

How Germans get it under the Knee:

The Acquisition of Dutch Idiomatic Language by German Learners

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Preface

This thesis and the experiment were part of my undergraduate study, the Bachelor's programme of Linguistics at Radboud University Nijmegen. The data was collected during a research internship at the research team for Idiomatic Second Language Acquisition (ISLA) at the Radboud University. I would like to thank all the members of the ISLA team for making this internship possible. I especially would like to thank Ton Dijkstra and Wendy van Ginkel for the great and patient support throughout the whole process of conducting the experiments and writing this thesis. Because their help was very valuable to me, I chose to write this thesis in the plural form.

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Abstract

If learners of a second language aspire to acquiring native-like proficiency, the usage and understanding of idiomatic language, such as *De inbreker liep tegen de lamp* (in English, “*The burglar walked against the lamp*”, i.e., got caught) is indispensable. This study investigates to what extent three different important variables affect the accuracy with which German native speakers rate idioms in Dutch. These variables are Lexical Familiarity, Imageability, and Semantic Transparency. Further, it is examined whether there are interaction effects between those factors and to what extent the lexical knowledge in the second language of participants has an effect on the number of idioms they know in that language.

A binary logistic regression analysis based on an online survey among 25 native speakers of German who speak Dutch at an advanced level showed that there were significant main effects for Lexical Familiarity, Imageability, Within-Language Transparency and Lexical Knowledge. A correlation analysis furthermore revealed that there were relationships between all of the main factors as well. The better participants reported to be familiar with an idiom, the higher they also rated its Imageability, and the higher they rated its Transparency. Also, the higher they reported an idioms’ imageability, the higher they reported its transparency.

Our results indicate that all of the investigated variables have an effect on idiomatic second language acquisition. These findings can be useful for further research on idiomatic second language acquisition.

Introduction

When native speakers of German learn Dutch they will not be able to understand an expression like *tegen de lamp lopen* (in English, “*to walk against the lamp*”, i.e. to get caught) right away because it is unique to the new language. Learning and understanding such idiomatic expressions in a foreign language takes time and it takes even longer to start using them yourself.

Nevertheless, if one really wants to acquire native-like proficiency in a second language, on top of vocabulary acquisition, the usage and understanding of idiomatic language is indispensable. In the present study we will investigate how native speakers of German acquire expressions in a foreign language, specifically Dutch. To set the stage for the experiment to be discussed we will first define the term *idiomatic language* and consider what empirical studies have taught us on idiomatic language processing in general.

Idiomatic language is a specific kind of what we call *figurative language*. There are many different types of figurative language such as proverbs, metaphors, and formulaic speech. For Citron, Cacciari, Kucharski, Beck, Conrad & Jacobs (2015) the term figurative language implies that the meaning of a sentence is not the same as the literal meaning based on its words. Thus, the speaker or hearer has to use semantic knowledge to retrieve the intended meaning of the utterance. One kind of figurative language is idiomatic language. Idiomatic language is defined by Cacciari (2014) as “strings of words whose figurative meaning does not necessarily derive from that of the constituent parts“ (p. 267). Unique about idioms is that they are flexible in the sense that they can be embedded in different kinds of sentences. The example mentioned above, *tegen de lamp lopen*, can be used in different contexts and can undergo inflection, as for example

in *De inbreker liep tegen de lamp* (in English, “*The burglar walked against the lamp*”, i.e., got caught). Its meaning is not likely to change, however. Or, as Citron et al. (2015) point out, the unique meaning of an idiom cannot be radically changed by the context.

Thus far, research has mainly focused on idiomatic expressions in only one language. Little research has been done on idiomatic processing in bilingual speakers. We will describe the available empirical studies in the following two sections, where we will first discuss the research on monolingual speakers and second the research on bilingual speakers.

Monolingual Research on Idiomatic Expressions

When it comes to monolingual research, there are different theories on idiomatic expressions. A broad overview of these theories is given by Cacciari (2014). She points out that according to previous research idioms are analysed on a semantical level and processed on a syntactical level. Evidence for this view is mistakes made in producing idioms. These mistakes typically occur when the literal and the idiomatic meaning are similar to one another. So some participants in former research said *swallow the bullet* instead of *bite the bullet*. This indicates that the constituents of the phrasal units of an idiom are not semantically empty but instead meaningful. However, Cacciari especially argues that more research must be done in order to fully understand idiomatic expressions.

