of IUs containing a clause is apparently implemented as a full clausal IU. Only a rather low amount of clausal IUs contains another element that predominantly belongs to the following syntactic unit (mixed clausal IU), often a conjunction initiating the subsequent clause. However, the differences between the pupils are fairly salient. While DPO produces approximately 30% full clausal IUs, the percentage of these units amounts to around 43% in the utterances of PMO. Furthermore, there are slight differences with regard to mixed clausal IUs: the percentages range from 6.5% (CRA) to around 12% (HKA).

In the other major category, viz., non-clausal IUs, phrasal IUs outnumber prosodically split clausal and truncated IUs in each interview. Interestingly, the two pupils who have the least clausal IUs (CRA and DPO) now also

have very similar figures with regard to the subcategories of non-clausal IUs. PMO and HKA, however, do not consistently show these similarities, although the two major categories clausal and non-clausal IUs are almost equally distributed. Only the distribution of the subcategories varies with respect to PMO and HKA.

On closer examination of the distribution of phrasal IUs (tabulated in Table 5.3), it needs to be pointed out at the beginning that a considerable part of these IUs syntactically belongs to a prosodically split clausal IU, which together form a clause (disregarding the prosodic boundaries). In total, 29.4% of phrasal IUs contain a complement of a prosodically split clausal IU. As in the other categories, the amounts of phrasal IUs varies between the pupils. Around 36% of PMO's and CRA's phrasal IUs syntactically belong to a prosodically split clausal IU. In contrast, approximately 19% of HKA's phrasal IUs are a complement of an adjacent IU, whereas DPO lies with ca. 28% inbetween these two values. At the same time, HKA and DPO both produce the highest amount of IUs that are syntactically unconnected, namely 29% of all IUs. In contrast, PMO produces only 18.4% syntactically unbound IUs, whereas CRA lies quite exactly in between the two extreme values with 24.8% syntactically unconnected IUs. The variations in the distribution of syntactically connected and unconnected units are not statistically significant ( $\chi^2 = 5.0$ ;  $df = 3$ ;  $p < 0.05$ ).

Table 5.3<sup>4</sup> shows which elements can be found in phrasal IUs, which is shown for each pupil separately. In this respect, the variations between the pupils are again quite salient. The most frequent subcategory of phrasal IUs differs from pupil to pupil. CRA predominantly produces phrasal IUs that contain a connective. In contrast, PPs are the prevalent type of phrasal IUs in the data of PMO, whereas hesitation elements predominate this IU type in the interview with DPO. NPs and AdvPs are similarly distributed in HKA's data,

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<sup>4</sup>The percentages in this table refer to the amount of the category phrasal IUs. In case two numbers occur in one bracket, the latter percentage refers to the total amount of IUs.

Phrasal IUs	L1					L2	
	TOTAL	CRA	PMO	DPO	HKA		
part of prosodically split clausal IU	64 (29.4%)	21 (35.6%/13.7%)	16 (36.4%/10.5%)	16 (27.6%/10.9%)	11 (19.3%/6.9%)		
syntactically unconnected IU	154 (70.6%)	38 (64.6%/24.8%)	28 (64.6%/18.4%)	42 (72.4%/28.6%)	46 (80.7%/28.9%)		
NPs	38 (17.4%)	4 (6.8%)	10 (22.7%)	13 (22.4%)	11 (19.3%)		
PPs	35 (16.1%)	7 (11.9%)	12 (27.3%)	9 (15.5%)	7 (12.3%)		
AdvPs	36 (16.5%)	9 (15.3%)	7 (15.9%)	9 (15.5%)	11 (19.3%)		
Disc.	28 (12.8%)	11 (18.6%)	3 (6.8%)	4 (6.9%)	10 (17.5%)		
Hesit.	32 (14.7%)	6 (10.2%)	3 (6.8%)	14 (24.1%)	9 (15.8%)		
Connective	37 (17%)	17 (28.8%)	7 (15.9%)	6 (10.3%)	7 (12.3%)		
Other	12 (5.5%)	5 (8.5%)	2 (4.5%)	3 (5.2%)	2 (3.5%)		
TOTAL	218	59	44	58	57		

Table 5.3: Distribution of phrasal IUs.

with both representing the highest percentage of phrasal IUs. In other words, the percentages of each subcategory vary by 12 to 19 percentage points (apart from the categories AdvPs and others which are rather similarly distributed across the pupils' data). On that score, it is difficult to draw any conclusions on the category which is predominantly prosodically (or possibly syntactically) isolated as it seems to be rather speaker-dependent in the present data. The chi-square test proves that the distribution of phrasal IUs is even significantly different between the subjects ( $\chi^2 = 30.7$ ;  $df = 18$ ;  $p < 0.05$ ).

### **Evaluating the distribution of the grammatical structures in IUs**

Before interpreting the distribution of the IU categories, the previous explanations suggest two aspects that have to be considered regarding the following evaluation, namely the amount of clausal IUs and the amount of IUs containing syntactically unconnected structures. These two aspects reflect the basic distinction between orate and literate structures (see section 4.1). IUs with a syntactically unbound structure are seen as orate structures. Their amount indicates roughly to what extent the pupils make use of orate structures in the interview. As opposed to this, the percentage of clausal IUs indicates how frequently the pupils integrate syntactically complete structures into a single coherent intonation contour, i.e., to what extent the pupils produce literate structures.

Of course, these implications have to be considered carefully. They are not meant to generally evaluate the language competence of the pupils, which is not the aim of this investigation; rather, the distribution of these IU types have to be seen as an indicator of how each pupil structures his utterances (always restricted to the data of this study). It will be part of section 5.3 to correlate the findings with respect to the pupils' spoken and written language. In doing so, it will be possible to ascertain whether the structures in the spoken data suggest where the pupil encounters difficulties in using more literate structures.

Evaluating the results, the analysis has shown that PMO (L1) produces

most IUs containing a full clause (51.3%, see Table 5.2) as well as the lowest amount of IUs containing a syntactically unconnected structure in his interview (18.4%, see Table 5.3). Based on the assumptions above, PMO is the pupil with the fewest orate structures. In contrast, the interviews with HKA and DPO (both L2) contain the largest amount of IUs with a syntactically unbound structure (ca. 29%, see Table 5.3). The amount of IUs with an unbound element varies by ten percentage points compared to PMO. Although the statistical test has not proven a significant variation, it can be determined that PMO tends to produce less orate structures than HKA and DPO. Interestingly, HKA and DPO both speak German as L2; still, their percentages of clausal IUs differ substantially (HKA: 49.1% vs. DPO: 38.1%). On the one hand, this indicates that both GL2 speakers have the highest amount of orate structures, at least with respect to the structures in the IUs. On the other hand, this does not implicate that both also produce considerably less clausal IUs as the amount of clausal IUs only slightly differs when comparing PMO and HKA. Moreover, the interview with CRA (the other German L1 pupil) contains the fewest clausal IUs (36.6%, see Table 5.2), i.e., least literate structures, whereas her percentage of IUs with a syntactically unbound structure (24.8%, see Table 5.3) lies in between PMO's and DPO's values.

In sum, the average amount of clausal IUs in this study is outnumbered by the findings of comparable studies (Chafe, 1987; Tao, 1996; Matsumoto, 2003). Nevertheless, it has to be considered that the studies differ in terms of language and subjects being investigated. Furthermore, two types of IUs have been focussed on within the comparison of the pupils as they are assumed to provide substantial information about the use of orate and literate structures in the pupils' spoken language.<sup>5</sup> In this respect, it has been ascertained that a high amount of orate structures does not necessarily entail a particularly low amount of literate structures (here complete clauses under a coherent in-

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<sup>5</sup>Here, orate and literate structures exclusively refer to the aspect of syntactically complete structures as this represents a decisive characteristic of literate structures (see section 4.1).

tonation contour). While PMO turns out to exceed the other pupils with the lowest amount of orate and the highest amount of literate structures, none of the other pupils shows such a clear tendency. HKA, for example, has the highest amount of orate structures in the group, but she also produces roughly as many clausal IUs as PMO. CRA's interview contains the lowest amount of clausal IUs, but she is also second to last with respect to syntactically unbound structures in IUs. Only the interview with DPO suggests that he structures his utterances rather orately: he has a comparatively low amount of clausal IUs in his data, whilst he at the same time produces a relatively high amount of IUs containing a syntactically unconnected structure. This means that in terms of the distribution of IU types, there is no clear tendency concerning the distinction on the basis of the pupils' linguistic background.

It will be interesting to see whether these findings are reflected in the other domains of analysis, which will particularly be compared in section 5.3. Initially, the other linguistic features will be considered separately, continuing with the form of referents in the interviews.

### 5.1.2 Referents in the interviews

The various linguistic forms that establish reference in the interviews can also indicate to what extent the pupils make use of orate and literate structures as the referents are ranged in the respective orate-literate scale (Figure 4.2). It is assumed that the linguistic forms directly impact on the degree of the texts' decontextualization as well as on the degree of the NPs' complexity: the fewer context-dependent referents (1st person pronouns, demonstrative pronouns) and the more complex NPs (those that contain an attribute) that occur in the interview, the more literate the text is.

Figure 5.1 shows the distribution of referents in the orate-literate scale. The distribution of orate and basic literate structures obviously varies between the pupils, whereas all pupils rarely produce developed (+) or enhanced (++) literate structures, with highly (+++) literate structures not occurring at all.

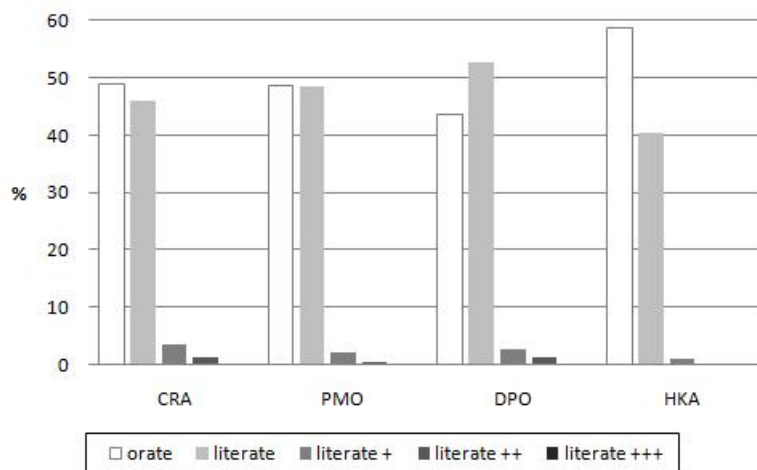


Figure 5.1: Orate-literate distribution of referents in the interviews.

While the amounts of orate and basic literate referents are rather equally distributed in the interviews with CRA and PMO, DPO's and HKA's interviews show a larger variation. DPO uses more referents that are ranged 'basic literate' than those being ranged 'orate'. In fact, he produces the highest amount of basic literate referents and the lowest amount of orate referents. In contrast, orate referents are prevalent in the interview with HKA, showing the highest amount of orate referents compared with the other pupils. Moreover, basic literate referents occur least frequently in HKA's interview, with the difference between the amounts of orate and basic literate referents being the largest among the four pupils.

As orate and basic literate referents are clearly the two prevailing types of referents, their distribution seems to be mutually dependent: a high amount of orate referents seems to implicate a low amount of basic literate referents and vice versa. The pupils particularly distinguish between referents that are context-dependent, namely orate ones, and the most elementary form of referents that cannot directly be derived from the context, i.e., basic literate referents. Only rarely do the pupils make use of structurally complex NPs in

the interviews. This is all the more apparent when considering that the sum of upper literate structures<sup>6</sup> does not exceed 5% of the referents, with the lowest amount accounting for only about 1% in HKA's interview.

Looking more closely at the two more literate structures, their amount is not only low, but one can also see that their distribution does not vary between the pupils as highly as the two predominant types of referents. On the one hand, the percentage of basic literate and developed literate (+) structures decreases considerably with the decline lying between 40 and 50 percentage points. On the other hand, each pupil produces more developed literate (+) than enhanced literate (++) referents, with HKA not at all making use of enhanced literate structures.

Considering each category of referents separately (Table 5.4), one can see that the referent forms used by the individual pupil are also distributed differently. Interestingly, the amount of 1st person singular pronouns is fairly equally distributed in the interviews. Presumably, this is due to the specific interview as it was conducted in this study. Besides, 1st person singular pronouns are the most frequent orate referent used in all interviews, except for HKA's interview where it is the second most frequent orate referent. With respect to the other pupils, the second most frequent orate referent is a demonstrative pronoun, which is the prevalent orate referent in HKA's interview. Accordingly, these two forms of orate referents are highly characteristic for this type of conversation, for in sum, they clearly amount to more than one third of all referents in each interview; partly, they even achieve a percentage of almost 50% (HKA: 48.7%). As a consequence, the remaining referents classified as orate amount to less than 10% in each interview, with the percentage of the 1st person plural pronoun showing the largest variation. In contrast, 2nd person singular pronoun and the proper noun preceded by a definite determiner (*der Paul* 'the Paul')<sup>7</sup> account for less than 5% in each interview. 2nd person

<sup>6</sup>The category *upper literate* encompasses developed (+), enhanced (++) and highly (+++) literate structures.

<sup>7</sup>A proper noun preceded by a definite article is quite typical of the dialect of the Ruhr

	referent form	CRA	PMO	DPO	HKA
<b>orate</b>	1SG	22.3	22.4	23.4	22.5
	2SG	0.7	2.2	3.2	0
	1PL	4.3	3.8	1.9	9.4
	2PL	0	0	0	0
	PRO.DEM	20.1	17.5	14.9	26.3
	N.PROP+DET	1.4	2.7	0	0.5
	TOTAL	48.8	48.6	43.5	58.6
<b>literate</b>	N.PROP	3.6	5.5	4.5	5.2
	PRO.INDF	15.8	9.3	3.9	4.2
	3SG	0	3.3	4.5	1.6
	3PL	0.7	0.5	0.6	0
	lex NP	25.9	30.1	39	29.3
	TOTAL	46	48.6	52.6	40.3
<b>literate</b> +	lex NP + Adj	2.9	2.2	1.9	1
	lex NP + PP	0.7	0	0	0
	lex NP + Gen	0	0	0.6	0
	TOTAL	3.6	2.2	2.6	1
<b>literate</b> ++	lex NP + Rel.cl.	1.4	0.5	1.3	0

Table 5.4: Distribution of the referent forms in the interviews in percent.

plural pronouns do not occur at all, which is rather obvious as the interviewer is only one person who is formally addressed with *Sie* by the pupils, ruling out the informal addressee with the 2nd person plural pronoun. Still, 2nd person singular pronouns occur (albeit rather rarely) and are restricted to direct speech since the pupils stick to the formal address with *Sie* when addressing the interviewer.

In the category of basic literate referents, the most frequent form is the simple lexical NP, at the same time being the most frequent referent at all. Still, there is a variation between the pupils as the percentage of lexical NPs varies between 26% and 39%. This variation, however, seems to be dependent on the amount of the other simple, i.e., orate and basic literate, referents. Since orate and basic literate referents in sum amount to roughly the same percentage in the pupils' interviews (between 67% and 69%), a lower amount of lexical NPs implicates that another orate or basic literate referent achieves a comparatively higher value. For example, CRA produces on a percentage basis the fewest lexical NPs, whereas she comparatively often makes use of demonstrative pronouns as well as indefinite pronouns. PMO achieves for these three forms of referents (demonstrative pronouns, indefinite pronouns, and lexical NPs) a medium value. DPO, however, has the highest amount of lexical NPs, which correlates with the lowest amount of both demonstrative and indefinite pronouns. In contrast, HKA has a rather low amount of lexical NPs in her interview, but she most frequently makes use of demonstrative pronouns, whereas indefinite pronouns amount to a fairly low percentage. Thus, external reference is most frequently established by either demonstrative pronouns or lexical NPs, the distribution of which seems to be mutually dependent. Indefinite pronouns play a minor role in this comparison.

The remaining basic literate forms of referents, i.e., 3rd person singular and plural pronouns, achieve rather low amounts with less than 5%. These

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area, where the pupils are growing up; however, it is very unusual in other regions of Germany and particularly with respect to the conventions of written language.

forms are mostly substituted by demonstrative pronouns as they are mutually interchangeable by not differing in the grade of complexity or explicitness. Rather, it depends on the register which of the two forms is chosen by the speaker. In formal written language, for example, the use of demonstrative pronouns is unusual so that 3rd person pronouns are chosen instead. Moreover, proper nouns (without a preceding definite article) are quite equally distributed with rather low amounts of less than 6%. However, it is noteworthy that all pupils produce more proper nouns without a definite article than those being preceded by one. Presumably, this is also associated with the more formal genre of spoken language since, as mentioned above, for the Ruhr area in Western Germany it is rather usual to combine a proper noun with a preceding definite article.

Developed (+) and enhanced (++) literate referents hardly occur in the interviews, while highly literate (+++) referents are not found at all. All in all, not more than 5% of the referents are elaborated by attributes, the most frequent form of which are attributive adjectives. At most four NPs are attributed by an adjective in the interview with CRA, which results in a percentage of less than 3%. Such an NP is illustrated in example 5.1.

(5.1) *ja also ich fand das schuljahr,*  
 yes well 1SG find.PST.1SG the school year

*besser als die letzt-en jahr-e,*  
 good.CMP than the last-PL year-PL  
 ‘yes, well I liked this school year better than the last years’

[CRA A1-2]

Here, it has to be considered that spoken language often makes recourse to ‘ready-made chunks’, among which the NP *die letzten jahre* ‘the last years’ is classed here. Although almost half of the NPs attributed by an adjective can be regarded as such ‘ready-made chunks’, they are not distinguished from those

regarded as 'non-ready-made'. They hardly bias the result as the amount of this referent type would not distinctly change the overall distribution of referents in the orate-literate scale, if these NPs were counted differently. Still, NPs attributed by an adjective that are not regarded as 'ready-made' are found as well:

- (5.2) *weil wir interessant-e sach-en mach-en.*  
 because 1PL interesting-PL thing-PL do-PRS.1PL  
 'because we do interesting things'

[HKA G75]

Other forms of developed literate (+) referents, i.e., NPs elaborated by a PP (5.3: *welche von den anderen schulen* 'some from the other schools') or a genitive attribute (5.4: *kiste voller spielsachen* 'box full of toys'), occur only once in all interviews.

- (5.3) *manchmal komm-en auch welche von den*  
 sometimes come.PRS-3PL also some of the.DAT.PL  
*ander-en schul-en,*  
 other-DAT.PL school-PL  
 'sometimes some also come from the other schools'

[CRA F91]

- (5.4) *ja da wollte so ne frau,*  
 yes there want.PST.3SG such a woman

*jetzt so,*  
 now so

*ne kiste,*  
 a box

*voll-er*                      *spielsache-n* *kauf-en*.  
 full of-GEN.PL   toy-PL            buy-INF  
 ‘yes, a woman wanted to buy a box full of toys’

[DPO E55-58]

As can be expected, enhanced literate (++) referents are even less frequent; CRA and DPO make use of them twice in their interviews and PMO once. In 5.5, DPO modifies the noun *Junge* ‘boy’ by means of a relative clause, namely *der auf der sonderschule ist* ‘who is at the special school’.

(5.5) *ja*   *dann* *hat*                      *der junge* *der* *auf der*  
       yes then   have.PRS.3SG   the boy   who at   the.DAT  
       *sonderschule*   *ist*,  
       special school   COP.PRS.3SG

*gesagt*,  
 say.PTCP  
 ‘yes, then the boy, who is at the special school, said’

[DPO G102-103]

Remarkably, the relative clause is embedded in the matrix clause here, which is rare for unplanned spoken discourse. Rather, a postponed relative clause as in 5.6 can be expected due to the fragmented character of spoken language. In the example given in 5.6, it is obvious that the relative clause is only loosely attached as it is not integrated into the sentence bracket *würd...dahingehen* ‘would go there’.

(5.6) *ich*   *würd*,  
       1SG   would.PRS.1SG

*wenn*   *dann*   *mit*,  
 when   then   with

*freund-en*            *oder so dahingeh-en*,  
 friend-DAT.PL or    so go there-INF

*die das*            *halt auch seh-en*,  
 who PRO.DEM just also see.PRS-3PL  
 'I would if at all go there with friends who also just see it'

[CRA H120-123]

In sum, the form of referent that most frequently occurs in the interviews is the simple lexical NP, which is followed by 1st person singular pronouns and demonstrative pronouns. While the frequency of orate and basic literate referents does not highly differ from each other, the gap between basic literate and developed literate (+) referents is considerably larger. Developed literate (+) referents do not exceed 5%. Thus, orate and basic literate referents are characteristic of the interviews. The largest variation between the pupils occurs with respect to the referent form lexical NP, whereas the amount of demonstrative pronouns also shows a considerable variation. This correlates with each other as a high amount of lexical NPs implies a low amount of demonstrative pronouns and vice versa. In terms of the orate-literate scale of referents, one can say that the interview with HKA is the most orate one, whereas the other pupils do not produce considerably literate texts as the amount of orate and basic literate referents is rather balanced. Furthermore, the distinction of pupils with German as L1 and with German as L2 does not have a determining influence on the referent structure in the spoken data, which is confirmed by the result of the chi-square test, not displaying a statistically significant difference ( $\chi^2 = 1.53$ ;  $df = 3$ ;  $p < 0.05$ ).

### 5.1.3 Clause structures in the interviews

Before looking at the different types of clause structures in the interviews, it has to be pointed out anew that the syntactic structure of the clause is evaluated independently of prosodic cues. Clauses that are prosodically separated

into several IUs are syntactically classified as though they are uttered under one coherent intonation contour. Although this contradicts the general approach of this work, i.e., analyzing spoken language units solely in terms of prosodic criteria, it is necessary here in order to be able to compare the clause structures of the spoken and written data. In sections 3.2.3 and 5.1.1, prosodic characteristics have been focussed on in the analysis of IU types so that it has already been analyzed to which amount non-clausal and clausal IUs occur in the interviews.

Referring to the orate-literate scale for clause structure which was developed in section 4.2.2, Figure 5.2 shows the distribution of the different syntactic structures in the interviews, considering each pupil separately. The amount of orate structures comes to less than one third for each pupil. However, it is obvious that the two pupils with German as L1 have both less orate structures in their interviews than the two pupils with German as L2. This variation is statistically significant ( $\chi^2 = 6.4$ ;  $df = 1$ ;  $p < 0.05$ ). In fact, the interview with PMO contains roughly half as many orate structures as the interviews with DPO and HKA, which is a decisive difference. The difference between the amount of orate structures in CRA's and DPO's or HKA's interview is rather nominal, though. This suggests that DPO and HKA produce more truncations (example 5.7), postponed structures (example 5.8), or left-dislocations (here exemplified by a structure found in PMO's interview: 5.9), viz., phenomena that are syntactically not integrated into the clause structure and consequently ranged as orate in the orate-literate scale for clause structure.

(5.7) *ähm,*  
um

<i>eigentlich</i>	<i>war</i>	<i>das</i>	-	-
actually	COP.PST.3SG	PRO.DEM		

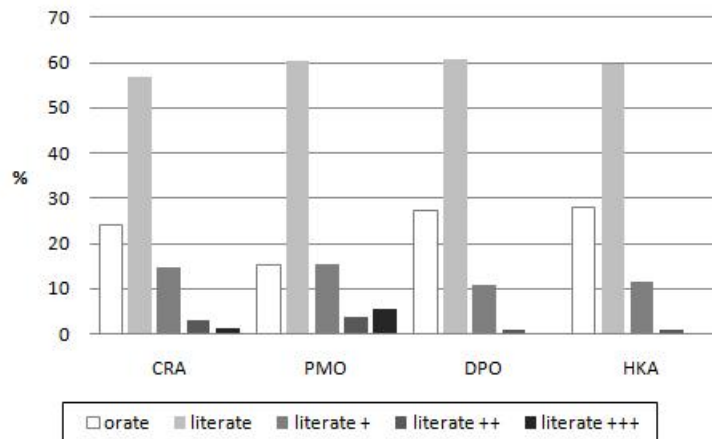


Figure 5.2: Orate-literate distribution of clause structures in the interviews.

*ich fand das am anfang nicht*  
 1SG find.PST.1SG PRO.DEM at the.DAT beginning not  
*schön,*  
 nice  
 ‘Um, actually, it was - - I didn’t like it at the beginning...’

[HKA A1-2]

Moreover, postponed structures are also ranged as orate as they are not integrated into the corresponding syntactic structure, which in German often correlates with phrases that are not integrated into the sentence bracket. These structures are generally also prosodically separated from the respective clause; example 5.8, though, shows a postponed PP which is uttered under the same intonation contour as the preceding syntactic unit. Due to the sentence bracket, the PP *wegen den noten* ‘because of the grades’ can be identified as a non-integrated PP.

- (5.8) *da muss-te sich man anstreng-en wegen*  
 there have to-PST.3SG REFLPRO one try hard-INF because of  
*den note-n und so.*  
 the.DAT.PL grade-PL and so  
 ‘One had to try hard there, because of the grades and stuff.’

[DPO A3]

Example 5.9 illustrates a left-dislocation of an adverbial in the first two lines, which is resumed by the deictic adverb *da* ‘there’ in line three.

- (5.9) *letztens beim,*  
 recently at.the.DAT.SG

*äh sportunterricht,*  
 um gym class

*da war-en wir,*  
 there COP.PST-1PL 1PL

*beim o-s-c,*  
 at.the.DAT o-s-c

‘Recently during um gym class, we were at the o-s-c [abbreviation for sports club]...’

[PMO E96-99]

These are all examples of structures that are classified as orate in the analysis scale as the information provided is not integrated into a syntactic structure.

In contrast, basic literate structures refer to simple clauses that do not contain syntactically integrated adverbials. Example 5.9 illustrates such a simple clause, where the syntactic structure does not integrate the adverbial (*da waren wir beim o-s-c* ‘we were at the o-s-c’); consequently, lines three and

four are regarded as a basic literate structure. Another example of a basic literate clause can be found in 5.10, where the simple clause is again prosodically split up. The adverb *eigentlich* 'actually' is rated as a conversational filler that does not increase the information content of the clause. 5.10 is evaluated as a simple structure since it only contains those constituents that are required by the copula.

(5.10) *e-kurs*                      *ist*                      *mir*                      *eigentlich,*  
           advanced course   COP.PRS.3SG   1SG.DAT   actually

*wichtig.*

important

'the advanced course is actually important for me.'

[CRA A18-19]

Regarding the next level of literate structures, the large decline from basic literate to developed literate (+) structures is quite evident. The amount of developed literate clause types decreases to less than one third of basic literate ones. In all interviews (except for PMO), developed literate structures are less frequently used than orate ones. PMO, however, uses as many developed literate patterns as orate ones. Furthermore, developed literate structures amount to less than one fifth of all structures used in the interviews; DPO, for example, elaborates only 10% of the clauses by means of a developed literate structure.

The clear majority of developed literate structures are adverbial subordinations; the amount of arguments that are propositionally extended only comes to approximately 10% in the interviews. Two-thirds of the propositionally extended arguments are indirect questions, such as in example 5.11, where *ob man das so ähm verschieben könnte* 'if it um can be postponed' represents the argument required by the predicate *fragen* 'ask'.

(5.11) *und dann hat man den trainer gefragt,*  
 and then have.PRS.3SG one the.ACC coach ask.PTCP

*ob man das so,*  
 if one PRO.DEM so

*ähm verschieb-en könn-te.*  
 um postpone-INF can.CONJ-3SG  
 ‘and then someone asked the coach if it um can be postponed’

[PMO D82-84]

Considering adverbial subordinations more closely, it is apparent that approximately two-thirds of the subordinations are initiated by *weil* ‘because’ and *wenn* ‘when/if’, with *wenn* being the most frequent subordinator. This corresponds entirely to the findings of Biber (1988, 107), who ascertains for English that causative and conditional subordinators frequently occur in conversations as they are

[...] associated with a relatively loose presentation of information due to real-time production constraints, and they seem to mark a range of affective functions relating to the elaboration of personal attitudes or feelings.

Examples 5.12 and 5.13 show utterances with these subordinators.

(5.12) *ja also ich fand das schuljahr,*  
 yes well 1SG find.PST.1SG the school year

*besser als die letzt-en jahr-e,*  
 good.CMP than the last-PL year-PL

*weil wir - -*  
 because 1PL

*weil Sie bestimmt da war-en,*  
 because 3PL.formal certainly there COP.PST-3PL  
 'yes well, I think this school year was better than the last years,  
 certainly because you were there'

[CRA A1-4]

(5.13) *wenn er groß wird* *wird* *er*  
 when 3SG big become.PRS.3SG become.PRS.3SG 3SG  
*sein vater-s,*  
 his father-GEN

*platz übernehm-en,*  
 place undertake-INF  
 'when he is grown up, he will take his father's place'

[DPO F90-91]

In 5.13, the subordinate clause precedes the main clause, whereas three quarters of the subordinate clauses in the interviews follow their main clause. Apart from one exception, all preceding subordinate clauses are initiated by *wenn* 'when/if'. Miller & Weinert (1998, 100-104) find similar results since the order of main and subordinate clause seems to depend on the nature of the subordinate clause. Conditional clauses follow *and* precede main clauses: they precede the main clause, when the entity they relate to is topical or given. In 5.13, the boy DPO is talking about has been introduced a few utterances before so that he is a given referent; thus, the subordinate clause can precede the main clause. Subordinate clauses of reason (*weil* 'because') rather follow their main clause, which naturally results from their characteristic to comment on the proposition of the main clause.

Other conjunctions do not occur repeatedly so that subordinators such as *dass* 'that', *obwohl* 'although', *damit* 'so that' as well as infinite subordinate

clauses can only be found once or twice in some interviews - in other interviews, they do not occur at all. Apart from that, relative clauses are the third frequent type of subordinate clauses in the interviews, although only 10% of the subordinate clauses are relative clauses (see example 5.14).

(5.14) *wir hab-en zu wenig*  
 1PL have.PRS-1PL too few

*ähm*  
 um

*lehrer*  
 teacher.PL

*die ähm auf-n schulhof aufpass-en*  
 who um at-the.ACC school yard watch-PRS.3PL  
 ‘we have too few um teachers who watch the school yard’

[CRA G99-102]

The next two levels of the orate-literate scale encompass clauses that contain a phrasal adverbial which is syntactically integrated into the clause (‘enhanced literate’) or coordinations that are closely linked to the preceding clause by means of an ellipsis (‘highly literate’). Figure 5.2 shows that both levels achieve rather nominal values in the overall distribution of clause structures. The amount of these two levels in the interview with CRA (4.3%) exceeds the values of DPO (0.9%) and HKA (0.8%), whereas PMO (9%) produces twice as many enhanced and highly literate clauses as CRA.

A good example of an adverbial can be found in 5.15, where the PP *am nächsten tag* ‘on the next day’ at the beginning of the clause represents such an integrated structure that provides additional information compared to a naked clause.

- (5.15) *ja am nächst-en tag hat der*  
 well at the.DAT next-DAT day have.PRS.3SG PRO.DEM  
*mein-en ball wiedergebracht.*  
 my-ACC ball bring back.PTCP  
 'well, on the next day, he brought my ball back'

[DPO G113]

Only PMO produces more than one highly literate structure, i.e., a coordinate structure combined with an ellipsis of a clause constituent, as can be seen in the following example. Here, the subject of the clause *ich* 'I' is deleted in the coordinate part of the subordinate clause.

- (5.16) *aber wenn ich dann um zwei verabredet bin,*  
 but when 1SG then at two make a date.PTCP be.PRS.1SG

*und,*  
 and

*bis zwei jetzt englisch gemacht hab,*  
 till two now english do.PTCP have.PRS.1SG  
 'but when I have made a date at two (o'clock) and I did English  
 homework by two (o'clock)'

[PMO F133-135]

While enhanced and highly literate clause structures are hardly used by the pupils, simple literate structures predominate in the interviews. Still, a considerable part of structures in all interviews does not form a clause, which makes them syntactically unconnected. In this respect however, the first differences between the pupils become apparent since the two pupils with German as L2 produce significantly more orate structures in their interviews than CRA and PMO. However, the respective values of CRA's interview do not differ from

those found in DPO's or HKA's interview. Only PMO's value is noteworthy as orate structures in his interview add up to approximately 15%, which is considerably less compared to the ca. 25% in the other pupils' interviews. Thus, it is particularly due to PMO that a gap between the L1 and the L2 pupils occurs.

Moreover, the distribution of the upper literate structures, i.e., those ranged above the simple literate level in the orate-literate scale, reveals another difference between the pupils. On that score, the pupils with German as L1 notably differ from the pupils with German as L2. Adding the percentages of the levels 'developed literate', 'enhanced literate', and 'highly literate', the value in CRA's and PMO's interview comes to more than 20% with PMO achieving the highest value of around 25% opposed to CRA with the second highest value of around 22%. Thus, both pupils with German as L1 achieve a perceptibly higher amount than DPO and HKA, the clauses of which contain subordinations or phrasal adverbials to an amount of 12% (DPO) respectively 14% (HKA). Thus, DPO and HKA not only achieve the highest value of orate structures, but they also tend to produce fewer upper literate structures. Although the latter variation is not significant ( $\chi^2 = 3.5$ ;  $df = 1$ ;  $p < 0.05$ ), a difference between the two groups can be determined.

In sum, the two pupils with German as L2 produce significantly more syntactically unconnected chunks in their interviews than the two pupils with German as L1; the variation is statistically significant. Correspondingly, the interviews with DPO and HKA can be characterized as more orate in terms of the clause structure than the interviews with CRA and PMO. In general, PMO stands out compared to the other three pupils as his text contains the fewest orate and at the same time the most literate structures. Now, it will be of particular interest if these tendencies in the spoken data can also be found in the written class tests. Before comparing the clause structure of the spoken and written data, the third aspect of analysis, namely linking devices, will be examined in the following section.

### 5.1.4 Linking devices in the interviews

The different means of establishing a semantic connection between two prosodic or syntactic units crucially impact on textual coherence. In section 4.2.3, the possible linguistic devices that semantically relate two units to each other have been presented. Here, these devices shall be analyzed as they occur in the pupils' interviews.

Figure 5.3 shows the distribution of linking devices in each interview. It can be seen that the majority of linkages in the interviews is established by orate means, which corresponds to prosodic cues, i.e., a non-falling intonation contour indicates that the speaker intends to continue speaking. At the same time, the subsequent IU does not contain a lexical linking device that connects the two successive IUs.

Thus, between 60% (HKA) and 72% (DPO) of the IUs follow a non-falling intonation contour asyndetically. Compared to the amount of the other levels in the orate-literate scale, the differences between the pupils are fairly large. However, all pupils predominantly establish linkages between IUs by means of

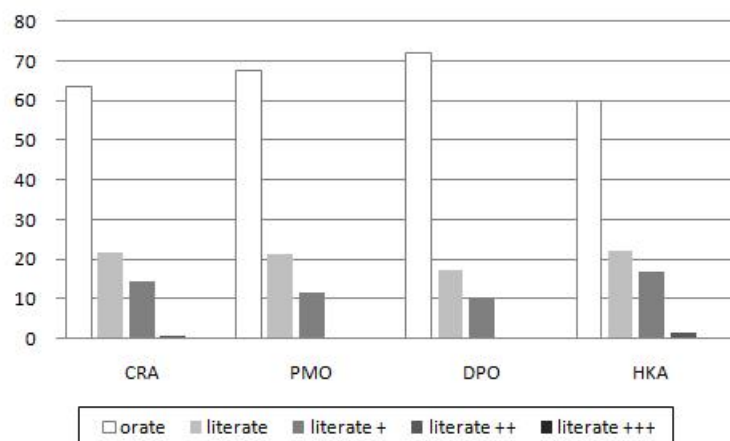


Figure 5.3: Orate-literate distribution of linking devices in the interviews.

prosodic cues. An example of this type of linkage is illustrated by in section 4.2.3 (Figure 4.5).

Considering the next levels, literate structures play a minor part in terms of the linking devices used in the interviews. Approximately 20% of the IUs are linked by means of simple conjunctions or they are not overtly linked at all as asyndesis is also ranged basic literate.<sup>8</sup> Most of the basic literate linkages are expressed by the simple conjunction *und* ‘and’, while roughly one third of the IUs follows an IU with falling intonation without a linking device (asyndesis). The preference to *und* ‘and’ has also been ascertained by Biber (1988, 106), who finds that *and* is a conjunction frequently used in English in order to “[...] string clauses together in a loose, logically unspecified manner, instead of integrating the information into fewer units through the use of prepositional phrases, relative clauses, adjectives, etc.” *Aber* ‘but’ as well as *oder* ‘or’ are rather rare in the interviews. Example 5.17 illustrates an instance where two clauses are loosely linked by *und* followed by *dann*, which indicates the chronological order of the events.

(5.17) *da hat der das nochmal gemacht,*  
 there have.PRS.3SG PRO.DEM PRO.DEM again do.PTCP

*und dann hab-en wir uns alle versammelt,*  
 and then have.PRS-1PL 1PL REFLPRO all gather.PTCP  
 ‘then he did it again and then we all gathered together’

[PMO E122-123]

Figure 5.4 shows the acoustic sample of 5.18<sup>9</sup> indicating that the intonation contour in IU85 is clearly falling. The fact that the interviewer (IV) briefly assures that she is still listening by saying ‘mh’ after the intonation decline,

<sup>8</sup>Here, the distinction between IUs having a falling and those having a non-falling intonation is decisive as IUs asyndetically following an IU with non-falling intonation are classified as orate.

<sup>9</sup>The numbers (83)-(86) correspond to the IUs in Figure 5.4.

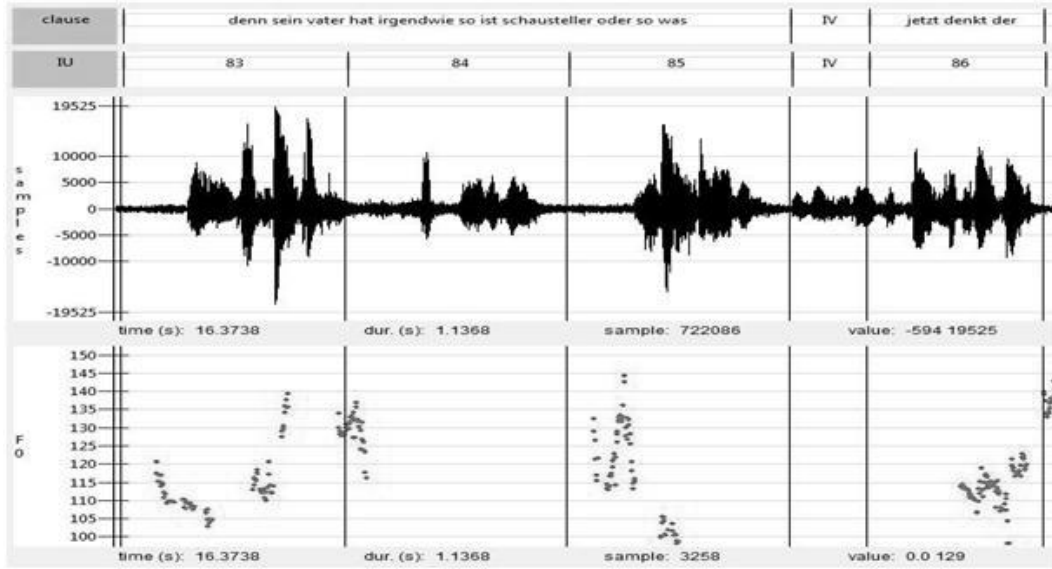


Figure 5.4: Asyndesis after falling intonation contour.

emphasizes that the intonation contour indicates the end of the utterance. Presumably, she would not have uttered anything, if the intonation had not declined as obviously as it did. The following IU86 *jetzt denkt der* ‘now he thinks’ continues without a linking device so that this exemplifies an asyndesis after a falling intonation contour.

(5.18) (83) *denn sein vater,*  
           since his father

(84) *hat                   irgendwie so,*  
       have.PRS.3SG somehow so

(85) *ist                   schausteller oder so was,*  
       COP.PRS.3SG showman or so something

(86) *jetzt denk-t der,*  
       now think.PRS-3SG PRO.DEM

‘since his father has such a, is showman or something like that, now he thinks’

[DPO F83-86]

The difference with respect to the percentages of basic literate and developed literate (+) linking devices is not as significant as between orate and basic literate forms. However, PMO for instance produces after all approximately twice as many basic literate linkages as developed literate ones. As shown in section 4.2.3, developed literate linking devices include all types of subordinators as well as a few coordinating conjunctions, such as *denn* ‘since’. All of them express a more specific relation between the two units than a mere coordination by means of *und* ‘and’, *oder* ‘or’, and *aber* ‘but’.

Between 10% (PMO) and 17% (HKA) of the IUs are linked by means of these more specific conjunctions.<sup>10</sup> A closer look at those connectives which occur most frequently in the category ‘developed literate’ linking devices reveals that *wenn* ‘when/if’ is prevalent (see also section 5.1.3). An example of the use of this conjunction is illustrated in 5.19.

(5.19) *weil ich da,*  
       because 1SG there

*schon angst vor-m herr-n G hab,*  
 yet fear of-DAT.SG mister-DAT.SG G have.PRS.1SG

---

<sup>10</sup>One might wonder, why these numbers do not correspond to the amount of subordinations that have been evaluated in terms of the clause structure (see section 5.1.3). As in this category, coordinating conjunctions are also considered, the amount of subordinations in the domain ‘clause structure’ and connectives in the domain ‘linking devices’ are not equal.

*wenn man die        hausaufgabe-n nicht hat.*  
 when one   the.PL homework-PL NEG have.PRS.3SG  
 'because I am afraid of Mister G, when one hasn't done the homework'

[CRA I139-141]

With respect to the second most frequent subordinator *weil* 'because' in this level of the orate-literate scale, it has to be pointed out that it is not only a subordinator, but also a coordinating conjunction. *Weil* not only occurs with the predicate in the final position of the clause (verb-final), but also with the predicate in the second position of the clause (verb-second). This corresponds with word order of main clauses in German. Thus, it is assumed to be both: a subordinating and a coordinating conjunction since a crucial characteristic of subordinate clauses in German is the verb-final position. If this characteristic is changed, a clause is not rated as subordinate anymore. Günthner (1996, 337) also delineates that *weil* has to be "[...] reinterpreted as a coordinate conjunction displaying main clause syntax". Yet, this is restricted to colloquial spoken German. Furthermore, the main clause word order always has a specific discourse-pragmatic function, where both connected clauses have their own illocutionary force. Example 5.20 shows an utterance where *weil* 'because' initiates a coordinate clause, i.e., a clause with verb-second position. Interestingly, *weil* occurs prosodically separated from the clause it initiates, which assumingly reinforces the choice of word order.

(5.20) *aber,*  
           but

*jetzt ähm,*  
 now    um

*würd                    ich gerne Espani    - -*  
 would.PRS.1SG 1SG gladly Spanish

*französisch wähl-en weil,*  
 French choose-INF because

*ich will ja abitur mach-en,*  
 1SG want.PRS.1SG PTL high-school diploma do-INF  
 ‘but now um, I’d like to choose &Spani French because I want to do  
 abitur’

[HKA B17-21]

In all interviews, the conjunction *weil* occurs 15 times, of which eight clauses are coordinate. This means that approximately half of the clauses initiated by *weil* are clauses with verb second position. As *weil* as a coordinating conjunction is closely linked with spoken registers, it would be regarded as inadequate in formal written texts (see Günthner (1996)). Presumably, *weil* with verb second position will not be found in the pupils’ class tests. Incidentally, DPO does not at all make use of *weil*. Instead, he expresses causal relations by means of the conjunction *denn* ‘since’, which always initiates a clause with verb-second position (see 5.21). Although there is not any empirical evidence, *denn* ‘since’ seems rather unusual in spoken registers from a German native speaker’s perspective. This seems to be supported by the fact that none of the other pupils use this conjunction in the interview.

(5.21) *und es war auch für mich schwer denn,*  
 and 3SG COP.PST.3SG also for 1SG.ACC difficult since

*ich muss-te mir ja - -*  
 1SG have to-PST.1SG 1SG.DAT PTL

*mich ja richtig anstreng-en damit ich auf die*  
 REFLPRO PTL really try hard-INF so that 1SG on the  
*neu-e schule komm-e,*  
 new-F school come.PRS-1SG  
 'and it was also difficult for me since I really had to try hard so that I  
 may go to the new school'

[DPO A11-13]

While the amount of developed literate structures comes to 13% of all linking types, enhanced literate linking devices are extremely rare. In all interviews, only three connective adverbs are used: one by CRA, two by HKA. Interestingly, it is the same adverb in all three cases, namely *deswegen* 'therefore'. In the interview with CRA and HKA, the percentage of enhanced literate linking devices amounts to roughly 1%. 5.22 exemplifies an utterance where *deswegen* 'therefore' occurs; the utterance reflects CRA's conclusion after several fights in the school yard.

(5.22) *ja deswegen geh ich da jetzt auch nicht mehr,*  
 yes therefore go.PRS.1SG 1SG there now also not anymore

*ähm,*  
 um

*oft hin,*  
 often PTL

'yes, that's why I don't go there um often anymore'

[CRA E83-85]

Since the percentage of enhanced literate types of linkages is rather marginal, it is not surprising that highly literate linking devices, i.e., linking PPs, do not occur in the pupils' interview at all. This means that at the end the pupils use rather few lexical linking devices as the majority of IUs is solely linked by means of prosodic cues. All in all, the distribution of linking devices hardly differs between the pupils.

### 5.1.5 Verification: Hypothesis A

In section 4.3, **Hypothesis A** suggests that orate and simple literate structures predominate in the interviews. As the analysis of the interviews is completed, this hypothesis can be verified. The data clearly indicates that **Hypothesis A** can be confirmed. In all three areas of analysis, orate and simple literate structures obviously predominate in each interview.