An important issue of idiomatic expressions is their representation. Cacciari (2014) critically examined the question about compositionality and non-compositionality, thus, how the idiomatic meaning and the literal meaning of expressions are considered. A decomposable idiom

such as *spill the beans* (i.e. to give away a secret) can be understood quite quickly. It can be processed compositionally based on the literal constituents and their overlap with the idiomatic meaning. On the other side, it takes longer to process a non-decomposable idiom such as *Kick the bucket* (literal meaning: to die) because of the lack of compositionality.

Cacciari (2014) refers to earlier research by Ortony, Schallert, Reynolds and Antos (1978) who found that the figurative meaning of an idiom is retrieved faster than its literal meaning. For example, Dutch native speakers will understand the idiomatic meaning of the Dutch expression *De inbreker liep tegen de lamp* (i.e. the burglar got caught) faster than its literal meaning (“*The burglar walked against the lamp*”). This is referred to as the Idiom Superiority Effect.

Furthermore, Cacciari (2014) discussed some other factors that affect the speed of which the meanings of idioms are retrieved. These factors are information about the context, familiarity with the idiom, and the meaning dominance. Idiom familiarity here refers to the extent to which subjects are familiar with the idiom, meaning how often they have heard or read the idiom before. This agrees with the definition Citron et al. (2015) give. According to them, Lexical Familiarity describes how often an individual has been exposed to a certain idiom. There seem to be several different factors, which are important to investigate when looking at idiomatic language.

Besides the representation of an idiom, an idiom’s processing is also very interesting when looking at monolingual speakers. Titone and Libben (2014) investigated the activation of an idiom’s meaning in English. They used cross-modal semantic priming to investigate which features of idioms influence the figurative meaning activation over time. Cross-modal semantic priming means that the priming items were presented on another manner than the experiment

items. In this experiment, priming items were presented in the auditory modality and the experiment items were presented in written form on a screen. The authors examined three features. The first one was *semantic decomposability*, describing whether the semantics of the single words of the idiom correspond with the overall figurative meaning of the idiom. Second, they examined *familiarity*, which refers to how frequently the participant has heard the idiom. The last one was *literal plausibility*, in other words whether the participants were capable of literally interpreting the idiom. Titone and Libben (2014) conducted two experiments with native speakers of English as participants. In both experiments, participants heard prime sentences over headphones such as *to kick the bucket* and were presented visual targets, for example *die* (figurative meaning of *to kick the bucket*) or a non-word on a computer screen. After the presentation of the auditory experimental items a lexical decision task followed in which participants were supposed to decide as quickly as possible whether the visual target was an actual English word. The main finding of this research was that the activation of the figurative meaning occurs gradually over time and that different features of an idiom have an influence on the meaning activation at different moments during the meaning activation. The results indicate that figurative meaning activation is influenced by multiple linguistic factors, thus not only based on decompositionality (Titone & Libben, 2014).

Having discussed representation and processing of idioms, we now turn to the extent to which figurative language has an influence on other relevant factors such as emotional valence, arousal, familiarity, semantic transparency, figurativeness, and concreteness. This was investigated by Citron et al. (2015). Besides creating a database of 619 idioms for German

(PANIG database) which is of enormous value for further research as the present one, they also conducted an experiment, which consisted of a rating task in which subjects rated nonliteral sentences on different aspects. Those aspects were the correctness, semantic transparency, and figurativeness of the idiom, and how well they knew their meaning. Hereby, semantic transparency as such describes how easily the figurative meaning of an idiom can be deduced based on the literal meaning of the utterance. Thus far, a number of studies have indicated different findings on whether transparency has an impact on processing idiomatic language. According to Citron et al. (2015), this mainly results from the subjectivity of which individuals rate transparency. Figurativeness, on the other hand, is about how subjects perceive an idiomatic expression. The meaning of an idiomatic expression can be perceived as either more literal or more nonliteral.

Subjects also rated whether the nonliteral sentences had a positive or negative emotional valence and on how stimulating they found the expression (arousal). For the rating task, 619 idioms were selected. The rating task and survey which include several hundreds of idioms showed, among other things, that more idioms are better known by subjects. Furthermore, they found that a more figurative meaning was rated as less transparent and less concrete.

Bilingual Research on Idiomatic Expressions

Only little research has been done on idiomatic processing in bilingual speakers. In this section, we will split the debate on bilingual research on idiomatic expressions into two parts. First, we

will consider the comprehension of idiomatic language, and second, we will turn to the production of idiomatic language.

When it comes to comprehending idiomatic language, there may be differences between native speakers and non-native speakers. Siyanova-Chanturia, Conklin & Schmitt (2015) implemented an eye tracking experiment in which both native and non-native speakers of English were tested while reading short stories that contained idioms in their second language (L2). The research had four goals: First, within native-speakers, to confirm that idioms are indeed processed faster than novel phrases. This is in line with the Idiom Superiority Effect, which we discussed earlier. Second, to explore whether there are any differences in processing the figurative and literal meaning of an idiom in a biasing story context. Third, to compare the processing speed before and after the recognition point of the idiom. And lastly, to show the differences in idiom comprehension between native speakers and non-native speakers. Their results for native speakers show that they processed idioms faster than novel phrases, thus supporting the Idiom Superiority Effect. Furthermore, literal and figurative meanings are processed with the same speed, even after the recognition point. When comparing native and non-native speakers, they found that there is a processing difference. According to them, non-native speakers have more difficulties processing figurative meanings; they have to re-read and re-analyse figurative meanings more often than literal meanings.

Because there seems to be a difference between native and non-native speakers when it comes to processing idioms, it is expectable that there are differences in producing idioms as well. Khodadady and Shamsaee (2011) took a closer look at language learners' usage of

formulaic language. They investigated which types of formulaic sequences language learners use the most, whether the level of listening and speaking ability is related to the usage of formulaic sequences and how the frequency of usage of those formulaic sequences can predict the fluency of speech of a language learner. Their experiments consisted of two parts. In the first part, the subjects' proficiency was measured by letting them take the IELTS Listening and Speaking specimen. In the second part, the researchers interviewed the subjects. The data was used for frequency, correction and discriminant function analysis. Their findings suggest that learners use collocations and autobiographical sequences the most and idioms and phrasal verbs the least often. Furthermore, they found that the subjects' usage of formulaic sequences was hardly related to their proficiency. Also, they point out that there is no significant relationship between the usage of collocations and fluency of speech.

The Present Study

This study attempts to investigate to what extent several variables have an influence on the accuracy of which German native speakers interpret idioms in Dutch. In this experiment, one lexical variable, namely Semantic Familiarity, and two semantic variables, Within Language Transparency and Imageability, were examined. It must be noted that all of the variables were self-reported by the participants. Furthermore, the subjects' proficiency in Dutch was taken into account. As already mentioned, according to Khodadady and Shamsaee (2011), the subjects' proficiency is hardly related to their usage of formulaic sequences. However, considering that interpreting the participants' scores without controlling their actual knowledge on idioms may be

problematic (Citron et al., 2015), it is important to look closer at the relationship between their proficiency and the subjects' accuracy.

Based on the variables described above, this study aims to answer the following questions: To what degree do the Lexical Familiarity, Imageability and Within-Language Transparency predict the accuracy with which speakers interpret idioms in their second language? What is the relationship between the number of words one knows in their L2 and the number of idioms one knows in their L2? And how do the variables influence each other? In the following, we will give our hypotheses concerning the questions above, first for the three independent variables and after that for the interactions of the variables.