Particularly in the area of referents, hardly any referents ranged in the upper literate levels of the orate-literate scale occur in the interviews. The amount of orate and simple literate referents accounts for 95% (CRA) to 99% (HKA) of all referents, whereas the distribution of orate and simple literate structures is rather balanced compared to the clause structure and the linking devices. With respect to clause structure, orate and simple literate structures are also prevalent as their amount ranges from 76% (PMO) to 88% (DPO). Simple literate clause structures, however, are the most frequent clause pattern. The amount of orate and simple literate linking devices comes to between 82% (HKA) and 90% (DPO) which confirms that the clear majority of linkages is expressed by orate and simple literate means. Here, the linkage by means of prosodic cues, which is ranged orate, is clearly predominant as the amount of simple literate linking types ranges between 17% (DPO) and 22% (HKA).

All in all, this shows that **Hypothesis A** can be confirmed as the interviews are basically characterized by orate and simple literate structures, regardless of the domain of analysis.

## 5.2 The pupils' written language: the class tests

As described in section 3.1, the written data consists of three class tests (6.5, 7.3 and 7.6) belonging to different text genres. In total, the data includes six different texts, as class test 6.5 and 7.6 contain more than one assignment,

which are elaborated in separate texts. In the following sections, the texts, however, are not considered separately, but rather the results represent the addition of all texts; in case peculiarities do not allow a generalization, it will be mentioned. Moreover, the texts are analyzed in terms of the three categories of the orate-literate scale, i.e., form of referents, clause structure, and linking devices as it has been conducted for the spoken data above. The analysis begins with the form of referents in the class tests in the following section.

### 5.2.1 Referents in the class tests

Section 4.2.1 delineates how the different types of referents are ranged in the orate-literate scale, the procedure being based on two criteria, viz., degree of context dependence and degree of NP complexity. Simply put, the more context independent and the more complex the referents are, the more literate is the text. Figure 5.5 shows how the referents being used in the class tests distribute across the different levels in the orate-literate scale.

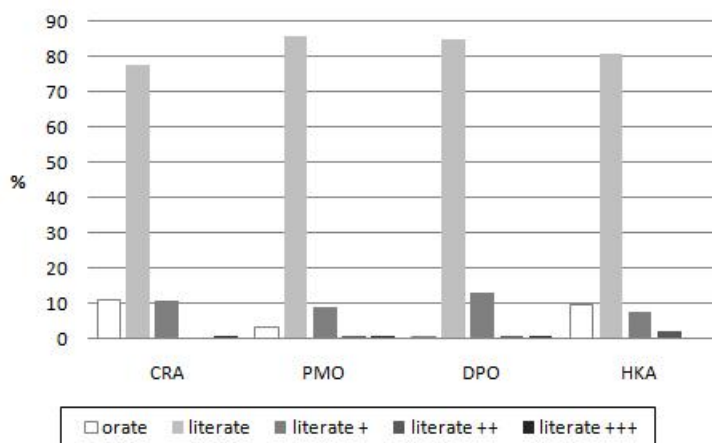


Figure 5.5: Orate-literate distribution of referents in the class tests.

It can be seen that the differences between the pupils are rather marginal. All pupils predominantly make use of basic literate referents (3rd person pronouns, simple lexical NPs, etc.); the amount ranges from 78% (CRA) to 86% (PMO). Hardly any of the other levels in the orate-literate scale does exceed 10%. The largest differences between the pupils can be found in the category 'orate'. While CRA and HKA produce around 10% orate referents, their amount comes to 3.3% in PMO's class tests and even less in DPO's class test with only 0.7% of the referents being classified as orate.

The different amounts of orate referents also impact on another dimension wherein the pupils differ from each other, namely with respect to orate and developed literate (+) referents. According to this, CRA produces as many orate as developed literate kinds of referents, while HKA uses fewer developed literate structures than orate ones. In contrast, the amount of developed literate referents clearly exceeds the one of orate referents in PMO's and DPO's class tests. DPO stands out here as he not only has the fewest orate structures, but also the highest amount of developed literate referents.

In terms of the next two levels in the orate-literate scale, the pupils barely differ from each other: the amount of enhanced (++) and highly literate (+++) referents does not exceed 2%. While CRA does not at all make use of this type of NP, the other pupils produce at most three NPs containing a relative clause. Highly literate structures are even less common as CRA, PMO, and DPO each elaborate only one NP by two modifiers, while HKA does not make use of this type of referent elaboration at all.

Table 5.5 shows the percentage of each referent type separately. Looking at the table, further differences and similarities with respect to the distribution of the referent forms become apparent. First, the pupils not only differ in the amount of orate referents, but they also predominantly use different types of orate referents. In the class tests of PMO and DPO, the two pupils with a very low amount of orate referents, the highest value of orate referents is achieved by demonstrative pronouns, although it has to be taken into account that

	referent form	CRA	PMO	DPO	HKA
orate	1SG	5.8	0.8	0	2
	2SG	0.7	0.8	0	0.7
	PRO.DEM	4.3	1.7	0.7	2
	N.PROP+DET	0	0	0	4.8
	TOTAL	10.3	3.3	0.7	9.5
literate	N.PROP	13.8	14	15.6	19
	PRO.INDF	1.4	1.7	4.3	2.7
	3SG	26.8	36.4	17	25.9
	3PL	3.6	0.8	0	1.4
	lex NP	31.9	33.1	48.2	32
	TOTAL	77.5	86	85.1	81
literate +	lex NP + Adj	7.2	4.1	9.2	7.5
	lex NP + PP	0	2.5	2.1	0
	lex NP + GEN	3.6	2.5	1.4	0
	TOTAL	10.9	9.1	12.8	7.5
literate ++	lex NP + Rel.cl.	0	0.8	0.7	2
literate +++	lex NP + 2 Mod.	0.7	0.8	0.7	0

Table 5.5: Distribution of the referent forms in the class tests in percent.

these amounts are rather low. In contrast, 1st person singular pronouns predominate the category of orate structures in CRA's class tests (5.8%), whereas demonstrative pronouns also achieve a comparatively high amount with 4,3%. These two referent types account to 2% in HKA's class tests, where a proper noun preceded by a definite article is the most frequent orate referent. Here, it has to be considered that 1st and 2nd person pronouns solely occur in direct

speech in the class tests, as can be seen in example 5.23, where a demonstrative pronoun also refers to the main happening of the assignment's underlying novel, namely Georg stomped another boy to death.

- (5.23) *Aufeinmal* *murmel-t* *Georg:*  
all at once mutter-PRS.3SG Georg

*“Ich woll-te das nicht.”*  
1SG want-PST.1SG PRO.DEM not  
‘All at once Georg mutters: “I didn’t want that.”’

[CRA 7.6, 4-5]

Example 5.24 illustrates an instance for a proper noun preceded by a definite article, which HKA does not only produce in direct speech.

- (5.24) *das* *er* *den* *Georg* *moch-te.*  
that 3SG the Georg like.PST-PST.3SG  
‘that he liked the Georg.’

[HKA 7.6, 41]

As opposed to orate referents where the single types of referents distribute rather differently in each interview, the category of basic literate referent types shows more similarities between the pupils. First, 3rd person pronouns as well as simple lexical NPs are the most frequent basic literate referents. PMO produces more 3rd person pronouns than simple lexical NPs, the proportion of which is reversed in the other pupils' class tests. In total, the sum of 3rd person pronouns and lexical NPs varies between 59% (HKA) and 70% (PMO). Accordingly, roughly two thirds of the referents are either 3rd person pronouns or simple lexical NPs. Example 5.25 shows the common use of a third person singular pronoun (*er* ‘he’) and a simple lexical NP (*die uhren* ‘the clocks’).

- (5.25) *und er besser-te heimlich die uhr-en aus.*  
 and 3SG fix-PST.3SG secretly the clock-PL PTCL  
 'and he secretly fixed the clocks.'

[PMO 6.5, 5]

Moreover, proper nouns are the third most frequent referent type in all class tests, the percentage of which ranges from 14% (CRA) to 19% (HKA). Indefinite pronouns play a minor role with their amount ranging from 1% (CRA) to 4% (DPO).

In terms of developed literate (+) referents, Table 5.5 shows that lexical NPs attributed by adjectives predominate this category of referents in the orate-literate scale, regardless of the total amount of this category. In 5.26, the adjective *große* 'big' modifies the noun *Spannung* 'excitement'.

- (5.26) *In R herrsch-te groß-e Spannung.*  
 in R prevail-PST.3SG big-F excitement  
 'In R, there was great excitement.'

[DPO 7.3, 2]

Lexical NPs attributed by PPs and genitives are less common; the following example illustrates an attribution by a PP.

- (5.27) *Der Sieger war F aus der Klasse 6a,*  
 the winner COP.PST.3SG F of the class 6a  
 'The winner was F of class 6a.'

[PMO 7.3, 10]

In terms of NPs being attributed by genitives, it is important to point out that the majority of genitives are proper nouns, as in 5.28.

- (5.28) *In dies-em Kapitel nimm-t sie Georg-s Hand,*  
 in this-DAT chapter take-PRS.3SG 3SG Georg-GEN hand  
 ‘In this chapter, she takes Georg’s hand.’

[CRA 7.6, 40]

Rather rarely, NPs are attributed by a genitive NP with a lexical noun as head (example 5.29).

- (5.29) *Der sinn der Veranstaltung war es,*  
 the purpose the.GEN.F event COP.PST.3SG 3SG  
 ‘The purpose of the event was,’

[PMO 7.3, 5]

Generally, a genitive of a proper noun expresses possession, which is also frequently used in unplanned discourse. Accordingly, it is not an indicator for register-specific differences. Still, the analysis requires that these NPs are classified as complex for the sake of consistency. Considering that the majority of genitives are proper nouns, the few occurrences of genitives in total do not bias the result. Moreover, especially with respect to attributive adjectives, it is apparent that pupils partly adopt expressions from the original text. Keeping this in mind, these structures would possibly be even less frequent without a textual prototype.

Enhanced literate (++) referents are even less common with the amount not exceeding 2% of all referents. 5.30 illustrates an NP (here a proper noun) attributed by a relative clause.

- (5.30) *Herr W*  
 Mr W

*der Stufenleiter ist*  
 who junior high coordinator COP.PRS.3SG

*sag-te*                *dann die*        *ergebnis-se.*  
 say-PST.3SG   then   the.PL   result-PL

‘Mr W, who is junior high coordinator, announced the results.’

[HKA 7.3, 18-19]

Referents being attributed by two or more modifiers are ranged as highly literate (+++) in the orate-literate scale of referents. They are particularly rare. Example 5.31 shows an instance where the head noun *Gespräch* ‘conversation’ is attributed by the adjective *wichtig* ‘important’ as well as by the PP *zwischen Anna und Georg* ‘between Anna and Georg’.

- (5.31) *In dies-em*    *wichtig-en*        *Gespräch*    *zwischen Anna und*  
          in this-DAT   important-DAT   conversation   between   Anna   and  
          *Georg öffne-t*            *Georg sein Herz,*  
          Georg open-PRS.3SG   Georg   his   heart  
          ‘In this important conversation between Anna and Georg, Georg opens  
          his heart,’

[DPO 7.6, 18]

In order to summarize the findings concerning the distribution of referents in the pupils' class tests, it can be stated that 3rd person pronouns and simple lexical NPs are the most frequent referent types in all class tests. More generally, basic literate referents also predominate the overall distribution of referents. The pupils most distinctly differ from each other with respect to the amount of orate structures ranging from 0.7% (DPO) to 10.9% (CRA). DPO makes use of the fewest orate referents and at the same time of most referents being ranged higher than basic literate; accordingly, DPO writes the most literate text in terms of the referent structure. Yet, particularly the percentages of enhanced (++) and highly literate (+++) referents hardly differ between the pupils.

The comparison of the structures in the interviews and in the class tests in section 5.3 will reveal to what extent the pupils succeed in adapting the referent structure in a decontextualized text compared to the interviews. But before going into detail, the other domains of analysis have to be considered in the following two sections.

### 5.2.2 Clause structures in the class tests

The structure of clauses is supposed to reveal to which extent the pupils integrate information into one clause structure: the more information is integrated, the more literate is the text. A sequence of simple clauses, for example, strings together information without integrating several pieces of information into one syntactic construction. In contrast, subordinate clauses elaborate information in a complex sentence, whereas phrasal adverbials even integrate information into one clause. A coordinate structure that at the same time includes an ellipsis of a constituent is assumed to integrate maximal information. According to these brief repetitions of the different types of clause structures, the structures of clauses are ranged in a corresponding orate-literate scale. In this section, it will be seen which clause structures predominantly occur in the pupils' class tests.

Figure 5.6 illustrates that the pupils achieve similar results in the general distribution of clause structures: while orate structures have the lowest amount with less than 3% in all class tests, the values of the different levels of literate structures decrease with advancing level, with the basic literate clause type having the highest amount. Nevertheless, a closer look at each level reveals that there are differences between the pupils.

As mentioned previously, orate structures come to a fairly low amount in the class tests, whereas they do not occur at all in CRA's class tests. Example 5.32, third line, shows an instance where PMO adds an adverb modifying the predicate of the preceding clause in a non-integrated structure. As this addition is not integrated into a syntactically complete unit, it is regarded as

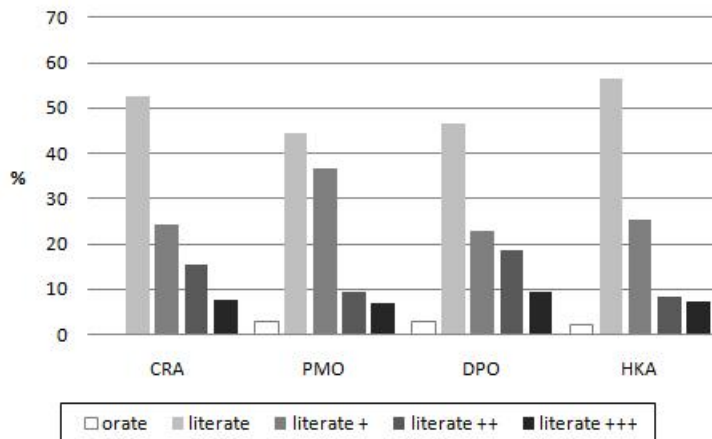


Figure 5.6: Orate-literate distribution of the clause structures in the class tests.

orate.<sup>11</sup>

(5.32) *Nachdem er das gesagt hat-te,*  
 after 3SG PRO.DEM say.PTCP have.PST-PST.3SG

*rann-te sie los.*  
 run.PST-PST.3SG 3SG PTCL

*Und nicht zu langsam.*  
 and not too slow

‘After he had said this, she started running. And not too slowly.’

[PMO 7.6, 16-18]

<sup>11</sup>Here, it has to be considered that the class test's underlying text, i.e., the young-adult fiction *Anna rennt* by Elisabeth Zöller, also contains many of these types of structures. Presumably, the style of the original text causes the pupils to make use of similar structures as they do not occur in the other class tests. While this style is of course a kind of literary license, in the context of this analysis, it has to be seen as an orate structure in order to analyze all texts equally.

Other types of orate structures are particularly clauses where a constituent is missing, as in 5.33. The copula is missing in the preceding subordinate clause (missing word in capitals in the translation) so that it cannot be seen as a complete clause.

- (5.33) *\*Nachdem er fertig [war]*  
 after 3SG finished [COP.PST.3SG]

*bekamm er ein reisieg-en ablaus.*  
 get.PST.3SG 3SG a.\*NOM great-ACC applause  
 ‘After he WAS finished, he got a hurricane of applause.’

[HKA 7.3, 8-9]

The numbers of the investigation, however, show that these types of structures are rather rare in the class tests.

In contrast, basic literate clauses, i.e., naked clauses without adverbials, are the most common type of clause in the class tests. Still, there is a rather large variation between the pupils, with the percentage ranging from 45% (PMO) to 56% (HKA). The chi-square test, though, does not determine significantly different results with  $\chi^2_{df=3;p<0.05} = 6$ . Example 5.34 illustrates a clause that does not contain any adverbials, but only the arguments that are required by the predicate *Angst haben vor* ‘to be afraid of’. Here, the preposition *vor* requires the dative instead of the accusative case so that the case of the NP *den Tod* ‘the death’ is incorrect.

- (5.34) *Der Schäferjunge hat kein-e Angst vor*  
 the shepherd boy have.PRS.3SG no-F fear of  
*den Tod.*  
 the.\*ACC.SG death  
 ‘The shepherd boy is not afraid of the death.’

[DPO 6.5, 10]

Developed literate (+) clause structures refer to sentences that contain a subordinate clause, whereas the syntactical function of the clause does not impact on the classification to developed literate. Therefore, both argument and adverbial clauses belong to developed literate clause structures. Figure 5.6 shows that this type of clauses are the second most frequent structure in all class tests. PMO has the highest amount of subordinate clauses in his class tests. While their amount otherwise ranges from 23% (DPO) to 26% (HKA), around 37% of the clauses in PMO's class tests are subordinate clauses. Yet, the variation is not statistically significant ( $\chi^2 = 2.9$ ;  $df=3$ ;  $p<0.05$ ).

Looking more closely at the types of subordinate clauses that predominantly occur in the class tests, it first becomes apparent that the pupils make use of various subordinate clauses since twelve different types of subordinate clauses can be found in the class tests. The most frequent subordinator is *dass* 'that' as in 5.35, where it initiates indirect speech, as with most of the clauses with *dass*. At the same time, these clauses are predominantly argument clauses, rather than adverbial clauses.

(5.35) *Er sag-t,*  
3SG say-PRS.3SG

*das er Eifersüchtig auf Anna und Helmut war,*  
that 3SG jealous of Anna and Helmut COP.PST.3SG  
'He says that he was jealous of Anna and Helmut.'

[HKA 7.6, 30-31]

The second and third most frequent types of subordinate clauses are infinite clauses and subordinations initiated by an interrogative. First, infinite clauses partly fulfill the function of an argument as in 5.36, here the predicative of the copula.

(5.36) *Der sinn der Veranstaltung war es,*  
the purpose the.GEN event COP.PST.3SG 3SG

*den Kinder-n das Lesen ans Herz zu*  
 the.DAT.PL child-DAT.PL the read.NMLZ at the heart to  
*leg-en.*  
 put-INF  
 ‘The purpose of the event was to entrust reading to the children.’

[PMO 7.3, 5-6]

Second, subordinate clauses that are initiated by an interrogative are more often than not an argument of the matrix clause. 5.37 illustrates an example where the subordinate clause conveys indirect speech which is the object of the predicate *erzählen* ‘to tell’. The predicate of the subordinate clause either has to be *getreten hat* ‘has kicked’ instead of *zugetreten hat*, or, if it is taken as *zugetreten*, the predicate does not require an object so that the clause is evaluated as incorrect.

(5.37) *Er erzähl-t Anna*  
 3SG tell-PRS.3SG Anna

*\*warum er den Helmut zugetreten hat.*  
 why 3SG the.ACC Helmut kick.PTCP have.PRS.3SG  
 ‘He tells Anna, why he kicked Helmut.’

[HKA 7.6, 3-4]

Thus, it is obvious that more than half of the subordinate clauses in the class tests are argument clauses, the majority of which are clauses that convey indirect speech. Accordingly, adverbial subordinate clauses are less frequent. However, the pupils produce various types of adverbial clauses, whereas the most frequent type is initiated by *weil* ‘because’, as in the following example.

(5.38) *Georg ist nicht mehr der stark-e,*  
 Georg COP.PRS.3SG not anymore the strong-NMLZ

*weil er Anna sag-t*  
 because 3SG Anna say-PRS.3SG

*das er es nicht woll-te*  
 that 3SG 3SG not want-PST.3SG

'Georg is not the strong one any longer because he tells Anna that he did not want [to do] it.'

[CRA 7.6, 29-31]

Incidentally, none of the *weil*-clauses has verb-second position, which corroborates that this phenomenon is characteristic of spoken language. Other subordinators being repeatedly found in the class tests are *als* 'when', *nachdem* 'after', *wenn* 'when/if' as well as relative clauses. Causative and temporal subordinate clauses, however, are the prevalent adverbial clauses; the subordinators *bis* 'until', *da* 'since', *damit* and *so dass*, both meaning 'so that', occur only once in all of the class tests.

In terms of the third level of the orate-literate scale, viz., developed literate (+) structures, it has been shown that only around one third of the subordinate clauses are adverbial clauses, while argument clauses represent the majority of subordinate clauses. Moreover, the conjunction *weil* 'because' is the most frequent conjunction initiating an adverbial being propositionally elaborated.

The following level in the orate-literate scale are enhanced literate (++) structures, i.e., clauses that contain an adverbial which is integrated into the clause structure in the form of a phrase. In this way, they increase the information content of one single syntactic construction. In Figure 5.6, it can be seen that their amount varies from around 9% (HKA) to approximately 19% (DPO). However, enhanced literate structures are the third most frequent type of clauses in all class tests. Example 5.39 illustrates an instance where the PP *in diesem Moment* 'at this moment' elaborates the clause.

(5.39) *In dies-em Moment fuhr das Glück in den*  
           in this-DAT moment go.PST.3SG the luck in the.ACC

*Knabe-n hinein,*  
 boy-ACC PTCL  
 ‘At this moment, luck entered the boy.’

[DPO 6.5, 17]

As in the example above, the majority of adverbials can be classified as temporal elaborations; adverbs such as *plötzlich* ‘suddenly’, *nun* ‘now’, etc. are prevalent. Less common are adverbs that establish a causative or concessive link to the preceding clause, viz., *daher* ‘therefore’ or *doch* ‘however’ (see section 5.2.3).

Finally, highly literate (+++) structures will be discussed. In each interview, this type of clause, i.e., a coordination with an ellipsis of a constituent, occurs more frequently than orate, but less frequently than enhanced literate (++) structures. The pupils hardly differ from each other regarding the amount of highly literate structures with the percentages lying between 7% (PMO) and 9% (DPO). In 5.40, a coordinate structure is illustrated; here, the subject is in both clauses the same and can thus be deleted in the second part.

(5.40) *Georg öffne-t sein Herz*  
 Georg open-PRS.3SG his heart

*und zeig-t sein-e wahr-en Gefühl-e.*  
 und show-PRS.3SG his-PL true-PL feeling-PL  
 ‘Georg opens his heart and shows his true feelings.’

[DPO 7.6, 14-15]

In the written data, none of the ellipsis in a coordinate clause affects another constituent than the clause’s subject.

In sum, basic literate structures predominate in the written data. It has been shown that, although the approximate distribution of clause structures

across the different levels of the orate-literate scale is quite similar with respect to all pupils, the amounts of the individual categories partly differ.<sup>12</sup> Obviously, the amount of basic literate structures also impacts on the distribution of the more literate types of clause structures as the percentages of upper literate structures account for between 48% (CRA) and 53% (PMO) in the class tests of CRA, PMO, and DPO (51%). Only HKA stands out since the sum of these clause types only comes to 41% in her written data. Accordingly, she also has the highest amount of basic literate structures in her texts. PMO and DPO achieve the most literate texts in this category of analysis with both using slightly more upper literate structures than basic literate ones. On the other hand, the percentages of basic literate structures in CRA's and HKA's class tests exceed the sum of the upper literate levels. Finally, while PMO produces distinctly more developed literate (+) structures than DPO, DPO uses twice as many enhanced literate (++) types of clauses than PMO; thus, the texts of the two pupils are evaluated as similarly literate.