Independent Variables

Lexical Familiarity, our first variable, is a combined variable of Frequency, Usage, and Familiarity. Because all of these three variables describe how well the subject knows an idiom, we decided to combine these three variables to one variable for the purpose of this thesis. The first part of Lexical Familiarity, the Frequency of an idiom, may play an important role in idiomatic second language acquisition because research revealed that the frequency of an idiom can influence the processing speed (Chanturia, Conklin & Van Heuven, 2011). However, Frequency can be divided into at least two kinds: On the one hand, Objective Frequency means how often an idiom occurs in language, which can be measured based on databases. On the other hand, Lexical Familiarity describes how often a subject has heard or read a certain idiom. In this experiment, the term Frequency will be used solely when referring to Lexical Familiarity. The

second part of Lexical Familiarity, Usage, is another important aspect of the idiom. Usage describes how often speakers use an idiom themselves. The last part, Familiarity, will be defined as introduced before. Thus, in this research, the term familiarity refers to how familiar a subject is with an idiom as judged by the subject. Based on the theoretical framework introduced before, we do expect that there is an effect of Lexical Familiarity on the accuracy of the subjects' ratings. We expect to find a higher accuracy rate for idioms for which subjects report a higher Lexical Familiarity. In other words, the more often subjects report to have heard or read idioms, use them themselves and the more familiar they are with them, the higher their accuracy of interpreting the idiom is. This expectation is in line with Citron et al. (2015), who claim that the more familiar a subject is with an idiom (i.e. Lexical Familiarity), the better the subject knows the idiomatic meaning. One might expect that individuals use those idioms more often they are familiar with and for which they rate a higher Lexical Familiarity. Overall, we can thus expect an effect on the combined variable Lexical Familiarity on the accuracy in the experiment.

Imageability in this research describes whether speakers can form a mental image of the idiom. This is in accordance with Citron et al. (2015). For the idiom mentioned in the beginning for example, *tegen de lamp lopen*, it is quite easy to form a mental image because the literal translation of the idiom, *walk against the lamp* (i.e. to get caught) could actually happen. This mental image, however, might not necessarily match the actual figurative meaning of the idiom.

When it comes to Imageability, we do not expect to find a high effect on the accuracy because, as mentioned above, Imageability does not necessarily specify the meaning itself. This

means that even though subjects can form a mental image quite well, this may not have an impact on whether or not they can correctly interpret the idiom.

Within Language- Transparency will in this experiment be understood to mean how clear the figurative meaning is based on the words in the sentence. This is based on Citron et al.'s (2015) definition for semantic transparency given in the introduction of this paper. According to them, an idiom such as *keep in touch* can be seen as relatively transparent, whereas for example *kick the bucket* is not transparent but opaque and must thus be learned in order to know the meaning. In this thesis, this will be referred to as Within-Language Transparency rather than semantic transparency.

To what extent does Transparency relate to the accuracy of which subjects interpret idioms? We do expect to find a high effect of Within-language Transparency. As shown above, idioms differ concerning the degree to which the literal meaning conforms to the meaning of the idiom. This would mean that subjects would have a higher accuracy for idioms, which they rate as more transparent.

Lexical Knowledge of the participants was examined prior to the experiment using the LexTALE test for Dutch as introduced by Lemhöfer and Broersma (2012). LexTALE is a test to measure lexical knowledge and to indicate overall proficiency in a second language. It was important to let subjects complete this test because one may assume that speakers with a higher proficiency in their L2 do succeed better in developing such form-meaning connections and therefore perform better at interpreting idiomatic language.

Interactions between the variables

Interaction effects between the variables indicate to what extent these variables combine in their effect on the accuracy of idiom interpretation. Concerning Lexical Familiarity and its interaction effect with Transparency, Citron et al. (2015) state that Semantic Transparency does not have any influence on Familiarity or idiom knowledge. According to them, this indicates that the meaning of idioms speakers are familiar with are stored in their semantic memory. The process of retrieving strings from the semantic memory is the same for highly transparent and low transparent idioms. If their findings are true, we cannot expect that speakers interpret highly transparent idioms in their L2 easier than any other idiom, regardless of whether they are more or less familiar with them. However, in this thesis, participants report their subjective familiarity. This may have consequences for their ratings. It may be the case that participants rate idioms as more transparent when they also rate those as more familiar. Therefore, I do expect an interaction effect between Lexical Familiarity and Transparency.

Table 1

Relation between Lexical Familiarity and Transparency

Lexical Familiarity	Transparency	Chance of accuracy
+	+	= more likely to be accurate
+	-	= less likely to be accurate
-	-	= not likely to be accurate

Because I do not expect that participants score higher on accuracy when they also rate an idiom higher on Imageability, it would also be unlikely that Imageability in combination with

Lexical Familiarity would lead to a higher accuracy. Thus, we do not expect an interaction effect for these variables.