### 5.2.3 Linking devices in the class tests

In section 4.2.3, it has been argued that linking devices are important features for the constitution of a text, particularly with respect to textual coherence, on which they have a determining influence. The different types of linking devices have been ranged in the orate-literate scale on the basis of two criteria. On the one hand, linking devices are assumed to be more literate when they establish a rather specific connection between two units. For example, the conjunction *und* 'and' is less specific than *weil* 'because' since the latter not only strings two sentences together, but also establishes a causative relation between two propositions. On the other hand, linking devices are assumed to be more literate, the closer the relation is that they establish between two units (see section 4.2.3). Hence, the closest relation is a connection where

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<sup>12</sup>The chi-square tests, though, do not indicate statistically significant variations, as will also be seen in section 5.3.2.

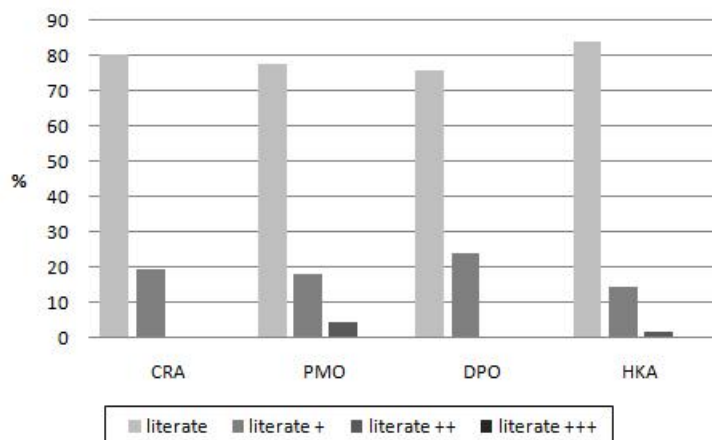


Figure 5.7: Orate-literate distribution of linking devices in the class tests.

the linking device refers back to an element of the preceding clause. This particularly applies to PPs such as *in Bezug darauf* ‘according to this’, which are ranged highly literate in the orate-literate scale.

Figure 5.7 illustrates that the primary use of linking devices in the class tests is confined to the basic literate type of linkages, i.e., asyndesis and simple connectives, such as *und* ‘and’. The percentages range from 76% (DPO) to 84% (HKA), indicating that the pupils generally structure their texts rather similarly in this respect. However, a closer look at the exact distribution of the linking types will show that there are some differences between the pupils. Moreover, developed literate (+) linkages are the second most frequent structure in all class tests, whereas here, the differences between the pupils are somewhat larger than with respect to the basic literate type. While enhanced literate (++) structures hardly occur in the class tests, with the percentage not exceeding 5%, highly literate (+++) linking devices are not found at all in the written data.

A closer look at how asyndesis and simple connectives are distributed reveals that basic literate linkages partly consist of different linking types, when

comparing the pupils with each other. While CRA, DPO and HKA predominantly make use of asyndesis, with its amount coming to approximately three quarters of the basic literate linkages (in the case of CRA, however, it is only two out of three), PMO produces more linkages by means of simple connectives than by asyndesis. He particularly distinguishes himself from the others due to the more frequent use of *aber* 'but'. The following examples show instances of the three types of basic literate linkages occurring in the class tests. 5.41 illustrates an asyndesis, where the two clauses are not overtly related to each other, but merely strung together. In contrast, the two clauses in 5.42 are linked by means of the simple conjunction *und* 'and'. The third type of basic literate linkages that occurs in the class tests is a connection of two clauses by the conjunction *aber* 'but', an example of which is shown in 5.43.

- (5.41) *Die Publikum war so aufgeregt und neugierig.*  
 the.\*F audience COP.PST.3SG so excited and curious

*J aus der 6a fing an zu les-en.*  
 J from the.DAT 6a begin.PST.3SG PTCL to read-INF  
 'The audience was very excited and curious. J from class 6a began to read.'

[HKA 7.3, 4-5]

- (5.42) *Der Junge ging mit den Pferd-en sehr geschickt [um]*  
 the boy go.PST.3SG with the.DAT.PL horse-DAT.PL very skillful PTCL

*und der Junge pfleg-te sie so gut,*  
 and the boy care for-PST.3SG 3PL.ACC so good  
 'The boy dealt with the horses very skillfully and the boy cared for them so well,'

[CRA 6.5, 1-2]

- (5.43) *Er fing in ein-er Goldmide an als*  
 3SG start.PST.3SG in a-DAT.F goldsmiths PTCL as  
*Stallknecht.*  
 stall-boy

*Aber es war im bald langweilig bei*  
 but 3SG COP.PST.3SG 3SG.DAT soon boring at  
*den Pferd-en*  
 the.DAT.PL horse-DAT.PL  
 ‘He started working in the stalls at a goldsmith’s. But soon he was  
 bored by the horses’

[PMO 6.5, 3-4]

Figure 5.7 shows that at most one out of four linking devices is ranged developed literate, i.e., connectives that establish a more specific relation between two clauses than *und* ‘and’ are rather rare in the texts. This type of linking mainly refers to subordinators, e.g., *weil* ‘because’, as it was shown in example 5.38 in the context of the analysis of the clause structure. Less common are conjunctions that initiate a coordinate clause, such as *denn* ‘since’ or *doch* ‘but’; still, they occur sporadically as exemplified in 5.44.

- (5.44) *Jeder las fünf Minut-en ein-en Absatz aus*  
 everyone read.PST.3SG five minute-PL a-ACC paragraphh of  
*sein-en Lieblingsbuch vor,*  
 his-\*ACC favorite book PTCL

*doch nur ein-er konn-te gewinn-en.*  
 but only one-M can.PST-PST.3SG win-INF  
 ‘Everyone read a paragraph of his favorite book for five minutes, but  
 only one could win.’

[DPO 7.3, 7-8]

Moreover, the distribution illustrated in Figure 5.7 indicates that enhanced literate (++) linking devices are even less common than developed literate (+) ones, with a total number of three in all class tests. Two adverbs ranged as enhanced literate linking devices can be found in PMO's class tests: *darauf* 'thereupon' and *außerdem* 'moreover', which is illustrated in 5.45, line three. The word order in the first sentence is incorrect as the positions of the subject and the predicate have to be interchanged. The other enhanced literate (++) linking is produced by HKA, who establishes a causative connection by means of the adverb *deshalb* 'therefore', as in 5.46, line four<sup>13</sup>.

- (5.45) \**Aber dann Georg fäng-t vor ihr-en*  
           but then Georg start.PRS-3SG in front of her-DAT.PL  
           *Auge-n an zu wein-en.*  
           eye-DAT.PL PTCL to cry-INF

*Außerdem versuch-t Georg*  
 moreover try-PRS.3SG Georg

*Anna davon zu überzeug-en*  
 Anna thereof to convince-INF

*ihm zu glaub-en,*  
 3SG.DAT to believe-INF

'But then Georg starts to cry before her eyes. Moreover, Georg tries to convince Anna to believe him,'

[PMO 7.6, 6-9]

- (5.46) *Er sag-t,*  
           3SG say-PRS.3SG

<sup>13</sup>The participle stem *angeguck-* in line three is incorrect as the personal suffix *-ten* is added. However, participles can only be inflected in nominal categories, if they are used attributively. In case the participle is part of the predicate (as in this example), an auxiliary is necessary for the personal inflection.

*das er Eifersüchtig auf Anna und Helmut war,*  
 that 3SG jealous of Anna and Helmut COP.PST.3SG

*weil die beiden fast in jeder Stunde sich*  
 because the both almost in every lesson REFLPRO.3PL  
*angeguck-ten;*  
 look at.\*PTCP-PST.3PL

*deshalb woll-te Georg ein-en Kampf mit Helmut*  
 therefore want-PST.3SG Georg a-ACC fight with Helmut  
*durchführ-en,*  
 carry out-INF

‘He says that he was jealous of Anna and Helmut, because they both looked at each other in almost every lesson. Therefore he wanted to fight with Helmut,’

[HKA 7.6, 30-33]

The discussion of linking devices has revealed that the pupils structure their texts with respect to linking devices rather similarly, with unspecific connections predominating in all class tests. This is supported by the chi-square test, which does not indicate any significant differences ( $\chi^2 = 6.1$ ;  $df = 3$ ;  $p < 0.05$ ). Furthermore, more specific connectives, viz., developed literate linking devices, occur primarily in the form of subordinators. Enhanced literate (++) types of linkages can only be found sporadically in the class tests.

Concluding the separate analysis of the spoken and written data with this section, section 5.3 will unveil the structural differences between the interviews and the class tests by comparing the results of both types of data. But before going into details about the comparison, the discussion of the written data conducted so far allows one to check the validity of another hypothesis. Moreover, section 5.2.5 will briefly evaluate DPO’s and HKA’s literacy skills in Turkish. This analysis is necessary for the verification of **Hypothesis E**.

### 5.2.4 Verification: Hypothesis C

**Hypothesis C** implies that the pupils will hardly exhaust the scale of literate structures in their class tests as they are still in the process of literacy acquisition. Thus, it is assumed that the pupils will rather make use of simple literate, developed literate (+) and maximally enhanced literate (++) structures, with highly literate (+++) patterns not occurring at all.

In general, this hypothesis cannot be confirmed, whereas it depends on the domain of analysis to what extent this statement pertains. While in terms of the linking devices the pupils hardly produce enhanced literate (++) types of linkages, with highly literate (+++) ones not being found at all in the class tests, the highest level of structures in the orate-literate scale occurs in the domains of referents and clause structures. Still, the amount of highly literate referents in the class tests is nominal since a referent that is modified by two attributes only occurs once in the class tests of CRA, PMO and DPO. Contrary to these two domains, highly literate (+++) structures can more frequently be found in the category of clause structure, the amount of which ranges from 7% to 9%. Although these types of clauses only add up to less than one-tenth of all clauses, the fairly equal amounts of these structures in the class tests suggest that the pupils master this structure at least to some extent.

Consequently, **Hypothesis C** can only partly be confirmed since highly literate structures occur in the class tests with respect to referents and clause structures. However, in all categories of analysis, enhanced and highly literate structures are still in the development stage.

### 5.2.5 Turkish literacy skills

In the literacy project LAS mentioned previously, tests were conducted in order to investigate the literacy skills in the pupils' L1. Here, the findings of this analysis will be briefly illustrated. This is necessary in order to be able to scrutinize whether DPO and HKA might have recourse to literate structures

in their L1 (see section 4.3). In this test, the pupils were asked to tell a story about a conflict situation they or a friend of them experienced. The oral narration was recorded. Afterwards, the pupils were asked to write their story down by - if they wanted to - using the recording.<sup>14</sup> Thus, it was possible to directly compare the Turkish spoken and written version and to determine those structures that the pupils changed in their written version compared to the oral one.

Here, the evaluation of the Turkish tests is restricted to a brief analysis of the written version so that oral skills are not considered. Both texts are extremely short. The same test was conducted in German in LAS project, where the texts of DPO and HKA are marginally longer. Thus, the text length assumingly has to be attributed to the situation of elicitation, rather than to the pupils' text competence in Turkish or German as both pupils do write longer (German) texts, e.g. in class tests.

Generally, DPO's written Turkish text can be evaluated as simply structured. First, this can be ascribed to the NP structure. All NPs are simple NPs with a pronominal or lexical head, i.e., none of the NPs in this text is modified by an attribute. The clause in 5.47 contains an example of a simple NP with a lexical head (*oğlan* 'boy').

- (5.47) *Sadece oğlan basla-mış.*  
           only     boy     start-PFV  
           'Only the boy started.'

[DPO TK5]

Second, the clause structure is also rather simple. DPO does not make use of subordinate structures, with his text consisting of seven juxtaposed main clauses. Moreover, the clauses contain few - if any - adverbials, which are mostly temporal ones, such as the postpositional phrase in 5.48.

<sup>14</sup>The Turkish texts can be found in Appendix C.

- (5.48) *Bir dakika sonra öğretmen gel-miş.*  
 one minute after teacher come-PFV  
 'After a minute, a teacher came.'

[DPO TK2]

These adverbials also contribute to the textual coherence as they at least mark the chronology of the events. Other devices for increasing textual coherence (e.g., causative markers) do not occur in DPO's text. All in all, this text is characterized by rather simple structures (NPs, clauses and linkages), indicating that DPO does not have elaborate literate skills in Turkish. Certainly, it is not sufficient to base this evaluation on one short text; yet, the structures that are consistently simple suggest this conclusion.

With respect to structural complexity, HKA's Turkish text only slightly differs from DPO's text. First, the structure of NPs is predominantly simple, albeit HKA makes use of one complex NP, shown in the following example. Otherwise, the NP structure is characterized by simple lexical and pronominal NPs.

- (5.49) *Sınıf-tan Arkadaş-lar-la-da Küs-üyor-uz*  
 class-ABL friend-PL-COM-FOC insult-IPFV-1PL  
 'We are also angry with the friends in the class'

[HKA TK3]

Second, the clause structure in HKA's text is fairly complex, i.e., she uses both a finite and an infinite subordination. Moreover, some clauses are elaborated by adverbial phrases. Example 5.50 shows the infinite subordination with the converb *küsünce* 'insulting'.<sup>15</sup>

<sup>15</sup>Moreover, the example contains an example of code-switching since HKA uses the German word *Pause* 'break'. The form of the predicate *gecmiyoz* results from an elision as it has to be *gezmioruz*; HKA merged the syllables *-iyor* and *-uz* here.

- (5.50) *ve* *küs-ünce-de* *on-la* *Pause-\*da* *beraber*  
 und insult-CV:TEMP-FOC 3SG-INST break-LOC together  
*\*gec-m-iyö-z*  
 pass-NEG-IPFV-1PL  
 ‘and when we are angry, I do not go with her in the break’

[HKA TK7]

Third, HKA partially marks her clauses by connectives, whereas these linkages are on a fairly basic level. Considering that almost half of the clauses is initiated by the simple connective *ve* ‘and’, the linking devices are not very complex in HKA’s Turkish text.

All in all, the analysis of the Turkish tests reveals that DPO and HKA mainly succeed in detaching from orate structure by using complete (and partially complex) sentences. Although the data basis for this evaluation is very small, the texts indicate that DPO and HKA predominantly make use of basic literate structures as their texts contain only few elaborate structures. In these texts, the Turkish literate competencies of the two pupils are for the most part restricted to formally normative structures, which do not suggest that they master highly literate competencies in Turkish. Certainly, more comprehensive data is necessary to come to a definite conclusion in this respect. However, the fact that the pupils had not more than two years Turkish instruction in school associated with the information on the family background also suggests that both pupils can rather not benefit from having recourse to literate structures in their L1, when writing in L2.

### 5.3 Comparison of the pupils’ spoken and written data

After the two data sets of this study have been discussed separately in the two previous sections, they will be compared in this section. In doing so, it

will be possible to reveal to what extent the pupils succeed in detaching from orate structures in their written texts. Moreover, the remaining hypotheses will be scrutinized, after the spoken and written texts are compared. Before the hypotheses are verified, the two types of language data will be discussed by looking at each category of analysis. Initially, each pupil is considered separately, which is followed by the L1/L2 comparison. Subsequently, a general evaluation of the results concludes each domain of analysis.

### 5.3.1 Referents in spoken and written language

The analysis of the interviews has shown that the structure of referents is predominated by orate and basic literate types of referents, with the amount of these two types being fairly balanced. In contrast, the clear majority of referents in the class tests are basic literate ones, while the amount of orate referents decreases to approximately 10% or less in the written data. Figures 5.8 - 5.11 compare the distribution of referents in the interviews and the class tests for each pupil separately; the results of the interview are displayed in the front row of the chart. It becomes apparent that each pupil succeeds in reducing the use of orate referents in the class tests. At the same time, the amount of basic literate structures is distinctly increased in the class tests, whereas the occurrences of upper literate referent types hardly varies between the spoken and written data.

	$\chi^2$	df
CRA	52.7	4
PMO	73.5	4
DPO	81.5	4
HKA	90.3	3

Table 5.6: Chi-square values for the distribution of referents in the interviews and the class tests.

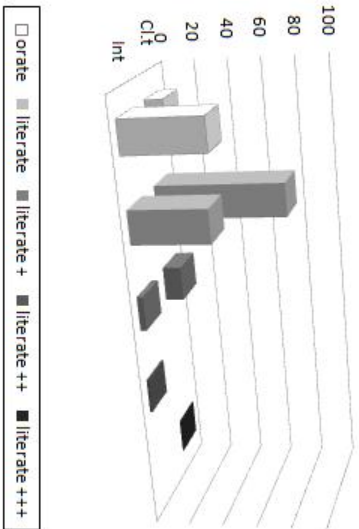


Figure 5.8: CRA: referents in the inter-views (Int) and the class tests (Cl.t).

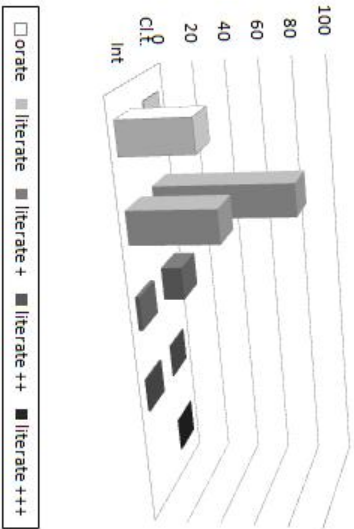


Figure 5.10: DPO: referents in the inter-views (Int) and the class tests (Cl.t).

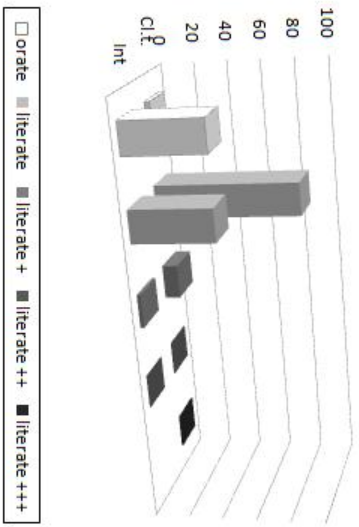


Figure 5.9: PMO: referents in the inter-views(Int) and the class tests (Cl.t).

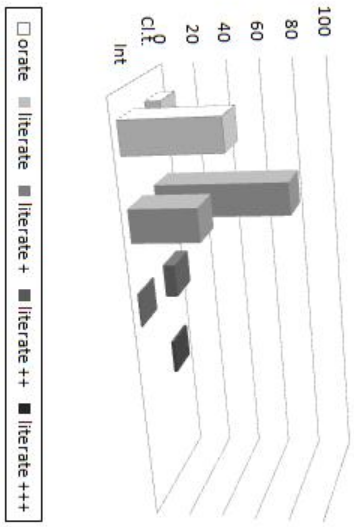


Figure 5.11: HKA: referents in the inter-views (Int) and the class tests (Cl.t).

The chi-square test shows that the distribution of the referents depends on the underlying register. With the significance level of  $p < 0.05$ , the differences between the two text types are by no means random (see Table 5.6). Thus, all pupils succeed in detaching from the contextualized use of referents in the interviews by focussing on more decontextualized structures. This can particularly be ascribed to the clear majority of basic literate referents. Moreover, the total amount of developed literate (+) referents in the class tests has significantly increased compared to the interviews ( $\chi^2 = 22.9; df = 1; p < 0.05$ ). Since enhanced (++) and highly literate (+++) referents are very rare in both registers, there are neither any patterns nor any significant differences distinguishable when comparing spoken and written data.

This reveals that the pupils master the first three levels of the orate-literate scale quite well, i.e., orate, basic literate and developed literate referents. As they barely produce enhanced and highly literate referents in either register, the pupils presumably encounter difficulties with the use of the two highest literate levels - at least in the texts of this study. Moreover, there is an obvious decline of frequency between the level of basic literate and developed literate structures in the class tests of each pupil. This might also indicate that the pupils indeed succeed in detaching from orate structures in their class tests, but they have difficulties with referent types structurally more complex. In other words, they are able to adapt the referent structure to a more decontextualized register, but they hardly vary the respective structures, with the upper literate levels not exceeding 15%.

Furthermore, the data will be compared in terms of the L1/L2 distinction. The addition of CRA's and PMO's as well as of DPO's and HKA's values is illustrated in Figures 5.12 and 5.13, comparing the L1 and the L2 pupils. The figures show that the differences in the comparison of the referent types are very marginal, which is confirmed by the chi-square test. Its results indicate that the variation between the L1 and the L2 pupils is not statistically significant (for the interviews:  $\chi^2 = 1.5; df = 4; p < 0.05$ ; for the class tests:  $\chi^2 = 3; df =$

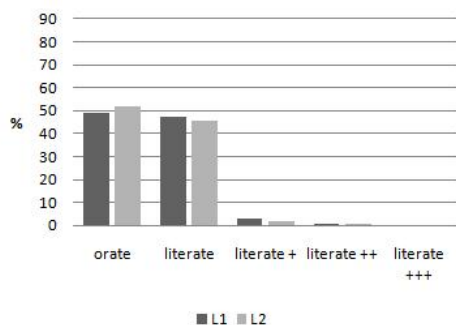


Figure 5.12: L1/L2 comparison of referents in the interviews.

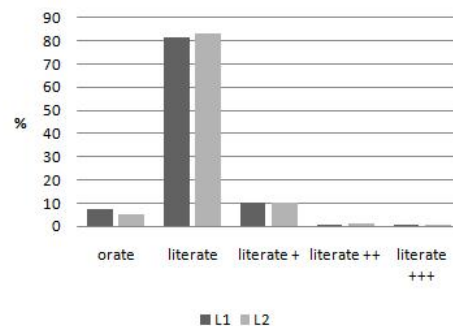


Figure 5.13: L1/L2 comparison of referents in the class tests.

4;  $p < 0.05$ ).

Accordingly, the use of orate and literate referents is not dependent on the pupils' linguistic background. Rather, the pupils with German as L2 and those with German as L1 produce fairly similar amounts of the different referent types in both the interviews and the class tests. This also implies that the pupils with German as L2 adapt the referent structure in a text to less contextualized referents to the same extent as the pupils with German as L1.

### 5.3.2 Clause structures in spoken and written language

In both the interviews and the class tests, simple literate clause structures are the predominant types of clauses. Still, the distribution of the different levels of the orate-literate scale clearly differs in the two text types as the amount of orate and basic literate structures decreases (to some extent significantly) in the class tests. At the same time, the percentages of the upper literate levels increase noticeably. This is illustrated by Figures 5.14 - 5.17, which directly compare the distribution of clause structures in the orate-literate scale, considering each pupil separately.

Generally, the orate-literate scales of the four pupils resemble each other, whereas PMO differs from the other pupils in two aspects. First, he pro-

	$\chi^2$	df
CRA	33,2	4
PMO	20	4
DPO	45,1	4
HKA	45	4

Table 5.7: Chi-square values for the distribution of clause structures in the interviews and the class tests.

duces considerably less orate structures than the other pupils in the interview, whereas the difference is not statistically significant ( $\chi^2 = 7.7; df = 3; p < 0.05$ ). Second, the amount of developed literate structures is the highest in PMO's class tests compared to the other pupils' class tests; the difference, however, is also not statistically significant ( $\chi^2 = 2.9; df = 3; p < 0.05$ ). Although the chi-square test does not prove a significant difference, PMO has both the lowest amount of orate structures in the interviews and the highest amount of developed literate clauses in the class tests. The combination of these two findings might suggest that his texts can be regarded as (slightly) more literate than the written texts of the other pupils.

All in all, the chi-square tests prove that the distribution of orate and literate clause structures depends on the text type, i.e., the variation in the two texts is statistically significant for each pupil. In Table 5.7, the results of the chi-square tests are tabulated. Thus, the pupils distinguish the two registers structure-wise and adapt the clause structures in the written data by producing fewer orate and simple literate patterns. Consequently, the clauses are more complex in the class tests, with the amount of subordinate clauses and of phrasal adverbials being distinctly increased. In other words, they discernibly detach from orate types of clauses, where it is required by the text type. This is also illustrated by Figures 5.14 - 5.17, where a decrease in the amount of orate and basic literate clause structures can be identified,

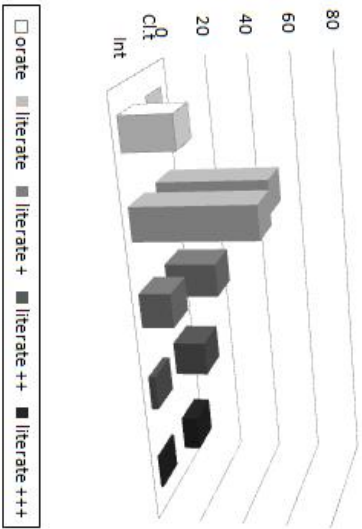


Figure 5.14: CRA: clause structures in the interviews (Int) and the class tests (Cl.t).

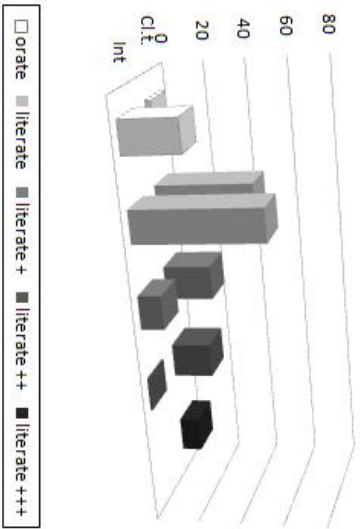


Figure 5.16: DPO: clause structures in the interviews (Int) and the class tests (Cl.t).

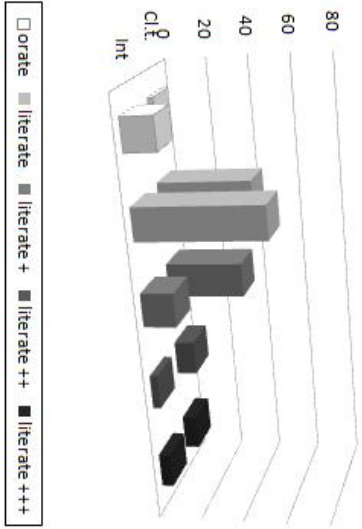


Figure 5.15: PMO: clause structures in the interviews (Int) and the class tests (Cl.t).

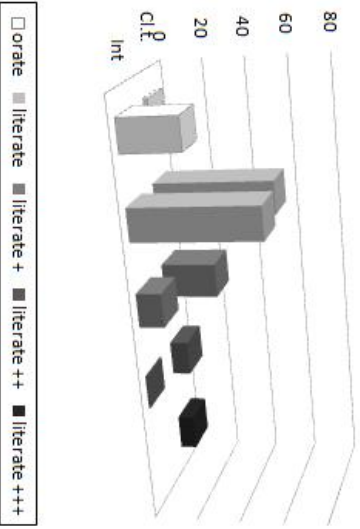


Figure 5.17: HKA: clause structures in the interviews (Int) and the class tests (Cl.t).

when comparing interview with class tests. Additionally, the percentages of the upper literate structures increase in all class tests compared to the spoken data.

Moreover, the analyses have unveiled that the prevalent subordinate clause differs with respect to the data type. In the interviews, subordinate clauses are most frequently initiated by the conjunction *wenn* ‘when/if’, which plays a secondary part in the class tests. There, most of the subordinate clauses are arguments, mostly indirect speech initiated by *dass* ‘that’. Interestingly, this type of clause is related to ‘on-line information elaboration’ in the study of Biber (1988, 114) on English register differences. It has to be considered that one of the text types in this study elaborates on a chapter of a novel, where the pupils often use indirect speech in order to render the conversations between the protagonists. Still, other types of argument clauses, i.e., infinite subordinate clauses and indirect speech, are the second and third most frequent types of clauses used in the class tests. This confirms that the structures of subordinate clauses vary distinctly in the pupils’ spoken and written language.

Figures 5.18 and 5.19 compare the results with respect to the L1/L2 distinction. Again, the differences between the two groups seem to be marginal, whereas the chi-square test reveals that the clause structures in the interviews distribute to a statistically significant extent ( $\chi^2 = 16.1$ ;  $df = 4$ ;  $p < 0.05$ ): The two pupils with German as L1 produce significantly less orate and basic literate clause structures. At the same time, the amount of upper literate levels is higher in their interviews than in the interviews of DPO and HKA (both L2). In contrast, the class tests do not show statistically significant variations between the two groups ( $\chi^2 = 1.8$ ;  $df = 4$ ;  $p < 0.05$ ). This means that CRA and PMO do not benefit from their advantages in the interviews. In other words, the pupils with German as L2 close the gap in the class tests, which means that they essentially take a larger step between the structures of the interviews and the class tests. All in all, the pupils with German as L1 have a slight advantage over the pupils with German as L2 in the clause structures

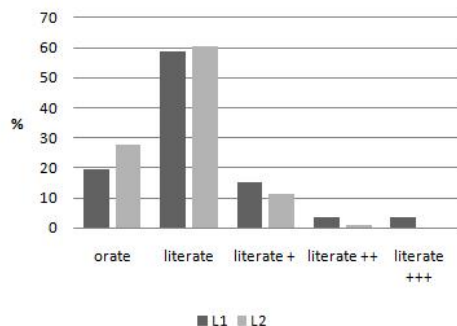


Figure 5.18: L1/L2 comparison of clause structures in the interviews.

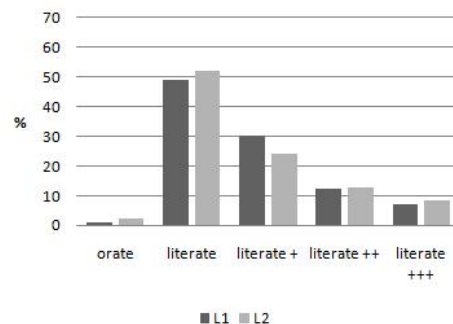


Figure 5.19: L1/L2 comparison of clause structures in the class tests.

of the interviews, whereas no statistically significant difference between the groups can be found in the class tests.

### 5.3.3 Linking devices in spoken and written language

The distribution of linking devices varies considerably regarding the two registers. The separate register analyses have revealed that a clear majority of linkages in the interviews is not implemented by means of lexical devices, but rather prosodic characteristics fulfill the task to link two adjacent units with each other. Thus, prosodic linkages do not function as a semantic linker as they are used for discourse-pragmatic reasons in order to indicate that the speaker intends to continue and not to pass to the interlocutor. Since this type of linking naturally does not occur in written texts, the majority of linkages shifts to the next level in the orate-literate scale, viz., the basic literate level.

Figures 5.20 - 5.23 compare the distribution of linking devices in the interviews and the class tests for each pupil separately. The amount of orate structures decreases to 0% in the class tests, while the percentages of basic literate linkages increases distinctly from approximately 20% in the interviews to approximately 80% in the class tests. While these two lower levels signifi-

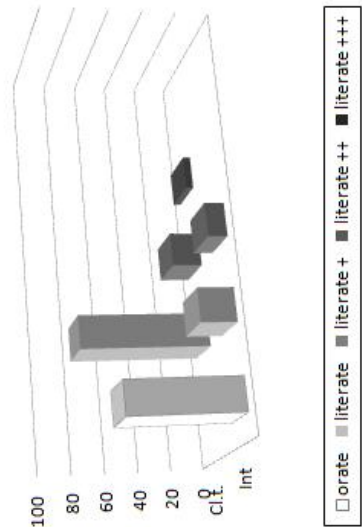


Figure 5.21: PMO: linking devices in the interviews (Int) and the class tests (Cl.t).

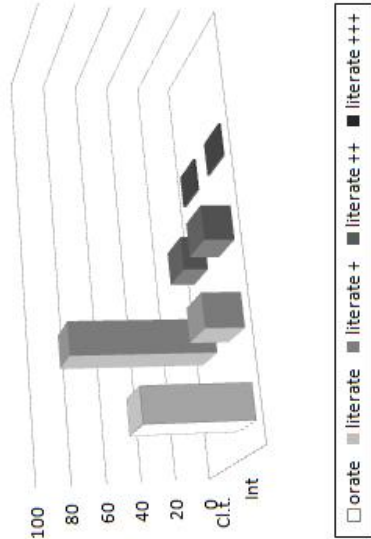


Figure 5.23: HKA: linking devices in the interviews (Int) and the class tests (Cl.t).

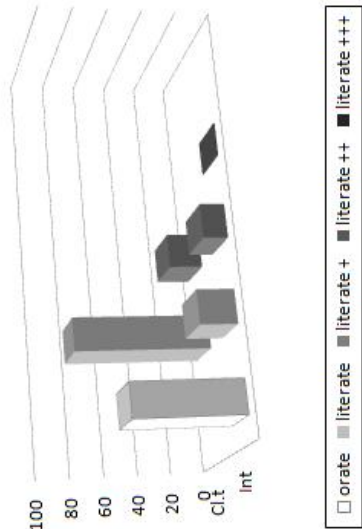


Figure 5.20: CRA: linking devices in the interviews (Int) and the class tests (Cl.t).

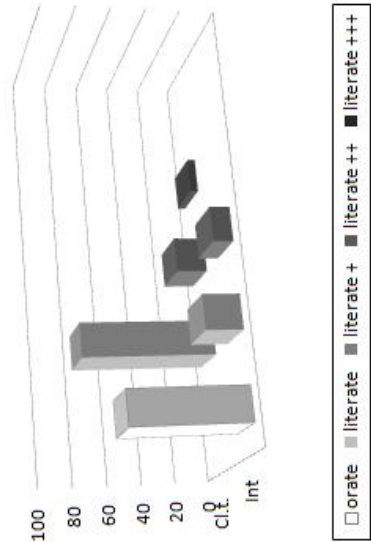


Figure 5.22: DPO: linking devices in the interview (Int) and the class tests (Cl.t).

cantly change regarding the two text types, the amount of upper literate levels is hardly increased in the class tests.

Scrutinizing the statistical significance of the register-dependent variations by means of the chi-square test, the results show that the distribution of linking devices is statistically different. Table 5.8 lists the chi-square values for each pupil. With the significance level of  $p < 0,05$ , the distribution of linking devices used in the class tests differs significantly from those found in the interviews.

	$\chi^2$	df
CRA	69.2	3
PMO	67.4	3
DPO	84.6	2
HKA	80.6	3

Table 5.8: Chi-square values for the distribution of linking devices in the interviews and the class tests.

Thus, the use of the linking devices is dependent on the register. Furthermore, a considerable decline between basic literate and developed literate linkages suggests that the pupils indeed detach from the orate type of linking, but do not succeed in increasing textual coherence by means of more specific linking types. Since enhanced and highly literate linking devices can only sporadically be found or are not used at all, the pupils hardly seem to master these upper literate levels of linking.

Figures 5.24 and 5.25 display the balanced distribution of linking devices in the interviews and the class tests when comparing the pupils with German as L1 and those with German as L2. As can be expected from the figures, the statistical test does not reveal any significant variations (for the interviews:  $\chi^2 = 0.6$ ;  $df = 3$ ,  $p < 0.05$ ; for the class tests:  $\chi^2 = 0.6$ ,  $df = 2$ ;  $p < 0.05$ ). For this linguistic domain, it can consequently be determined that the linguistic background does not impact on the choice of linking devices in this study, neither in the interviews nor in the class tests.

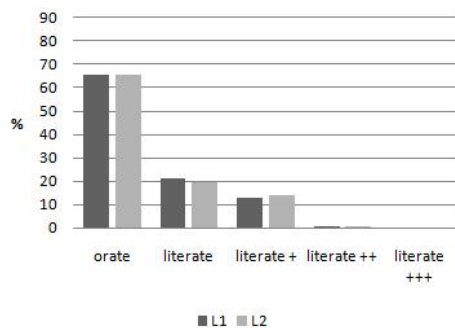


Figure 5.24: L1/L2 comparison of linking devices in the interviews.

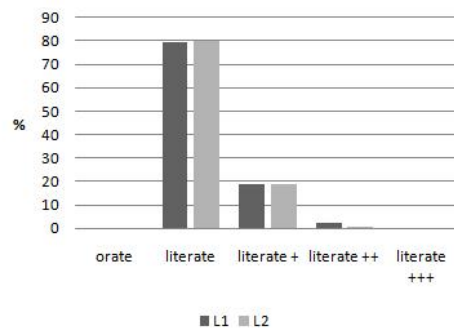


Figure 5.25: L1/L2 comparison of linking devices in the class tests.

### 5.3.4 Summary and verification of hypotheses

In sum, it can be ascertained that orate structures are rather rare in the class tests, although they are very common or even predominate in the interviews. Accordingly, the pupils succeed in detaching from orate structures in the written data. Moreover, basic literate structures clearly prevail in the class tests, regardless of the domain of analysis. Generally, there is a strong decline between basic and developed (+) literate structures, indicating that the pupils hardly use upper literate structures. Apart from the domain ‘clause structure’, enhanced (++) and highly literate (+++) structures hardly occur in the data. This is particularly remarkable and decisive for the class tests as the pupils do not seem to master upper literate structures easily, not even in written registers.

Concluding from this finding, the pupils presumably need to be supported in order to make these structures more easily accessible for them. This especially applies to the analysis domains ‘referents’ and ‘linking devices’. With respect to referents, more upper literate structures would integrate more in-

formation into one syntactic unit. Thus, the text can achieve a higher degree of decontextualization. Moreover, an increased amount of upper literate linking devices would basically contribute to a higher degree of textual coherence. Taking this into account during literacy instruction in schools, the access to these structures assumingly need to be made as simple as possible. In doing so, the pupils might succeed in using upper literate referents and linking devices to a larger extent.

Furthermore, the comparison of the pupils with German as L1 and those with German as L2 does not show any significant differences in the distribution of orate and literate structures except for the domain clause structure in the interviews. Regarding this, the pupils with German as L1 produce significantly less orate structures. As this difference is not carried over into the class tests the performance of DPO and HKA has essentially to be estimated more generously: by being able to close this gap, the range between the structures used in the interviews and in the class tests is virtually higher than with respect to CRA and PMO. However, apart from this, there are no statistically significant differences which indicate that the linguistic background of these four pupils does not significantly impact on the use of orate and literate structures in this study. This can be underlined when considering that the distribution of structures in the orate-literate scale is generally rather similar for all pupils. Further aspects regarding the language background distinction will be discussed below, where the corresponding hypothesis is verified.

The analysis of the spoken data often has identified one (or even more) pupil(s) who achieve(s) the least orate and the most literate structures in his/her interview. The comparison of the domains of analysis in the spoken and written data, though, does not show clear tendencies that the respective pupil benefits from the advantage when considering the class tests. Vice versa, it pertains as well: Someone who achieves the most orate interview in one domain of analysis does not necessarily “fail” in the class tests. For example, PMO has the fewest orate and the most literate clause types as well as the most

clausal IUs in his interview. DPO, however, has rather many non-clausal and rather few clausal IUs resulting in many orate and rather few upper literate clause structures. Yet, both pupils produce more upper literate than simple literate structures in their class tests, whereas CRA and HKA do not make use of as many upper literate clause types as PMO and DPO. Accordingly, PMO maintains his advantage, while DPO succeeds in reversing the rather orate structures in his interview into more literate ones in the class tests. In this comparison, it still becomes apparent that HKA does not take such a step. With respect to referents and clause types, her interview contains the fewest literate structures, which also pertains in her class tests. CRA generally achieves rather average results and thus does not stand out in this respect.

### Verification of remaining hypotheses

Finally, the verification of three hypotheses remains to be done. First, **Hypothesis B** is considered, which suggests in section 4.3 that the amount of literate structures is higher in the class tests than in the interviews, whereas it depends on the domain of analysis to what extent the structures are elaborated. The comparison of the spoken and written data shows that this hypothesis can be fully confirmed: Literate structures occur more frequently in the class tests than in the interviews. Moreover, each linguistic domain shows a different distribution of literate structures in the orate-literate scale, which indicates that the degree of language elaboration depends on the specific domain. Clause structures, for example, encompass the widest range of structures in the orate-literate scale, with the amount of basic literate structures being lower than in the other two domains. In contrast, referents and linking devices are considerably less elaborated. Consequently, the proposition of **Hypothesis B** can be confirmed: The degree of language elaboration is linked with the specific linguistic domain as not all structures are equally elaborated.

In **Hypothesis D**, it is assumed that a higher amount of clausal IUs and of non-orate structures in the interviews presumably correlates with a higher

amount of literate structures in the class tests. Partly, this hypothesis cannot be confirmed; partly, it is difficult to verify it in general. First, the distribution of clausal IUs does indeed significantly differ between the pupils. Since no other domains of analysis show significant variations, the differences in the amounts of clausal IUs neutralize and have no influence on the structures of referents, clauses, or linkages. Thus, those pupils who produce significantly more clausal IUs do not make use of more non-orate structures in the class tests. Even by tendency, prevalent orate structures used in the interviews do not rule out that the pupil succeeds in using comparatively many upper literate structures (see DPO in the domain of clause structure). Second, the hypothesis cannot completely be verified as the data lack significant differences in the domains of referents, clauses, and linking devices in both registers. Simply, the findings are too similar in order to be able to ascertain different correlations of non-orate structures in the interviews and the class tests. Only a wider scope of data would presumably contribute to a comprehensive verification of this hypothesis.

**Hypothesis E** refers to the distinction on the basis of the pupils' L1. It is assumed that pupils who did not learn to distinguish registers in their L1 will have more problems to make these differences with respect to their L2 than pupils who acquire literacy in their L1. Section 5.2.5 revealed that DPO's and HKA's Turkish literacy skills are rather restricted to simple literate structures. On the basis of this finding, it is assumed that both bilingual pupils do not have recourse to enhanced literate skills in their L1. Although this is not the case, the comparison between the monolingual and bilingual pupils did not show any significant differences in the class tests, regardless of the linguistic domain. As a consequence, **Hypothesis E** cannot be confirmed. However, it has to be taken into consideration that this study refers to pupils who began to acquire their L2 rather early, namely at four years of age. On the basis of the small data set for this investigation, acquiring an L2 at an early age, i.e., presumably before school, does not result in disadvantages with respect to the

degree of language elaboration in written texts.



# Chapter 6

## Comparative data

Register analyses only make sense when they are conducted comparatively (Biber & Conrad, 2009, 36). In the main part of this study, spoken and written language of four seventh graders were compared in order to investigate to what extent the pupils succeed in detaching from orate structures in their written products. The claim to be comparative is thus answered for the evaluated group. Yet, the results of the pupils' compositions trigger new questions. So far, it has been ascertained that the pupils successfully detach from orate structures in their written texts. Only the degree to which the structures are elaborated ranges on a very basic literate level of the respective orate-literate scales. In other words, the elaboration levels are by no means exhausted by the pupils. The remarks on literacy acquisition (see section 2.4) as well as on the categories 'orate' and 'literate' (see section 4.1) pointed to a decisive characteristic of literate structures, namely that the category 'literate' has to be seen as relative considering that literate structures have to be acquired during the process of literacy acquisition. Moreover, certain structures are developed rather late in this process and are actively produced only after adolescence (see articles in Strömqvist & Verhoeven (2004)). On the basis of this characteristic, it was hypothesized (**Hypothesis C**) that the pupils will rather use structures classified as lower literate, which has been confirmed in section 5.2.4.

The results of the comparison of the pupils' spoken and written language were comprehensively discussed in the previous chapter. However, it was only demonstrated that the pupils write their texts (mainly) independently of orate structures. But in the meantime, it remains unaccounted for to what extent and in which respect their texts do or do not correspond with literate skills expectable for their age group. It is therefore particularly interesting to see how written products of more successful pupils differ from this study's pupils. In section 3.2.1, it was mentioned that the four case pupils have to be rated as rather less successful as they all have been recommended to go to 'Hauptschule' (lower secondary school) or comprehensive school. That differences to more successful pupils can be expected is based on the fact that they assumingly distinguish themselves from pupils on 'Hauptschule' not least by higher literate skills.<sup>1</sup>

In order to evaluate the results of the written text analyses from a broader perspective, they will here be contrasted with texts of pupils that can be seen as more successful. Since both selected groups of pupils attend a seventh grade of a comprehensive school, differences in achievement cannot be expected per se. In the case at hand, however, it is possible to make a distinction between the two groups due to the pupils' background information (see section 3.2.1). Moreover, the performance level of the case pupils' school is estimated as rather low according to several teachers of this school. They regard their school rather as a 'Hauptschule' than a comprehensive school, which they ascribe to the rather low socio-economic status of the school's district. As against this, the comprehensive school used for comparison has an excellent reputation not least due to the school's location as it is situated in an upscale middle-class district.

For the purpose of comparison, the texts of four pupils from the reference school are considered. All of the pupils are assessed as achieving good to

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<sup>1</sup>It is widely accepted that good literate skills impact on the performance in various subjects in school. Hence, it can be assumed that more successful pupils generally possess higher literate skills, from which they benefit in several aspects (Verhoeven & Aarts, 1998).

medium results by their German teacher. With respect to their socio-economic background, the information is of course not as extensive as regarding the four case pupils CRA, PMO, DPO and HKA. Yet, information is available on their parents' professions, which indicate educational backgrounds. By referring to the recommendation of the primary school regarding the appropriate secondary school type for the individual pupil, one can get an idea of how the school estimated the pupil's capabilities. The four pupils in the reference group are ANG, BEN, FRE and MAR, all of whom speak German as L1.

ANG comes from a medium to highly educated family, with her secondary school recommendation being comprehensive school or 'Realschule'. BEN's parents are both engineers with university degree so that his family background can be seen as highly educated. The primary school recommended him for a comprehensive school or 'Realschule'. In contrast, FRE was recommended to go to 'Gymnasium' (academic high school). He also comes from a rather highly educated family. MAR has a medium educated family background. Because her family had only recently moved to the city, information about the school recommendation is not available. However, she was transferred from a 'Gymnasium' to this comprehensive school so that it can be assumed that her recommendation from the primary school was quite high - presumably 'Gymnasium' or comprehensive school.

In order to easily differentiate between both groups, CRA, PMO, DPO and HKA are henceforth referred to as P1, whereas ANG, BEN, FRE and MAR belong to P2. The comparative texts of P2 are also summaries of books (see Appendix D). Contrary to P1, each of the pupils in P2 writes about a different book as the texts are part of a lesson project where each of the pupils had to compile a folder about a book of his/her choice including various information, e.g., the summary, the protagonists' characteristics, etc. Although these summaries were not part of a class test, the conditions of text production resemble those of P1 as the texts were also written during the lessons and the pupils will receive a grade for the book folder as well. Again, it cannot be

ruled out that the pupils in P2 carry over wordings from the original text, but this has also been considered with respect to the texts of P1. All in all, the comparative data does not entirely match the conditions of the texts of P1, but the differences are not assumed to have determining impact on the written products.