The last interaction effect that will be examined is the one between Transparency and Imageability. Because we expect Transparency to have a great impact on the accuracy of which participants score on idioms but do not expect Imageability to have an influence, we do not expect that participants perform significantly better on idioms that are highly transparent and highly imaginable than on idioms that are highly transparent but less imaginable.

Method

Participants

A total of 25 native speakers of German (21 women, 4 men) between 19 and 32 (mean= 25.5, median=23) years of age participated in this experiment. They all have been using Dutch as a second language for between 0.5 and 6.5 years (median=3.75). In order to determine the participants' knowledge of Dutch, all of them completed the LexTALE test for Dutch. They all scored between 51% and 91% on this test (median=72%). Most of the participants were students at the Radboud University from different studies recruited through the Radboud Research Participant System. As a reward, participants were either paid 10€ or received one credit point which they needed to collect a certain amount as a part of their undergraduate study. The experiment was conducted in a lab where the participants completed an online survey, the LexTALE test, and a language background questionnaire.

Stimulus Materials

For this experiment, 154 idioms of Dutch were selected from the OOGST corpus, newspapers, the internet and from Rommers, Dijkstra and Bastiaansen (2013). Either there is no German equivalent for the idiom, for example *Met zijn ziel onder de arm lopen* (in English, “to walk with your soul under your arm”, i.e. to not know what to do), or there is a German equivalent which is totally different, for example, the Dutch idiom *Een hard hoofd in iets hebben* (in English: “to have a hard head in something“, i.e. to feel pessimistic about something) is an equivalent for the German idiom *schwarzsehen* (in English, “to see black”, i.e. to feel pessimistic about something). The overlap between German and Dutch idioms was determined by seven native speakers of German with a high proficiency in Dutch who examined the German versions of the Dutch idioms based on their own opinion and with the aid of Redensarten-Index (Udem, 1999), a German website which contains a great amount of German expressions and idioms and their meanings.

Method and Design

Before starting the experiment, the participants gave informed consent. Next, they completed the LexTALE test for Dutch. After that, the online survey hosted on Qualtrics (Qualtrics, 2005) started. Firstly, they received written instructions in Dutch. The participants were told that they could ask if any of the instructions were unclear. The first part of the experiment was a short background questionnaire containing questions about their age, gender, place of residence, previous education, first language and other languages they spoke. After that, a practice session

with sets of questions about two idioms followed to make sure the instructions were clear to the participants. In this practice session the questions were further explained. After the exercise session, the actual questionnaire started. The experiment was structured as follows:

Lexical Familiarity was measured in the first three questions. The first question was about the *Subjective Frequency* of the idiom. In this question, participants gave an answer to the question how often they have read or heard an idiom. Answers could be given on a scale from one to five, where one meant *very little* and five meant *very often*. The second question measured the *Usage* of the idiom. This question was about how often participants used the idiom themselves when speaking Dutch. The answers were given on the same scale as for the first question. In the third question, *Familiarity* of the idiom was queried. The participants were asked how familiar they were with an idiom. Again, they rated this on a scale from one to five, where in this case one meant *not familiar at all* and five meant *very familiar*.

Imageability, the second variable, was measured in the following question. The participants were asked to rate to which extent they could form a mental image for the idiom. They could answer on a scale from one to five, where one meant *very hardly* and five meant *very easily*. After that, the participants were asked to fill in the meaning of an idiom in a blank themselves.

Correctness of the interpretation of the idioms was measured by giving the participants four single choice options about the meaning of one idiom. The answer to this question was used to state whether they knew the meaning of the idiom or not.

Transparency of an idiom, lastly, was examined by showing participants the correct meaning of the idiom. They were asked how clear the figurative meaning was to them based on the words in the sentence.