Choosing pupils of another comprehensive school (instead of pupils who go to ‘Gymnasium’, i.e., academic high school) for this comparison is associated with the initially repeated characteristic of literate structures being relative. Against this backdrop, it would not make sense to use academic high school students for comparison as the (literate) structures being found in the comparative data still have to be achievable for the pupils of this study.

By means of the comparison to more successful pupils, it will be possible to investigate ...

1. ... if and to what extent PMO, CRA, DPO and HKA make use of less literate structures in their texts than the pupils of the reference group.
2. ... in which linguistic domain(s) the differences are particularly distinct.

Analogous to the previous chapters, each linguistic domain of analysis will be discussed separately, beginning with the referents.

## 6.1 Referents by comparison

In the comparison of the referents occurring in the written texts of P1 and P2, the differences are rather subtle, but yet they indicate that the pupils of P2 generally use more complex types of referents. Figures 6.1 and 6.2 illustrate the distribution of referent types regarding each pupil separately. It becomes apparent that orate referents do not occur in the book summaries of P2. In contrast, each of the pupils in P1 makes use of orate referent types, although their amount does not exceed 11%. In this respect, it has to be taken into account that direct speech and thus 1st and 2nd person pronouns occur in the texts of P1. These pronouns are the majority of orate referents.

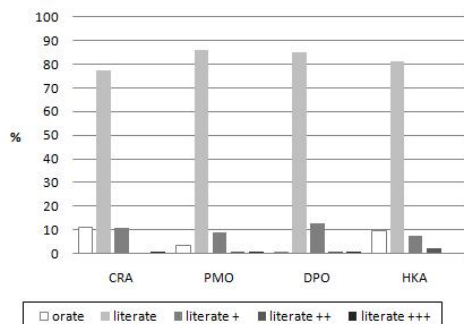


Figure 6.1: Referents in the written texts of P1.

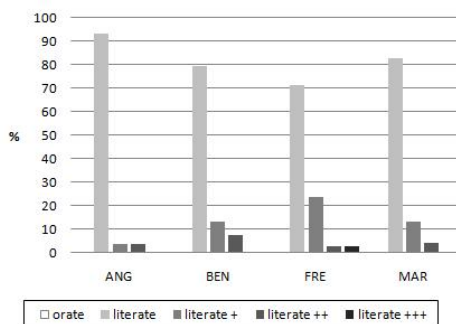


Figure 6.2: Referents in the written texts of P2.

While basic literate referents are the most frequent type of referents in each text, the pupils in P2 tend to have the advantage over CRA, PMO, DPO and HKA in terms of upper literate referents, i.e., developed (+) to highly literate (+++). However, ANG from P2 is the odd one out because her results rather resemble those of P1. The amount of upper literate structures comes to between 17% and 29% in BEN's, FRE's and MAR's text, whereas the pupils in P1 do not achieve more than 14% upper literate referents in their class tests. Since highly literate types of referents hardly occur (at most once in each text), the differences particularly result from developed and enhanced literate referents. Example 6.1 includes an NP modified by a genitive attribute *die Schwester des rennenden Jungen* 'the sister of the running boy'.

- (6.1) *Spät-er*      *stell-t*              *sich*              *heraus*  
 late-CMP   put-PRS.3SG   REFLPRO   PTL

*dass* *Beatrice* *die* *Schvester* *des*              *renn-end-en*  
 that Beatrice the sister      the.GEN run-PTCP.PRS-GEN  
*junge-n*      *ist*.  
 boy-GEN COP.PRS.3SG

'Later, it turns out that Beatrice is the sister of the running boy.'

[BEN 17-18]

Moreover, the following sample illustrates an NP, which is attributed by a relative clause, i.e., an enhanced literate structure.

(6.2) *In Wahrheit geh-en sie in ein Hotel,*  
 in truth go.PRS-3PL 3PL in a hotel

*in welch-em ein Party des Sanger-s 'it!'*  
 in which-DAT a.\*M party the.GEN singer-GEN 'it!'  
*stattfinde-t,*  
 take.place-PRS.3SG

'In fact, they go to a hotel, where a party of the singer 'it!' takes place,'

[MAR 6-7]

All in all, the pupils of P2 (except for ANG) use more NPs modified by attributive adjectives, PPs, genitive attributes or relative clauses. Although the statistical analysis does not reveal a significant difference ( $\chi^2 = 8.85$ ;  $df = 4$ ;  $p < 0.05$ ), the NP structure in the texts of P2 can be evaluated as slightly more complex than that in the texts of P1.

## 6.2 Clause structures by comparison

When comparing the structures of clauses in the written products of the pupils in P1 and P2, the differences seem to be greater than in terms of the previous domain of referents. The chi-square test also shows that the differences between the two groups are statistically significant ( $\chi^2 = 11.35$ ;  $df = 4$ ;  $p < 0.05$ ). While orate structures, i.e., incomplete clauses, left-dislocations, or postponed structures, occur sporadically in the texts of both groups, the amount of basic and developed literate clause structures constitutes the decisive difference between P1 and P2. In P1, the most frequent clause structure are basic literate clauses, viz., simple clauses. As against this, pupils in P2 (except for ANG)

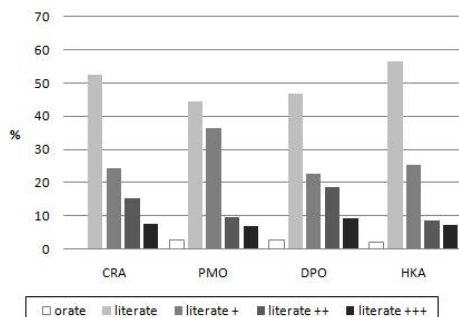


Figure 6.3: Clause structures in the written texts of P1.

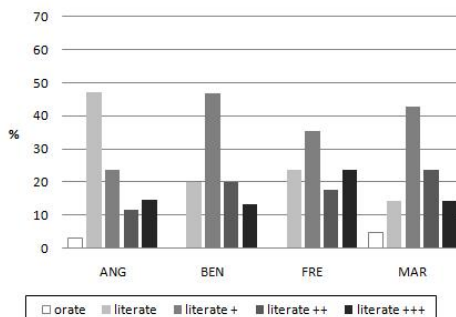


Figure 6.4: Clause structures in the written texts of P2.

most frequently make use of developed literate types of clauses, i.e., subordinations (see Figures 6.3 and 6.4), meaning that the clause structure is more complex in the texts of P2.

This finding is supported by the fact that even the amount of enhanced and highly literate structures is higher in P2 than in P1. In this respect, the result of ANG's text does not correspond with the summaries of the other pupils of her group since it contains similar structures as the texts of P1. While the other pupils, namely BEN, FRE, and MAR, produce between 18% and 24% enhanced literate types of clauses, only DPO in P1 achieves a similar result, with 19% of his clauses being ranged enhanced literate. CRA, PMO, and HKA use less enhanced literate clauses, with an amount between 9% and 15%. This tendency can also be found regarding highly literate clauses where each of the pupils in P2 achieves higher percentage values than the pupils in P1.

In example 6.3, a rather complex sentence can be found containing a developed clause structure due to the temporal subordination in line one, an enhanced structure in line three with the adverbials *mit Aud* 'with Aud' and *über die Talgrenze* 'across the border of the valley', and a coordinate clause with the reduction of the subject (lines two and three).

(6.3) *Als der Mörder schon vorher stirb-t*  
 when the murderer already before die.PRS-3SG

*wird er beschuldigt*  
 AUX.PRS.3SG 3SG accuse.PTCP

*und flieh-t mit Aud über die Talgrenze*  
 and flee.PRS-3SG with Aud across the valley border  
 ‘When the murderer dies before, he is accused and flees with Aud  
 across the border of the valley.’

[FRE 6-8]

Thus, it can be concluded that the pupils in P2 use more complex clause structures and also integrate more information into a syntactic unit, whereas this does not hold for ANG, who, as has already been established in the domain of referents, achieves results rather similar to the pupils in P1. As regards the other three pupils, this finding is particularly confirmed by the amount of upper literate structures: It ranges between 76% and 81% in the texts of BEN, FRE, and MAR, whereas upper literate structures in the texts of P1 come to between 41% and 53%.

### 6.3 Linking devices by comparison

In general, the distribution of linking devices varies considerably with respect to the pupils in P2. Again, the distribution of linking types in ANG’s text corresponds rather with the results of the pupils in P1: Basic literate linking devices are clearly prevailing, while enhanced literate linkages amount to roughly 20%. In contrast, linking devices in the other three pupils’ texts are rather evenly distributed. This means that basic literate linkages only slightly predominate in the texts of BEN and MAR. FRE stands out in this respect since basic, developed, and enhanced literate devices come to exactly the same

percentage. The frequent use of enhanced linking devices (i.e., connective adverbs such as *daher* ‘therefore’) is particularly remarkable in FRE’s text since this type of linkage occurs only sporadically - if at all - in the other pupils’ texts. In example 6.4, a sentence with such a connective adverb (here *danach* ‘afterwards’) is illustrated.

- (6.4) *Danach flieh-en sie über die Berg-e in ein unbekannt-es Land.*  
 afterwards flee.PRS-3PL 3PL over the mountain-PL in a  
 unknown-N country  
 ‘Afterwards they flee over the mountains to an unknown country.’

[FRE 19]

Figures 6.5 and 6.6 contrast the results of linking devices in both groups. By means of the chi-square test, it can be ascertained that the variations between the two groups are statistically significant ( $\chi^2 = 12.8$ ;  $df = 4$ ;  $p < 0.05$ ).

Taking the sum of upper literate structures as the basis for the concluding comparison, it again becomes apparent that the pupils in P2 have the advantage over the pupils in P1. While the amount of upper literate linking devices ranges from 16% to 24% in the texts of CRA, PMO, DPO and

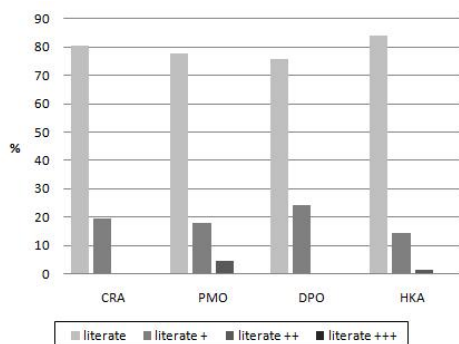


Figure 6.5: Linking devices in the written texts of P1.

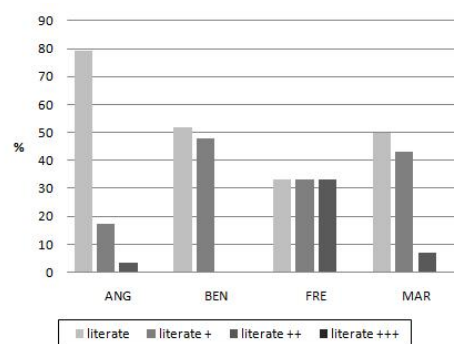


Figure 6.6: Linking devices in the written texts of P2.

HKA, the amount comes to between 48% and 67% in the texts of the pupils in P2 (except for ANG, who produces 21% upper literate linkages). Thus, also in this respect, the pupils in P2 outperform the pupils in P1 as their texts show a higher density of specific connectives, resulting in an increased textual coherence.

## 6.4 Summary

The comparison of the two groups of pupils reveals that the more successful ones in P2 generally achieve more literate texts in all domains of analysis than the pupils in P1. Only one pupil in P2, namely ANG, seems to be an exception as her results rather correspond to the ones found in the texts of the pupils in P1. However, the other three pupils in P2 make use of more upper literate structures at all points, with two domains of analysis, namely clause structure and linkages, displaying a statistical difference to P1. This shows that more successful peers than this study's case pupils are indeed able to produce more elaborated texts. With respect to the referents, the structures are more complex, thus the texts are assumed to be less dependent on the context, which has been identified as one crucial characteristic of written language (see sections 2.2 and 4.2.1). Moreover, the clause structure turns out to be more complex in the texts of the reference group. Consequently, the pupils in P2 succeed in integrating more information into particular syntactic units, which reflects another important aspect in the comparison of spoken and written language structures (see section 4.2.2). Finally, the texts of the reference group contain more specific connectives in the form of subordinators and connective adverbs so that the textual coherence is assumed to be higher than in the texts of P1.

All in all, the pupils in P1 seem to have special educational needs with respect to the three domains of analysis referent structure, clause structure, and linking devices. Focussing on these aspects during literacy instruction

in school might help these pupils to make advances in this respect, which assumingly would not only impact on the level of text production, but also on the comprehension of complex texts with a high information density. This aspect will also be resumed in the following conclusion.



## Chapter 7

### Conclusions

The overall aim of this study was to develop a tool for the systematic comparison of spoken and written language. In this respect, it was focussed on three linguistic domains of analysis: the form of referents, clause structure, and linking devices. For these domains, scales that are based on the categories *orate* and *literate* were developed. It was argued that these categories are particularly suitable for the analysis of spoken and written language because they reflect the concept of language elaboration. This means that literate structures are elaborated in that they are built upon orate or communicative structures resulting in more complexity. This illustrates very well the structural differences between spoken and written language.

The purpose for the development of this analysis model was its application in practice. It was assumed that the comparison of spoken and written language by means of the orate-literate scales reveals those linguistic domains where rather unsuccessful pupils in the German school system have difficulties with when writing a text. Conversely, those domains where the pupils succeed in detaching their written texts from orate structures can be determined as well. The problematic structures identified are then supposed to be particularly promoted in literacy instruction. By means of the analysis model and the respective questions, five hypotheses were made. The hypotheses required two

types of comparison: first, contrasting the spoken and written language of each pupil; second, contrasting monolingual and bilingual pupils. Conclusively, a third comparison turned out to be necessary in order to evaluate the pupils' performance from a more general perspective. Thus, the study's written data was compared to texts from pupils who are more successful in school.

With respect to the analysis of spoken language, it was shown that orate and basic literate structures predominate in the interviews in each of the three domains of analysis. The structures of referents, clauses, and linkages in speech can thus be seen as rather simple and not elaborate, as was expected in **Hypothesis A**. Generally, the differences between the pupils were rather marginal, with the group comparison between GL1 and GL2 pupils not displaying any statistical significance in the domains 'form of referents' and 'linking devices'. Only with respect to the clause structure did GL1 pupils produce significantly more literate clause structures than GL2 pupils.

In written language, the amount of literate structures was altogether higher than in the spoken data. Yet, it depended on the domain of analysis as to what extent the structures were elaborated, as was hypothesized in **Hypothesis B**. It was ascertained that clause structures are generally more elaborate than the referents and the linking devices in the pupils' texts. The comparison between the pupils did not reveal any significant differences, which also holds for the comparison of GL1 and GL2 pupils. Accordingly, the pupils' linguistic background does not impact on the texts' constitution in this study. It is however remarkable that the bilingual children catch up with the monolinguals regarding clause structure since the GL1 pupils had a significant advantage over the GL2 pupils in the interviews. Thus, the extent to which the GL2 pupils elaborate the clause structures in their texts compared to the spoken data is larger than in the monolinguals' texts.

Moreover, the findings of the orate-literate analysis revealed that the pupils hardly make use of enhanced (++) or highly literate (+++) structures. **Hypothesis C** suggested that enhanced and highly literate structures will not be

found in the pupils' texts, which cannot be confirmed entirely. Yet, the amount of these upper literate structures is in all cases rather low. As mentioned previously, it also depends on the domain of analysis if and to what extent upper literate structures occur. For example, enhanced literate linking devices are very rare, with highly literate linkages not occurring at all. In contrast, enhanced and highly literate clause structures can be found in each of the pupils' texts, with the percentages amounting to around 20%. Thus, the differences between the domains of analysis are rather considerable.

With respect to the comparison of spoken and written language, it was hypothesized that a comparatively high amount of literate structures in the spoken data will be reflected by respective structures in writing (**Hypothesis D**). This means that the pupil who has the most literate structures in his interview will presumably benefit from it by using more and possibly higher literate structures in written texts compared to the other pupils. The results, though, showed insignificant differences so that it is not possible to prove whether advantages in speech can be found in writing as well. As the bilingual pupils catch up their disadvantage in the clause structure of the spoken language in writing, this might be seen as an indicator that more or higher literate structures in speech do not by default result in advantages in written language. However, investigations based on a larger data basis are necessary in order to achieve more distinct results.

The comparison of the monolingual and bilingual pupils did not show differences between the two groups. It was hypothesized that the bilingual pupils, who do not possess structurally enhanced literate skills in their L1, will have more difficulties when using complex literate structures than the two pupils who have German as L1 (**Hypothesis E**). The analysis, however, revealed that the monolingual and bilingual pupils in this study do not differ from each other with respect to the structures they use in their written texts. In this study, thus, early second language acquisition and having no elaborate literacy skills in L1 does not seem to impact on literacy skills in L2. Nevertheless, this finding

is based on a very small data basis so that a generalization on other contexts is beyond the scope of this investigation.

On the basis of these results, it can be concluded that the pupils generally succeed in detaching their texts from orate structures in writing. However, the level of language elaboration can be seen as rather low since the pupils hardly use upper literate structures in their texts. For the sake of a better evaluation of the pupils' achievements, the results were compared with texts from pupils who can be seen as more successful in school. Usually, these pupils have a more favorable socio-economic background. It was shown that the pupils in the reference group (P2) used a higher amount of literate structures in all domains of analysis than the study's case pupils (P1). In fact, these differences even turned out to be significant in two domains of analysis, namely clause structure and linkages.

This suggests two conclusions: First, although certain factors were not controlled with respect to the reference group, socio-economic background seems to impact on the level of language elaboration in written texts. In this study, it even has a greater impact on the pupils' achievements than the pupils' linguistic background because the comparison between monolinguals and bilinguals did not show as obvious differences as the comparison between P1 and P2. Although the significance of the socio-economic background with respect to students' school success in Germany is not a new insight of this study (e.g., see OECD (2006)), the result underlines the power of this factor. Since differences were found on the basis of a fairly detailed structural analysis, the family background even seems to be 'reflected' in such fine-grained structures. The reverse of this conclusion is that the school associated with this kind of literacy instruction does not seem to be able to compensate for these differences, the children bring along from their differing family backgrounds (see below).

Second, the comparison of P1 and P2 shows that peers use significantly more and higher literate structures than the study's case pupils in P1, particularly with respect to clause structures and linking devices. As a consequence,

these domains of analysis can be identified as standing in need of specific promotion in literacy instruction. This means that the information density and complexity of clauses is expandable, e.g., in that more adverbials are integrated into the clause. Moreover, the coherence of the pupils' texts can be increased by more intensively conveying linking devices in literacy instruction. Certainly, it can be expected that certain structures might develop in the course of the years since the pupils are still in the process of literacy acquisition. Yet, the comparison to peers showed that the study's pupils lag behind in terms of certain literate structures. Therefore, it is assumed that knowledge of the difficulties in acquiring literate structures can be used in order to focus on these aspects under literacy instruction. Immigrant children and children with a less favorable socio-economic background might benefit from a more systematic literacy instruction as they obviously cannot sufficiently utilize their language capacities for writing.

In conclusion, more comprehensive studies are necessary in order to prove whether these findings can be confirmed. The tool for such investigations, though, is provided by this work. Furthermore, it has been obvious for a considerable length of time that the German school system does not meet the requirements that an immigrant society and the increasing social gap entail. As a consequence, the prevalent aspiration should be to accredit disadvantaged children with the necessary resources to open equal chances for everyone, regardless of their social background. For this purpose, it is particularly important to provide comprehensive experience with German (written) language. Natural and extensive input on a regular basis is the basic prerequisite for a meaningful support of language development (Tracy, 2007, 164). On the basis of this practical experience, pupils will be able to *boot* literate structures (Maas, 2008, 660). This, however, requires a change of thinking in schools since communicative skills which are the basis for developing literate skills are hardly considered in school.

Only by means of a purposeful promotion of children who are at a disad-

vantage will it be possible to compensate for the inequalities with which the pupils start to attend school. This work is supposed to be understood as another piece of the long process to reduce these inequalities with far-reaching consequences for all the people concerned.

# Zusammenfassung der Dissertation

## **Orate and literate structures in spoken and written language - A comparison of monolingual and bilingual pupils**

Unterschiede von gesprochener und geschriebener Sprache sind seit einigen Jahrzehnten fester Bestandteil linguistischer Forschung. Frühere Studien konnten zeigen, dass Strukturen in geschriebener Sprache weitestgehend komplexer als in gesprochener Sprache sind. Das Ziel der Arbeit ist, diese Unterschiede systematisch zu erfassen, wobei die Kategorien *orat* und *literate* den Rahmen für die vorgenommene Systematisierung bilden. Diese Kategorien eignen sich für den Vergleich von gesprochener und geschriebener Sprache, da *literate* als skalar aufzufassen ist und somit den Sprachausbau in geschriebenen Texten widerspiegelt. Zudem unterscheiden sich die Ansätze in Bezug auf die Analyse der unterschiedlichen Daten. Während die gesprochenen Daten anhand von prosodischen Kriterien in Einheiten geteilt werden (Intonationseinheiten), werden in der Einteilung der geschriebenen Texte syntaktische Kriterien berücksichtigt.

Die Gegenüberstellung von gesprochener und geschriebener Sprache konzentriert sich auf drei Bereiche: die Form der Referenten, die Satzstruktur und Konnektiva. Die Auswahl dieser Bereiche ist damit begründet, dass sie die entscheidenden strukturellen Unterschiede von gesprochener und geschriebener Sprache widerspiegeln. Dabei ist die Form der Referenten für den Grad der Dekontextualisierung des Textes verantwortlich, während die Analyse der Satzstruktur zeigt, in welchem Maße Informationen innerhalb einer sprachlichen (prosodischen oder syntaktischen) Einheit integriert werden. Die Konnektiva beeinflussen die Kohärenz eines Textes. Für jeden der drei Bereiche wird eine Skala entwickelt, in der die verschiedenen linguistischen Formen in dem jeweiligen Analysebereich einem Literalitätsniveau zugeordnet werden. Dies ermöglicht den systematischen Vergleich und gleichzeitig eine Evaluierung, inwiefern der entsprechende Text literate Strukturen enthält.

Die orat-literat Skalen werden in der Arbeit für die Analyse gesprochener und geschriebener Texten von wenig erfolgreichen Schülern im deutschen Bildungssystem verwendet. Für diese Untersuchung werden Interviews und Klassenarbeiten von vier Schülern einer siebten Klasse gegenübergestellt, wobei zwei von ihnen Deutsch als Erstsprache und zwei von ihnen Deutsch als Zweitsprache sprechen. Im Mittelpunkt dieses Vergleichs steht, inwiefern es den Schülern gelingt, sich von oraten Strukturen in geschriebenen Texten zu lösen und ob es Unterschiede zwischen Schülern mit Deutsch als Erst- bzw. Zweitsprache gibt. Es zeigt sich, dass die Loslösung von oraten Strukturen in den Klassenarbeiten weitestgehend gelingt, wobei keine systematischen Unterschiede zwischen Schülern mit Deutsch als Erst- oder Zweitsprache festzustellen sind. Dennoch ist in allen Klassenarbeiten das Niveau des Sprachausbaus relativ gering, d.h. die Schüler verwenden wenige Strukturen, die in den Skalen als gehoben literat eingestuft werden.