After the practice session, the participants were tested on 16, respectively 20 idioms, for all of which they answered the questions mentioned earlier. A transcript of the questionnaire is presented in Appendix A. After completing the online questionnaire, all participants filled in a questionnaire on their language background on paper. This questionnaire contained questions about their first language, in which region they grew up, which language(s) is spoken at the participants' home and about all the languages they had listed. For all the languages they were asked at which age and in which situation they learned it and how many years they had taken lessons in these languages. Furthermore, they were to rate their own proficiency in all the languages with regard to their speaking, writing, listening, and reading skills. Those skills were rated on a scale from one to seven, where one meant *none* and seven meant *just like first language*. The participants were also asked various questions about native speakers of Dutch or themselves using German words while speaking Dutch. Lastly, participants were asked what they thought was being researched in the experiment. This language background questionnaire can be found in Appendix B.

Data Analysis

No data and thus no potential outliers were excluded because of the few judgements we were able to collect per item. First, we conducted a correlation analysis in SPSS with the variables Lexical

Familiarity, Transparency, Imageability, LexTALE score, self-reported language proficiency in Dutch and the correctness of the interpretation of the idiom. We first considered the correlations for all the variables, regardless of the correctness of the interpretation measured by a multiple-choice task. However, to find out whether the correct interpretation is important for the effects of the variables, we then filtered the variables and only regarded the effects for idioms that were interpreted correctly by participants.

After that, we conducted a binary logistic regression analysis using R to examine the main effects and the interaction effects of the different variables. We started with a model with all factors and two- and three-way interactions. Then, we iteratively removed any effects from the model which turned out to be non significant. At the end, only the four main effects turned out to be significant and were further analysed.

Results

Descriptive Statistics

In total, 25 participants gave 472 judgements for 154 different expressions. The minimal number of judgements per expression was one. In appendix C, the number of judgements, percentage of correctly interpreted idioms and the means for the variables Frequency, Usage, Familiarity, Imageability, and Transparency are described per item in appendix 2, the average ratings and percentages are shown per participant. We calculated the means for the three main variables for both correctly and incorrectly interpreted idioms. Table 2 provides an overview over the means

regardless of whether the idioms were interpreted correctly or not. Figure 1 compares the variables and whether the idioms were correctly interpreted or not.

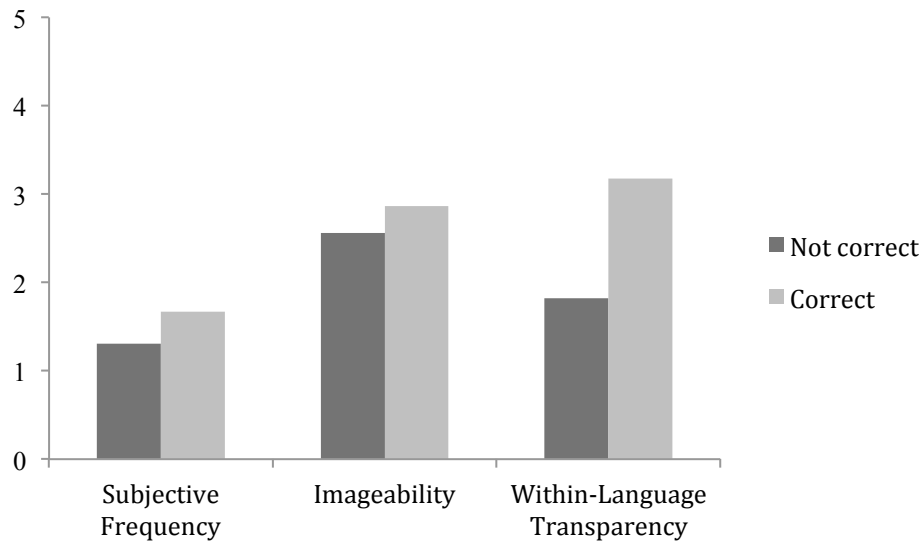


Figure 1. Illustration of the means of the three main variables whether they were correctly or not correctly interpreted.

Table 2

Means for all main variables for both correctly and incorrectly interpreted

Variable	Mean	Standard deviation
Subjective Frequency	1.53	0.796
Imageability	2.67	1.397
Semantic Transparency	2.58	1.320

Correlations Between the Factors

We ran a correlation analysis to examine the relationships between the three main variables for both correctly and incorrectly judged idioms in the multiple-choice task. The two variables Imageability and Lexical Familiarity were significantly correlated ($r(454) = .35, p < .01$), which implicates that higher ratings for Imageability were accompanied by higher the ratings for Lexical Familiarity. There was also a correlation between the variables Transparency and Imageability ($r(454) = .33, p < .01$), which shows that more transparent idioms were also more imaginable according to participants' judgements. The two variables Transparency and Lexical Familiarity were correlated as well, but showed the lowest correlation of the three main variables ($r(470) = .29, p < .01$). Still this implicates that participants judged idioms for which they assigned a higher Lexical Familiarity were also as more transparent. All of these results can be found in Table 3. There was no big difference between results of the variables for both incorrectly and correctly interpreted idioms. For further comparison, the results for correctly interpreted idioms only can be found in Table 4.

Table 3

Results for correlation analysis for both correctly and incorrectly interpreted idioms

	Lexical Familiarity	Imageability	Transparenc y
Lexical Familiarity			
Pearson Correlation	1		
Sig (2-tailed)			
N	472		
Imageability			
Pearson Correlation	.352	1	
Sig (2-tailed)	.000		
N	456	465	
Transparency			
Pearson Correlation	.287	.331	1
Sig (2-tailed)	.000	.000	
N	472	456	472

Table 4

Results for correlation analysis for correctly interpreted idioms only

	Lexical Familiarity	Imageability	Transparency
Lexical Familiarity			
Pearson Correlation	1		
Sig (2-tailed)			
N	265		
Imageability			
Pearson Correlation	.355	1	
Sig (2-tailed)	.000		
N	256	265	
Transparency			
Pearson Correlation	.260	.302	1
Sig (2-tailed)	.000	.000	
N	265	256	265

Regression Analysis

As mentioned above, for the binary logistic regression analysis we iteratively removed the two- and three-way interactions from the model. In the end, only the four main factors remained, namely Lexical Familiarity, Imageability, Transparency and LexTALE. The results are shown in Table 5.

There was a main effect of Lexical Familiarity ($Z(434)=2.949$, $P<.001$). Participants scored higher on accuracy on idioms for which they reported a higher Lexical Familiarity. Furthermore, there was a main effect of Imageability ($Z(434)=-3.135$, $P<.001$) which indicates that participants scored better on accuracy for idioms for which they reported a higher Imageability, as well as a main effect of Transparency ($Z(434)=9.648$, $P<.001$) which means that participants scored higher on accuracy on idioms for which they reported a higher Transparency. Lastly, there was also a highly significant main effect of Lexical Knowledge ($Z(434)=4.51$, $P<.001$) which led to a higher general accuracy for participants with a greater lexical knowledge.

Table 5
Results for the main effects from the regression analysis

	Estimate Std. Error	Z value	Pr(> z)
Lexical Familiarity	0.58908	2.949	0.00319
Imageability	-0.30352	-3.135	0.00172
Transparency	1.16083	9.648	< 2e-16
Lexical Knowledge	0.05513	4.511	6.45e-06

Discussion

In this study we investigated to which extent three independent variables, namely Lexical Familiarity, Usage, and Familiarity, affect the accuracy with which native speakers of German interpret idioms in Dutch. In the following, we will discuss the results for each of the variables and the interactions.

Lexical Familiarity

Concerning this variable, we did expect the accuracy with which participants interpreted idioms to be higher when they also reported a higher lexical familiarity for that idiom. As mentioned above, there was a significant effect of Lexical Familiarity. This indicates that participants indeed scored significantly higher on the interpretation of idioms for which they reported a higher Lexical Familiarity. These results support our hypothesis and also support the findings of Citron et al. (2015) who stated that the higher the Lexical Familiarity, the better participants know the meaning of that idiom.

Imageability

We did not necessarily expect that participants scored higher on accuracy for idioms that they reported as more imaginable because whether or not you can form a mental image for an idiom does not necessarily help to interpret the meaning of that idiom. However, according to the results, Imageability does have a significant effect on accuracy. Participants had a significantly

higher accuracy when interpreting idioms that they reported as highly imaginable. A reason for this may be that participants rated the variable subjectively. It may be the case that participants find idioms more imaginable when they have actually heard of that idiom before.