Ein Vergleich zu gleichaltrigen, erfolgreicheren Schülern zeigt schließlich, dass Schüler des gleichen Jahrgangs durchaus literatere Strukturen verwenden als die Gruppe der wenig erfolgreichen Schüler. Da insbesondere in den Bereichen der Satzstrukturen und der Konnektiva signifikante Unterschiede zwischen den beiden Gruppen festgestellt werden, bedürfen diese Aspekte einer besonderen Förderung in der Vermittlung von schriftsprachlichen Fähigkeiten.

# Appendix A

## The interviews

### CRA

**A** (1) ja also ich fand das schuljahr (2) besser als die letzten jahre (3) weil wir (4) weil sie bestimmt da waren (5) waren wir auch manchmal n bisschen ruhiger (6) und nicht so laut (7) ja und das hat mir (8) besser gefallen (9) weil da kann man auch besser unterrichten (10) und (11) ja (12) und ich hab jetzt auch mehr mitgemacht (13) als die letzten jahre (14) weil (15) jetzt ja im achten (16) entschieden wird ob man im e- oder g-kurs kommt (17) und ja (18) e-kurs ist mir eigentlich (19) wichtig

**B** (20) mh ja (21) ich musste ja erst freunde und so finden (22) und (23) ja hab ich auch schnell gefunden (24) weil (25) ich kannte auch schon n paar (26) von der grundschule (27) ja und (28) ja ich hab mich schnell an die (29) schule gewöhnt weil mein bruder hier auch auf der schule war (30) da war ich ja nicht ganz so alleine

**C** (31) ja da kann man (32) lernen da kann man auch ähm (33) also (34) wenn man jetzt zum beispiel nach &engla (35) also wenn man ja jetzt englisch hat (36) dann (37) kann man wenn man ja mal nach england oder so (38) fliegen möchte oder fahren möchte (39) dann (40) kann man sich halt mit den

mitmenschen (41) ähm (42) unterhalten

**D** (43) ja also dass (44) ähm (45) hier (46) an der schule (47) ganz viel kloppe ist (48) das find ich eigentlich (49) doof weil (50) wir sind (51) menschen und äh (52) ja man kann ja miteinander auskommen (53) man muss ja nicht gerade beste freunde sein (54) aber (55) man kann sich ja auch unterhalten (56) und nicht immer direkt wenn jemand (57) sagt (58) hey du (59) und dann sagt der (60) ja wat is'n (61) und dann sagt der (62) ich meint dich gar nicht (63) und dann direkt auf den draufgehen (64) das find ich (65) doof das ist

**E** (66) ja manchmal hab ich schon angst (67) vor allen dingen wenn (68) jetzt (69) jemand (70) wenn man den jetzt eine (71) verpasst (72) und dann (73) direkt anfängt (74) so blutet (75) und dann (76) will der ja auch wegrennen (77) und dann direkt auf mich zukommen (78) und dann (79) dann geh ich auch immer direkt weg (80) weil ich angst hab (81) der will jetzt noch mal (82) zuschlagen und der trifft mich (83) ja deswegen geh ich da jetzt auch nicht mehr (84) ähm (85) oft hin (86) wenn da kloppe ist

**F** (87) ja (88) das ist (89) nur am schulhof (90) ja und (91) manchmal kommen auch welche von den anderen schulen (92) und möchte (93) jemanden verhaufen und das find ich dann doof (94) man kann sich ja selber wehren (95) man muss ja nicht mit 150 (96) mann auf einem draufgehen oder so

**G** (97) nee wir haben (98) also finde ich (99) wir haben zu wenig (100) ähm (101) lehrer (102) die ähm auf'n schulhof aufpassen (103) also ich glaub (104) da (105) &si (106) ist nur eine person auf'm schulhof (107) da müssten vielleicht (108) ja (109) drei oder sogar (110) fünf auf'n schulhof sein (111) weil ja (112) da hinten an den (113) tischtennisplätzen wird ja auch immer geraucht (114) und (115) sind ja nicht nur die oberstufenleute (116) sondern auch in der siebten oder in der achten (117) rauchen da ja auch welche

**H** (118) ja (119) ja alleine würd ich mich das nicht trauen (120) ich würd (121) wenn dann mit (122) mit freunden oder so dahingehen (123) die das halt auch sehen (124) und die das halt auch bezeugen können (125) nicht dass der herr m oder so sagt (126) ja das stimmt nicht (127) dass ich da alleine steh (128) und dann (129) aber wenn freunde dabei sind (130) die können ja auch sagen (131) ja dat stimmt (132) der und der ist da und so (133) und der ist in der achten (134) hab ich (135) alleine hab ich schon angst

**I** (136) ja in (137) ja in deutsch (138) die mach ich immer (139) weil ich da (140) schon angst vorm herrn g hab (141) wenn man die hausaufgaben nicht hat (142) ja (143) und in den anderen fächern (144) da mach ich die manchmal (145) aber dann (146) wenn ich die manchmal nicht hab (147) dann sag ich das auch nicht (148) ja und (149) in mathe da (150) keine ahnung (151) da (152) vergess ich die manchmal (153) obwohl der mein Lieblingsfach ist

## PMO

**A** (1) ja wo soll ich denn anfangen (2) ähm (3) also (4) e- und g-kurse sind (5) also e für erweiterungskurs (6) und g für grundkurs (7) das ist dann (8) also wenn man in der fünften und sechsten hatte ja die ganze klasse im klassenverband unterrichtet (9) und entscheidet der lehrer (10) jetzt sag ich mal englisch (11) bei dem (12) man hatte (13) ob der schüler gut (14) also für den e-kurs (15) gut genug ist (16) oder doch lieber in den (17) g-kurs geht (18) also das sind dann so (19) zwischen (20) ja nicht so zwischen guten und schlechten schülern sondern (21) zu den (22) leistungsbereiteren schülern oder (23) und zu den faulen schülern und so

**B** (24) ja wir gehen (25) als erstes in n chat (26) und wenn wir dann was zu bereden haben (27) dann fragt (28) er oder sie (29) oder ich (30) ob wir dann telefonieren (31) weil ich kein bock hab zu schreiben (32) oder wenn &wi (33) wenn ich jetzt kein bock hab mit dem zu reden (34) weil er dann sowieso

wieder nur scheiße labert (35) schuldigung (36) aber (37) dann (38) schreib ich lieber (39) weil (40) dann gibts ja auch so ne funktion ignorieren (41) und das kann man ja beim telefon nicht (42) man kann ja nicht sagen (43) ach kein bock mehr und tschüss

**C** (44) ja also (45) ich hab das bisher nur gehört (46) und bei mir war bisher das schlimmste (47) vom herrn g (48) n schlag auf n nacken (49) und da hab ich aber dann hab ich aber auch gesagt (50) bin ich aufgestanden (51) dann hab ich aber auch gesagt (52) warum haben sie mich jetzt geschlagen (53) dann hat der (54) und dann hat der gesagt (55) setz dich jetzt sofort wieder hin (56) ja dann hab ich (57) aber bisschen so protestiert (58) ich will jetzt nicht angeben aber (59) ja das fand ich schon doof (60) dann hab ich das meinem vater erzählt (61) und dann hat der gesagt (62) wenn der so was noch einmal macht (63) dann gehen wir zur schulbehörde oder so was es da noch (64) wo man sich dann über den schulleiter beschweren kann (65) und dann hat mein vater auch gesagt schon doof dass der schulleiter ist (66) weil sonst &beschw (67) man beschwert sich ja eigentlich über'n lehrer bei der &schullei (68) bei der schulleitung (69) aber er ist ja die schulleitung (70) also müssen wir ne stufe höher gehen

**D** (71) weil (72) das alles total doof war (73) dann (74) ähm (75) die trainingszeiten waren scheiße (76) ich hab ja mittwochs bis vier (77) dann war halb fünf anfang (78) das hab ich dann nie so hinbekommen und dann (79) dann ähm (80) ja dann hat das nie so (81) hat das nie so ineinander gepasst (82) und dann hat man den trainer gefragt (83) ob man das so (84) ähm verschieben könnte (85) aber das geht dann nicht und dann (86) man muss ja selber mit den zeiten zurecht kommen (87) und dann (88) das hat nicht so gepasst (89) und vor allen dingen wenn man dann (90) auch beim training so n fehler gemacht hat (91) wurde man auch direkt angeschnauzt (92) und wenn man dann (93) widerworte gegeben hat (94) musste man direkt rundlaufen

**E** (95) ja aus meiner klasse sind zum beispiel d und n (96) letztens beim (97) äh sportunterricht (98) da waren wir (99) beim osc (100) in den peschen (101) ich weiß jetzt nicht gerade nicht wo (102) und ähm (103) und dann hat dann (104) hab ich (105) einwurf gemacht (106) beim fußballspielen (107) d stand hinter mir (108) und dann hab ich den ball zurückbekommen bin mit dem ball gelaufen (109) und dann hat der d schon so losgeschrieben (110) das heißt dann immer schon für mich (111) INTJ (112) weil der sonst immer schlägt oder so (113) und dann stellt der mir beinchen (114) und ich flieg hin (115) und dann fragt der noch so (116) wat machste (117) und dann hätte ich dem am liebsten eine reingehauen (118) aber das mach ich dann nicht (119) da hab ich dann eher dem (120) herr g gesagt (121) und dann hat der gesagt da achte ich drauf (122) da hat der das noch mal gemacht (123) und dann haben wir uns alle versammelt (124) und dann hat der herr g (125) so heißt mein sportlehrer (126) hat dann den d (127) so gesagt &daf für diese beiden stunden bekommst du jeweils eine sechs (128) unsportliches verhalten ist das ja (129) vor allen dingen (13) beinchen stellen und dann fragen (131) wat machste

**F** (132) nee ich mach das schon (133) aber wenn ich dann um zwei verabredet bin (134) und (135) bis zwei jetzt englisch gemacht habe (136) dann mach ich wenn ich nach hause komm mathe (137) oder morgens (138) ich wohne ja hier auf der e.straße (139) die ist ja direkt gegenüber (140) ich brauch zwei minuten bis zur schule (141) und dann steh ich um sieben uhr auf (142) dann (143) werd ich wach (144) pack meine tasche (145) wenn ich die jetzt nicht schon abends gepackt hab (146) mach mich fertig (147) dann mach ich eben noch mathe (148) und dann geh ich (149) ich kann auch um fünfundfünfzig noch los (150) also sieben uhr fünfundfünfzig noch loslaufen (151) und komm noch pünktlich

## DPO

**A** (1) das war n bisschen anstrengend (2) wegen den e- und g-kursen (3) da musste sich man anstrengen wegen den noten und so (4) ja (5) jetzt (6)

sportfest war auch schwer (7) und so (8) also (9) dieses jahr war (10) deutlich schwieriger als das sechste (11) und es war auch für mich schwer denn (12) ich musste mir ja (13) mich ja richtig anstrengen damit ich auf die neue schule komme (14) damit die mich aufnehmen (15) ja

**B** (16) ja äh (17) also (18) ich habe nur e-kurse denn (19) das ist auch schwieriger als g-kurse ähm (20) ähm (21) die arbeiten (22) waren nicht so gut (23) also von mir (24) so vier und drei (25) ja da musste ich im mündlichen sehr viel mitmachen (26) das war für mich schwer (27) und sehr viel üben (28) ja (29) in englisch (30) brauch ich eigentlich nichts zu machen (31) alle arbeiten waren zwei (32) ja

**C** (33) ja (34) denn (35) ich will nicht so (36) ich streng mich jetzt lieber an (37) als im späteren leben (38) bei der arbeit (39) denn (40) ich hab ja gesehen dass (41) also in nachrichten sagt man es gibt so viele arbeitslose in deutschland und so (42) und ist schwer n job zu finden (43) und dann will ich mich lieber anstrengen und so

**D** (44) man muss gut denken können (45) denn (46) wie jetzt beim fußballspiel (47) die manager denken jetzt (48) zum beispiel (49) wenn (50) wenn sie jetzt (51) einen spieler kaufen wollen (52) der kostet ja bestimmt paar millionen (53) dann müssen die auch denken (54) was er kann

**E** (55) ja da wollt so ne frau (56) jetzt so (57) ne kiste (58) voller spielsachen kaufen (59) da waren so kleinteile (60) und (61) die wollte (62) alles irgendwie so (63) diese vw- (64) käfer dinger autos da (65) da hat die gesagt (66) ja ich geb dir für die ganze kiste fünfzehn (67) da habe ich gesagt (68) da hab ich n bisschen nachgedacht (69) ja das wär dann (70) zu wenig (71) denn die kiste war richtig woll (72) da hab ich gesagt ja (73) für drei autos (74) dann (75) fünfzig cent (76) da (77) das waren bestimmt so (78) siebzig autos (79) und da hab ich mehr bekommen

**F** (80) der (81) mein bester freund (82) ist auf der sonderschule (83) denn sein vater (84) hat irgendwie so (85) ist schausteller oder was (86) jetzt denkt der (87) äh (88) der braucht nicht so in sich in der schule anzu- (89) strengen (90) wenn er groß wird wird er sein vaters (91) platz übernehmen aber (92) das find ich nicht gut so

**G** (93) über mir wohnt noch so n freund (94) und ja äh (95) ja der hat so (96) also mein freund der jetzt auf der sonderschule ist der hat (97) der kannte den (98) die sind bekannt oder so was (99) dann (100) ist der mal mit uns gekommen so spazieren und so (101) fußball gespielt (102) ja dann hat der junge der auf der sonderschule ist (103) gesagt (104) ähm (105) hat meinen ball so weggeschossen (106) ich dachte (107) kann passieren und so (108) und ich (109) der hat dann gesagt ja (110) ich kann es dir zurückzahlen (111) da hab ich gesagt (112) ist nicht schlimm (113) ja am nächsten tag hat der meinen ball wiedergebracht (114) dann haben (115) wir uns immer so getroffen

**H** (116) ich guck immer morgens wenn ich zur schule gehe (117) so zehn minuten (118) wenn ich nach hause komme (119) beim essen guck ich (120) fernsehen dann mach ich hausaufgaben (121) dann geh ich raus (122) ja nur abends guck ich filme eigentlich

**I** (123) nee ähm (124) ich lern (125) ich sprech jetzt ab und zu (126) jetzt so kurdisch (127) n bisschen (128) dann lern ich das auch n bisschen (129) aber meine mutter hat gesagt (130) ja (131) lieber deutsch denn (132) wenn du kurdisch rede (133) wenn wir dir kurdisch beigebracht hätten (134) dann würdest du schwierigkeiten haben in der schule und so (135) ja

**J** (136) ja (137) mein vater ist alevite (138) meine mutter (139) jetzt (140) moslem sagen wir mal (141) und (142) ja äh (143) meine mutter sagt mir schon manchmal (144) was über religion und so (145) aber sie ist nicht jetzt so richtig

gläubig (146) trägt auch kein kopftuch und so (147) mein vater sagt (148) auch manchmal (149) ähm (150) was über religion aber (151) ich bin nicht so

### HKA

**A** (1) ähm (2) eigentlich war das (3) ich fand das am anfang nicht schön (4) weil ich nur eine freundin hatte (5) die war aus meiner grundschule (6) aber wir waren nicht in derselben klasse (7) aber ich hatte (8) ich hab aber schwestern ja hier an der schule (9) da war das nicht so (10) also ich fand das gut

**B** (11) ja meine schwester die war auch in dug (12) ja (13) das (14) also ich fand das gut (15) weil die ja dann aufführungen gemacht hatten (16) dann wollte ich das auch wählen (17) aber (18) jetzt ähm (19) würd ich gerne &spani (20) französisch wählen weil (21) ich will ja abitur machen (22) dann wird das ja schwerer (23) eigentlich konnt ich jetzt auch fremdsprache wählen aber ich (24) latein das (25) also gefällt mir nicht (26) deswegen (27) muss ich jetzt in der abitur wenn ich abi machen kann (28) das ist ja dann schwer (29) weil ich ja dann anfänger bin

**C** (30) eigentlich nicht (31) ich mein meine mutter die sagt (32) also die schimpft nicht so und mein vater (33) dann meint er immer ich soll dann (34) mehr arbeiten (35) natürlich schreien die manchmal wenn das zu schlimm ist (36) aber (37) ich schreib auch nicht so schlimme noten (38) so vier

**D** (39) ähm (40) da hatten wir lehrerwechsel (41) und sie erklärte das besser (42) wenn wir das nicht verstanden hatten (43) dann kam die immer zu uns (44) sie war freundlicher (45) die hat das besser also gemacht (46) deswegen (47) das liegt eigentlich an der lehrer

**E** (48) ja (49) aber (50) am meisten sind wir immer so draußen (51) manchmal für üben (52) also (53) in der klasse das ist ja zu klein (54) dann gehen

wir immer (55) vorm klassenraum (56) oder wir gehen nach draußen manchmal (57) oder in die eingangshalle

**F** (58) da war ich zu herrn g gekommen (59) da hat der gesagt das geht nicht (60) da hat der so (61) keine ahnung irgendwas gemacht (62) dann meinte der das geht wieder (63) ja da sind wir nach unten (64) gegangen da haben wir ärger bekommen (65) weil wir bei herrn g waren

**G** (66) &grundschul (67) ich kann mich jetzt nicht erinnern aber (68) grundschule (69) ich glaub in der grundschule (70) war ich besser (71) das war leichter (72) jetzt aber (73) in deutsch (74) ich mag deutsch keine ahnung (75) weil wir interessante sachen machen

**H** (76) weiß ich nicht (77) da machen wir das immer mündlich (78) und wenn wir das mündlich machen (79) dann (80) also (81) &konfron (82) konzentriere ich mich mehr und schriftlichen (83) da (84) da (85) keine ahnung wenn (86) dann weiß ich nicht ob das falsch oder richtig ist (87) dann will ich das auch nicht aufschreiben (88) und wenn wir das ja mündlich machen dann (89) also ist das besser (90) weil wenn ich sage ob &da (91) wenn ich (92) wenn ich das ja sagen (93) dann sagt der herr g ja ob das in ordnung oder nicht in ordnung ist (94) deswegen mündliche sachen (95) gefällt mir am meisten

**I** (96) weil hinten da ist ja n &grammati (97) ähm (98) vokabelliste (99) da guck ich nach (100) und (101) da muss man ja die (102) ähm (103) keine ahnung (104) so (105) wie sagt man das jetzt (106) kann man ja nicht einfach übersetzen (107) man muss ja die satzglieder da so irgendwie (108) ja das ist &an (109) so kein ahnung schwer

**J** (110) ich les immer vor (111) wenn ich was mache (112) in englisch oder so (113) dann (114) sag ich immer kontrolliert mal (115) ob das richtig ist (116)

damit ich mich dann nicht blamiere (117) dann kontrollieren die das (118) natürlich mit geld (119) nein scherz

**K** (120) ja in englisch (121) da haben wir immer texte (122) und (123) ähm (124) wenn ich das so zum ersten mal lese (125) dann kapier ich das nicht so gut (126) und da sind immer texte (127) ähm (128) so fragen über den text (129) dann kann ich das nicht richtig antworten

**L** (130) ja (131) ich kauf immer meistens von der cafeteria (132) brot oder wasser (133) manchmal kauf ich mir kleider (134) eigentlich (135) wenn ich kleider kaufen will dann geben meine eltern (136) also das geld aus (137) und das ist nur für so essen oder trinken so (138) oder wenn was jetzt passiert oder so (139) keine ahnung

**M** (140) also am meisten (141) weil (142) wir kaufen eigentlich nicht zeitungen (143) mein vater liest immer von internet zeitungen (144) da sind so seiten (145) für zeitungen (146) und von internet lesen die immer (147) aber manchmal kaufen die auch immer (148) zeitungen (149) ab und zu

**N** (150) Freibad (151) ähm (152) ist ja geschlossen (153) weil (154) also hier in r gabs ja ein (155) aber jetzt ist das geschlossen (156) jetzt können wir nicht mehr (157) letztes jahr war ich aber (158) dieses jahr ist das ja geschlossen (159) geht ja nicht mehr

# Appendix B

## The class tests

### CRA

**6.5** (1) Der Junge ging mit den Pferden sehr geschickt [um] (2) und der Junge pflegte sie so gut, (3) das (dass) es bald die schönsten Pferde waren. (4) Er machte alle Uhren besser als vorher. (5) Er konnte die Singuhr wieder zum spielen (Spielen) bringen.

(6) Weil da fantasie (Fantasie) bei ist (7) und das Märchen ist frei erfunden geworden.

(8) Nun machte sie der Schäferjunge an, (9) die Königstocher zum lachen (Lachen) zubringen (zu bringen). (10) Als erstes versuchte er es mit kitzeln (Kitzeln), (11) aber sie war nicht kitzelig. (12) Als zweites versuchte er es mit Grimassen schneiden (Grimassenschneiden), (13) aber sie lachte auch nicht. (14) Zuletzt versuchte er es mit, (15) einen Affen nach zu machen, (16) und sie musste anfangen zu lachen. (17) Nun konnte er sie heiraten (heiraten) noch am selben Tag. (18) Sie lebten glücklich und zufrieden bis an ihr Lebensende. (19) Und er wurde der neue König, nach ihr Vatters (Vaters) Tod.

**7.3** (1) Im großen Musiksaal der HHG am 6.12.2006 war es endlich (endlich) so weit. (2) Die Schule wurden von Schüler/innen und Lehrer/innen Geschmückt

(**geschmückt**) für den Lesewettbewerb. (3) Der Korbsessel im Musiksaal ist mit Scheinwerfern (**Scheinwerfern**) beläuchtet (**beleuchtet**) geworden (**worden**). (4) Alle Klassenkameraden/in sind in den großen Musiksaal gekommen. (5) In den letzten Reihen (**Reihen**) kam Aufregungen hoch. (6) Zwei Kinder lesetzten (**lasen**) aus der Klassen (**Klasse**) vor. (7) 5, Minuten durfte jeder vorlesen (**vorlesen**). (8) J hat sich in den Sessel gesetzt. (9) Und hat aus sein Buch vorgelesen. (10) Als J fertig war (11) kam ein Donnerer (**donnernder**) Ablauf (**Applaus**) aus den Reihen (**Reihen**). (12) Die vier Jury gingen in ein Nebenraum (**Nebenraum**) (13) um sich zu beraten. (14) Sie haben den Sieger fest gestellt (15) und den bekannt gegeben (16) es war F aus der 6b. (17) Joshua hat am Ende (**Ende**) gesagt (18) dass er das Interessantere (**interessantere**) Buch hatte (19) und ihm es Spaß Gemacht (**gemacht**) hat.

**7.5** (1) Am nächsten Tag trifft Anna Georg auf der Straße, (2) nachdem sie bei Helmut's Mutter war. (3) Anna und Georg stehen sich gegenüber. (4) Auf einmal murmelt Georg: (5) "Ich wollte das nicht." (6) Sie sieht (7) das (**dass**) Georgs Augen feucht werden (8) Es läuft eine Träne von den Augen nach unten (9) Georg weint. (10) Er wiederholt mehrmals z.B.: (11) "Ich wollt es nicht (12) und wirklich wollte ich das nicht." (13) Anna nimmt für einen Augenblick Georgs Hand in ihre Hände (14) und fragt zur Bestätigung (15) "Du wolltest es nicht?" (16) Er nickt mit dem Kopf. (17) Georg sagt den Grund (18) warum er Helmut zu Tode getreten hat, (19) weil er eifersüchtig war auf die Beiden (**beiden**). (20) Nachdem Georg gepfeifen hat, (21) rennt Anna nach Hause und hört ihre eigene Stimme: (23) "Ich tue das! (24) Ich will!" (25) Sie wiederholt sich: (26) "Ich tue das, (27) ich tu das! (28) Ich spreche."

(29) Georg ist nicht mehr der starke (**Starke**), (30) weil er Anna sagt (31) das (**dass**) er es nicht wollte (32) dass er Helmut zu Tode getreten hat. (33) Als sie sich treffen (34) rennt Anna nicht direkt weg (35) sonder (**sondern**) bleibt stehen (36) und hört zu (37) was Georg ihr zu sagen hat. (38) Es

kiecht (**kriecht**) ihre Angst nicht mehr hoch (39) wenn sie sich alleine treffen. (40) In diesem Kapitel nimmt sie Georgs Hand (41) auch wenn es nur für ein Augenblick war.

## PMO

**6.5** (1) Der Schäfersjunge wollte in die Statd (**Stadt**) (2) um dort sein Glück zu versuchen. (3) Er fing in einer Goldmide (**Goldschmiede**) an als Stallknecht. (4) Aber es war im (**ihm**) bald langweilig bei den Pferden (5) und er besserte heimlich die Uhren aus.

(6) Der Text ist ein Märchen, (7) weil Glück und Verstand keine Personen sind (8) und weil im Märchen Märchenbausteine zu finden sind, z.B. Umkerung (**Umkehrung**) des Anfangs.

(9) Nun wollte der Schäfsjunge (**Schäfersjunge**) sein Glück versuchen. (10) Aber leider schafte (**schaffte**) auch er es nicht, (11) die Prinzessin zum lachen (**Lachen**) zu bewegen. (12) Doch ales (**als**) er gehen wollte, (13) stolperte er (14) und fiel mit dem Nunde (**Munde**) voran in ein Kirchtorte (**Kirschtorte**), (15) der der König für seine Tochter gemacht hatte. (16) Aber der junge (**Junge**) sagt: (17) “Mist ich habe sie garnicht (**gar nicht**) gesehen!” (18) Und nachdem er dies gesagt hatte, (19) fing die Prinzession auf einmal an zu lachen (20) und sie konnte gar nicht mehr aufhören. (21) Der König erfur (**erfuhr**) es (22) und die beiden heirateten, (23) weil der Verstand und das Glück getäuscht hatten. (24) Sie waren glücklich bis an ihr Lebtage. (25) Und geheiratet hatten sie auch.

**7.3** (1) An der HHG fand am 5.12.2006 ein Vorlesewettbewerb statt. (2) Die Aufgabe der zehn besten Leser aus den Jahrgängen fünf und sechs war es, (3) ein Jugendbuch (**Jugendbuch**) vorzustellen (4) und etwa 5 Minuten daraus vorzulesen. (5) Der sinn (**Sinn**) der Veranstaltung war es, (6) den Kindern das Lesen ans Herz zu legen. (7) Als die zehn besten Leser vorgelesen hatten,

(8) zog die Jury sich zurück, (9) um das Ergebnis von Herrn W preis geben (**preisgeben**) zu lassen. (10) Der Sieger war F aus der Klasse 6a, (11) und der zweite Sieger war B aus der 6. Klasse.

**7.5** (1) Georg sagt immer wieder, (2) dass er es nicht gewollt hat, (3) was er Helmut angetan habe. (4) Aber Anna traut ihm nicht (5) und fragt gezieht (**gezielt**) nach. (6) Aber dann Georg fängt vor ihren Augen an zu weinen. (7) Außerdem versucht Georg (8) Anna davon zu überzeugen, (9) ihm zu glauben, (10) dass er es nicht gewollt hatte. (11) Darauf antwortet Georg (12) das (**dass**) er es nur gemacht habe, (13) und auch die ganze Zeit total eifersüchtig auf sie war, (14) wie sie in der Stunde immer rot wurden (15) und “wie das lief”. (16) Nachdem er das gesagt hatte, (17) rannte sie los. (18) Und nicht zu langsam. (19) Sie streifte ein paar Leute (20) und hatte immer das Bild von Georg vor ihr. (21) Und dann bemerkte sie erst einmal (22) wie einsam Georg doch war. (23) Genauso wie sie. (24) Aber trotzdem du muss sprechen. (25) Sie wird es sagen müssen!

(26) Anna ist zuerst entschlossen, (27) biss (**bis**) Georg langsam anfangt (**anfängt**) zu weinen. (28) Er weint, (29) und bereut es (30) was er Helmut angetan hat. (31) Anna glaubt ihm nicht so recht. (31) Später hat sie aber ein wenig Mitleid mit ihm. (33) Sie rennt wieder einmal weg. (34) Sie denkt über Georg nach. (35) Ob sie ihm vertrauen kann? (36) Aber dann entscheidet sie sich (37) doch alles zu sagen (38) und es zu tun.

## DPO

**6.5** (1) Der Junge bekommt jetzt Verstand (2) und meint (3) das (**dass**) eine Arbeit in der Stadt viel besser wäre. (4) Der Knabe ist ein guter Denker geworden. (5) Der Schäferjunge ist ein Naturtalent. (6) Seine Arbeit nahm er ernst (7) und machte Spaß. (8) Er freut sich, (9) dass er eine Geselle vom Schmiedmeister zu sein. (10) Der Schäferjunge hat keine Angst vor den Tod.

(11) Das kann nur ein Märchen sein, (12) weil wie kann eine Königstochter (Königstochter) noch nie gelacht haben? (13) Und wie kann Verstand und Glück miteinander auf die Reise gehen? (14) Es sind auch in den Märchen sehr viele Bausteine. Denn die Zahl drei. Erstens. Ein Schafhüter. Zweitens. Ein Stallknecht. Drittens. Ein Geselle.

(15) Nun ging das tapfere Naturtalent ins Schloss, (16) um die Prinzessing (Prinzessin) zum lachen (Lachen) bringen. (17) In diesem Moment fuhr das Glück in den Knaben hinein, (18) um ihn zu helfen. (19) Auf einmal zog der unge (junge) Geselle so eine Grimasse, (20) so das (dass) die Prinzessin vom Stuhl gefallen war (21) und sich auf dem Boden wälzte. (22) Der glückliche König ließ seine Tochte (Tochter) mit dem Knaben heiraten, (23) und waren glücklich bis an ihrem Lebensende. (24) Nun, liebe Kinder, der Verstand und das Glück kann jeden treffen. (25) Dock keiner wird davon erfahren. Nur die Menschen, (26) die ein bisschen Geduld und Fantasie in sich haben.

**7.3** Noch nie war lesen (Lesen) so spannend! (1) D-R, 3.12.06: (2) In R herrschte große Spannung. (3) Denn im Musiksaal veranstaltete die H.-,H.-G.- einen großen Vorlesewettbewerb. (4) Die Klassenbesten, aus dem Jahrgang fünf und sechs, traten gegeneinander an. (5) Insgesamt zehn Kandidaten, und vier Jury. (6) Alle waren nervös. (7) Jeder las fünf Minuten einen Absatz aus seinem Lieblingsbuch vor, (8) doch nur einer konnte gewinnen. (9) Als alle zu Ende gelesen hatten, (10) entschied die Jury den Gewinner. (11) F aus der 6b war der Sieger. (12) Alle Zuschauer applaudierten. (13) Doch die neun Kandidaten gingen nicht leer aus. (14) Jeder bekam ein Buch. (15) “Aber eigentlich war jeder der Kandidaten ein Gewinner!

**7.5** (1) Nach der Beerdigung von Helmut sagt Frau Rüffgen, Helmut's Mutter, (2) dass sie eine Anzeige erstatten wird. (3) Als Anna danach nach Hause rennt, (4) trifft sie Georg auf der Strasse (Straße). (5) Plötzlich sagt er, (6) dass er nicht Helmut treten wollte. (7) Er wiederholt es mehrfach (8) und

weint. (9) Doch Anna kann es nicht so richtig glauben, (10) denn Georg ist doch immer der reiche (**Reiche**) und starke (**Starke**). (11) Er meint, (12) dass er Anna geliebt hat, (13) und auf Helmut eifersüchtig war. (14) Georg öffnet sein Herz, (15) und zeigt seine wahren Gefühle. (16) Anna begreift jetzt, (17) dass Georg genauso einsam ist wie sie.

(18) In diesem wichtigen Gespräch zwischen Anna und Georg öffnet Georg sein Herz, (19) und zeigt sein wahres Gesicht. (20) Er sagt (21) dass er auf Helmut eifersüchtig war, (22) und Anna auch geliebt hat. (23) Der ganz starke Georg ist in Wirklichkeit ein sehr schwacher Junge. (24) Er will sich bei Anna entschuldigen, (25) doch Anna nimmt die Entschuldigung nicht an, (26) denn sie ist ja nicht das Opfer. (27) Anna ist in diesem Gespräch sehr hart und direkt, (28) denn sie setzt ihre neu entdeckte Stärke ein. (29) Anna zeigt keine Gefühle, wie Liebe, Mitleid, Traurigkeit oder Trost. (30) Sie ist der Ansicht, (31) dass Georg es verdient hat (32) in so einer Situation auf sich selber gestellt zu sein. (33) Er muss es alleine und ohne Hilfe schaffen, (34) die ganze Sache zu beenden.

## HKA

**6.5** (1) Der war ein guter Junge. (2) Er arbeitete sehr viel im Stahl (**Stall**) (3) und wenn der meister (**Meister**) weg ging (**wegging**), (4) ging er in die Werkstadt (**Werkstatt**), (5) weil er dann die Uhren besserte. (6) Dem Meister gefiel es sehr (7) und der Junge musste nicht mehr im Stahl (**Stall**) arbeiten (8) er war Geselle geworden.

(9) In diesem Text kann man erkennen (10) das (**dass**) dass (**das**) ein Märchen ist (11) weil hier viele Märchenbausteine drinn (**drin**) sind (12) und hier sind fantasie (**Fantasie**) drin sind. Bausteine: Personen, Orte, gutes Ende, Gegensätze, die Zahl drei, Abenteuer erleben.

(13) Nun hatte es der Junge geschafft (**geschafft**), (14) er hatte einen schönen

armbanduhr (**Armbanduhr**) für die Königin gemacht, (15) brauchte dafür viele Tage. (16) Er brachte es zu die Königin. (17) Sie hatte sich sehr gefreut (18) und lachte vor Freude. (19) Sie hatten sich entschieden zu heiraten. (20) Nach paar Jahren hatten sie schon Kinder bekommen.

**7.3** (1) Am 5.12.07 war es endlich bereit. (2) Die Sechser Klassen wollten einen Jugendbuch vorstellen. (3) Die Wänder (**Wände**) waren mit tollen sachen (**Sachen**) geschmuckt (**geschmückt**). (4) Die Publikum war so aufgeregt und neugierig. (5) J aus der 6a fing an zu lesen. (6) Alle fingen an zu lachen, (7) da er ein witziges Buch vorstellte. (8) Nachdem er fertig (9) bekam (**bekam**) er ein reisiegen (**riesigen**) ablaus (**Applaus**). (10) Nach J war eine kurze Pause. (11) Die Lehrerin erklärte (12) das (**dass**) lesen (**Lesen**) wichtig ist. (13) Herr S (14) der ein Musiklehrer ist spielte auf der Gitarre eine bekannte Song. (15) Alle (16) die gelesen hatten bekammen (**bekamen**) ein Buch. (17) Aus der 6b laß (**las**) der F. (18) Herr W (19) der Stufenleiter ist sagte dann die Ergebnisse. (20) Erster war B (21) und zweiter war F. (22) Fs Klasse und die Schule freuten sich.

**7.5** (1) Am Tag nach der Beerdigung läuft Anna wiedereinmal (**wieder einmal**) in der Stadt, (2) da sieht er den Georg. (3) Er erzählt Anna (4) warum er den Helmut zugetreten hat. (5) "Ich wollte das nicht" (6) murmelt er und wiederholt es oft. (7) Plötzlich fängt er an zu weinen. (8) Georg schreit ganz laut, (9) damit alle Leute hören (10) "Du musst mir glauben. (11) Ich wollte es nicht." (12) An dem Moment zeigte er an seinem Herz. (13) Dann nimmt Anna wie von selbst Gerogs Hand und fragt, (14) warum er es nicht wollte. (15) Georg war Eifersüchtig (**eifersüchtig**) auf Helmut und Anna, (16) weil die beiden immer in der Stunde sich angeschaut hatten (17) und die dann rot wurden. (18) Anna sagt dann, (19) das (**dass**) sie den Helmut mochte. (20) Georg lasst (**lässt**) dann Anna einfach da stehen und geht weg. (21) Sie rennt danach auch weg. (22) Anna seht Georgs Bild und sagt, (23) der große und der Starke (**starke**) Georg. (24) Anna denkt jetzt auch wie er heute mit den

Augen zur Anna gekuckt hat und erzählt hat (25) Aber trotz allem sie wird die Wahrheit sagen.

(26) Georgs Verhalten hat sich ziemlich verändert (27) er lügt nicht mehr. (28) Er erzählt Anna die Wahrheit, (29) warum er den Helmut getötet hat. (30) Er sagt (31) das (**dass**) er Eifersüchtig (**eifersüchtig**) auf Anna und Helmut war, (32) weil die beiden fast in jeder Stunde sich angeguckten; (33) deshalb wollte Georg einen Kampf mit Helmut durchführen, (34) er wollte ihn natürlich nicht töten. (35) Und Annas Verhalten ist an Georg am Anfang nichts, (36) also sie sagt dann nichts, (37) sie hört nur zu und guckt an den Georg, (38) aber wo der Georg sagte, (39) das (**dass**) er Eifersüchtig (**eifersüchtig**) war (40) sagt Anna dann, (41) das (**dass**) er den Helmut mochte. (42) Eigentlich wollte sie nich (**nichts**) sagen; (43) nur weil sie sauer auf Georg war (44) hat sie es gesagt. (45) Und die Wahrheit wird sie trotzdem sagen.

# Appendix C

## Turkish test

### DPO

(1) Ben ve iki oğlanlar (oğlanlar) etmiştik. (2) Bir dakika sonra öğretmen (öğretmen) gelmiş, (3) osaman beni ve olane sakinleşte. (4) Öğretmen (Öğretmen) ona ceza vermemiş, ama bana. (5) Sadece oğlan (oğlan) başlamış (başlamış). (6) Oğlan (Oğlan) osaman kaçmış. (7) Ben de bişe yasıçaktım.

### HKA

(1)Dersde birbirimizden bazen anlamasak cevapları soruyoruz, (2) bazende kayıta yazıyoruz. (3) Sınıftan Arkadaşlarıda (arkadaşlarla da) Küsüyoruz (küsüyoruz) (4) ve dövüşüyoruz. (5) Bikaçgün sonrada Öğretmenler (öğretmenler) bizi barıştırıyorlar (6) faydasınıgöstermiyor (7) ve kūsūncede (kūsūnce de) onla Pauseda beraber gecmiyoz (gezmiyoruz) (8) ve derse veraber oturmuyoz.



# Appendix D

## Texts of reference group

### ANG

(1) Im Buch “Die drei Ausrufezeichen Fussballstar (**Fußballstar**) in Gefahr” geht es darum, (2) dass der Fossballstar (**Fußballstar**) Bastian in Gefahr ist. (3) Bastian ist ein Fussballspieler (**Fußballspieler**) (4) der in der U-17 spielt. (5) Er hat immer SMS bekommen (6) die ihn bedroht haben (7) Aber die drei !!! sind immer am Fall dran. (8) Sie haben erst gedacht (9) das (**dass**) es Ulli war (10) aber dann ist in Fittnesraum (**Fitnessraum**) ein Unfall passiert (11) irgendjemand hat ein gewicht (**Gewicht**) abgedreht (12) und es Bastian auf den Fuß geworfen. (13) Der Onkel wurde sauer (14) und sagte (15) wenn noch was passiert (16) dann fliegt er raus. (17) Naja wie man weiß (18) sind die drei !!! wieder da (19) und finden ein Hinweis (20) es ist ein Plastic stück (**Plastikstück**). (21) Und ein Haargummi. (22) Sie denken dann (23) das (**dass**) es Jenniger war (24) weil sie lange haare (**Haare**) hat. (25) Doch es gibt noch ein (26) er heißt kai (27) er hat auch lange haare (**Haare**). (28) Da wollen Jenny und die drei !!! ihm eine falle (**Falle**) stellen (29) nämlich sie wollen Kai einladen (30) und ihn dann fassen. (31) Die falle (**Falle**) hat auch zugeschnappt. (32) Am ende (**Ende**) waren alle glücklich (33) und feierten da bei einen Grillfest. (34) wieder haben die drei !!! den fall (**Fall**) gelöst.

**BEN**

(1) Roy ist neu in Florida (2) und hasst es, (3) dass sie so oft umziehen, (4) den (**denn**) sein Vatter ist beim Stadt (**Staat**) angestellt (5) und wird immer wieder befördert (6) so dass sie umziehen müssen. (7) Roy geht auf die Trace middle scholl (**school**) (8) und fährt jeden tag (**Tag**) mit dem Buss (**Bus**) zur Schule, (9) wo er fon (**von**) einem 8.kläsler (**Achtklässler**) namens Dana Matherson schikaniert wird. (10) Eines tages (**Tages**) sieht Roy einen Jungen am Bus vorbeilaufen (11) da bemerkt Roy, (12) dass der Junge barfuß ist. (13) An der Buss-Haltestelle (**Bushaltestelle**) (14) wo einige Schüler ein steigen (**einsteigen**) springt Roy aus dem Buss (**Bus**) (16) und rempelt ein Mädchen namens Beatrice an. (17) Später stellt sich heraus (18) dass Beatrice die Schester (**Schwester**) des rennenden jungen (**Jungen**) ist. (19) Zur selben Zeit wird in der Nähe der Schule Ein (**ein**) Pfankuchen haus (**Pfannkuchenhaus**) gebaut (20) wo auf der Baustelle immer wieder mess stäbe (**Messstäbe**) und andere Sachen demoliert (21) Offiser (**Officer**) delinko (**Delinko**) soll darauf auf passen (**aufpassen**) dass nicht noch mehr sachen (**Sachen**) demoliert werden. (22) Am ende (**Ende**) stelt (**stellt**) sich heraus (23) das (**dass**) Fischfinger der Bruder von Beatrice das getahn (**getan**) hat (24) den (**denn**) er wolte (**wollte**) nicht (25) das (**dass**) die Eulen (26) die in der erde (**Erde**) wohnen sterben (27) wenn nähmlich (**nämlich**) das fundermend (**Fundament**) gelegt wird (28) würden die unter naturschutzstehenden Eulen sterben. (29) am ende (**Ende**) darf das Pfankuchen haus (**Pfannkuchenhaus**) nicht gebaut werden, (30) weil kein Naturformular forliegt (**vorliegt**) (31) das (**dass**) auch keine tiere (**Tiere**) dabei verletzt oder umgebracht werden.

**FRE**

(1) Hal, ein 13 Jähriger (**13jähriger**), etwas zu klein geratener dunkel Haariger (**dunkelhaariger**) Junge langweilt der öde Alltag in seinem Haus. (2) Daher beschließt er (3) als bei einer Versammlung sein ungeliebter Onkel ermorder (**ermordet**) wird (4) Rache an dem Mörder aus einem verfeindeten Haus zu

nehmen. (5) Dabei lernt er Aud kennen seine spätere Weggefährtin kennen. (6) Als der Mörder schon vorher stirbt (7) wird er beschuldigt (8) und flieht mit Aud über die Talgrenze (9) wo den Sagen nach schreckliche Monster lauern sollen, (10) was die beiden aber nicht glauben. (11) Als sie die Grenze überqueren (**überqueren**) (12) erfahren sie die Wahrheit über die Ungeheuer (13) und müssen zurück über die Grenze. (14) Als das verfeindete Haus sich Rächen (**rächen**) will an seinem Haus (15) fliehen Aud und er über die Grenze (16) und können die Verfolger denn (**den**) Monstern überlassen (17) müssen danach aber gegen den Anführer der Monster kämpfen (18) und besiegen ihn. (19) Danach fliehen sie über die Berge in ein unbekanntes Land.

## MAR

(1) In dem Buch “Party mit Superstar” aus der Reihe “Die Glamour-Clique” von Lisi Harrison. Geht es um ein Mädchen namens Alicia (2) welches aus den USA zu ihren Verwandten nach Spanien fliegt. (3) Als sie bei ihren Verwandten ankam (4) Verschwinden (**verschwinden**) zwei ihrer Cousinen unter dem Vorwandt (**Vorwand**), (5) dass sie shoppen gehen. (6) In Wahrheit gehen sie in ein Hotel, (7) in welchem ein Party des Sangers (**Sängers**) “it!” stattfindet, (8) um dort zu arbeiten (9) und so and (**an**) Vip-Pässen für die Party zu kommen. (10) Mit den Vip-Pässen im Gepäck holen sie ihre Schwester und Alicia, (11) fahren zur Party. (12) Kaum dort angekommen zerstören Alicia und ihre Cousine Nina eine teure Statue. (13) Sie müssen in das Büro der Hoteldirektorin kommen, (14) welche ihnen prompt (**prompt**) einen Job aufdrückt (15) um den Schaden zu begleichen. (16) Tage danach treffen sie beim Nigel (17) und unterhalten sich mit ihm über “it!” (18) wobei sie feststellen, (19) dass er “it!” ist. (20) Er lädt sie auf seine Yacht ein (21) und bezahlt die Statue.



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## **Erklärung über die Eigenständigkeit der erbrachten wissenschaftlichen Leistung**

Ich erkläre hiermit, dass ich die vorliegende Arbeit ohne unzulässige Hilfe Dritter und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt habe. Die aus anderen Quellen direkt oder indirekt übernommenen Daten und Konzepte sind unter Angabe der Quelle gekennzeichnet.

Die Arbeit wurde bisher weder im In- noch im Ausland in gleicher oder ähnlicher Form einer anderen Prüfungsbehörde vorgelegt.

Weitere Personen waren an der inhaltlichen, materiellen Erstellung der vorliegenden Arbeit nicht beteiligt. Insbesondere habe ich hierfür nicht die entgeltliche Hilfe von Vermittlungs- bzw. Beratungsdiensten (Promotionsberater oder andere Personen) in Anspruch genommen. Niemand hat von mir unmittelbar oder mittelbar geldwerte Leistungen für Arbeiten erhalten, die im Zusammenhang mit dem Inhalt der vorgelegten Dissertation stehen.

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Ort, Datum

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Unterschrift