Transparency

We did expect that participants had a higher accuracy when interpreting idioms that were highly transparent than when interpreting idioms that were less transparent according to participants' subjective judgements. Indeed, the effect of Transparency on accuracy was the most significant one of the three examined main effects. In our case, we measured the Within-Language Transparency, which described to which extent the constituent words in the idiom in one language overlapped with the constituent words in another language. The more the idiom's constituents resembled one another, the higher the accuracy of participants was in this experiment.

Lexical Knowledge

We expected that if participants had a better Lexical Knowledge in their L2, they also knew more meanings of idioms in their L2 because a higher proficiency in a second language is associated with better skills in form-meaning connections in a L2. The results are in line with our hypothesis. This indicates that speakers with a better lexical knowledge in an L2 indeed had a better knowledge of idioms in that language.

Mutual Influences Between the Variables

As mentioned above, we did expect an interaction effect between Lexical Familiarity and Transparency, even though this disagrees with Citron et al.'s (2015) findings that Transparency does not affect the ease with which strings can be retrieved from the semantic memories. We expected an effect because participants rated the idioms' transparency subjectively. This may be because participants feel like an idiom is more transparent than it actually is simply because they know its meaning. Indeed, the variables Lexical Familiarity and Transparency were significantly correlated. This means that the more familiar participants were with the idiom the more transparent they rated it. However, these two variables showed the lowest correlation of the three main variables.

For the variables Imageability and Lexical Familiarity, we did not expect an interaction effect. However, these two variables showed a significant correlation. This indicates that participants rated idioms with which they were more familiar with also as more imaginable. This result is likely to be a consequence of subjectivity. Perhaps an idiom with which participants are well familiar seems more imaginable as well.

Furthermore, we did not expect a significant interaction effect between Transparency and Imageability. Yet, also for these variables we found a significant correlation. This means that idioms that were rated as more transparent were also rated as more imaginable. This may be the case because on average, the ratings for Imageability and Transparency were very similar to one another, indicating that maybe participants didn't make such a clear distinction between these two.

Link with Empirical Studies

As mentioned in the introduction of this thesis, little research has been done on bilingual idiomatic expressions. Therefore, in this present study some variables were examined for the bilingual processing of idiomatic language. We found that Lexical Familiarity, Imageability and Within-Language Transparency play an important role when participants interpret idioms in their L2. Most of these variables have been examined for monolingual idiomatic research before. However, for bilingual research there were little empirical studies in which these variables have been examined.

In monolingual research Cacciari (2014) has shown that there is an Idiom Superiority Effect and that there are several factors which have an influence on the speed of which native speakers retrieve the meanings of idioms. One of these factors is the Idiom Familiarity. Individuals can retrieve an idiom's meaning faster when they are familiar with that idiom.

Idiom Familiarity for monolingual speakers has also been investigated by Titone and Libben (2014). They found that it is indeed an important factor for idiom processing. This variable has also been used in the present study. Besides Idiom Familiarity, Titone and Libben (2014) also examined other factors which can be linked to the present study, among which Literal Plausibility. This variable is comparable to the variable Within Language- Transparency in the present study. While literal plausibility refers to the ease with which individuals can literally interpret the idiom, Within Language- Transparency is defined as how clear the figurative meaning is based on the words in the sentence. A similar variable can be found in Citron et al.

(2015) who use the term Semantic Transparency to refer to this idea. Citron et al. (2015) also mention Imageability, which, according to them, makes word processing easier.

In bilingual research Siyanova-Chanturia, Conklin & Schmitt (2015) show that non-native speakers often have difficulties processing figurative meanings. Khodadady and Shamsaee (2011) state that non-native speakers' usage of formulaic speech is hardly related to their overall proficiency in a language.

In this study we investigated Lexical Familiarity as introduced by Cacciari (2014) and Titone and Libben (2014) in non-native speakers. We found the same effect of Familiarity for bilingual speakers as they found for monolingual speakers. We also examined Within Language-Transparency which is comparable to variables used for earlier research by Titone and Libben (2014) and Citron et al. (2015). Our present results support their findings for a bilingual context. Imageability has only been mentioned in Citron et al. (2015). Our results disagree with our hypothesis. However, they do agree with Citron et al. (2015). Our last variable, Lexical Knowledge, has been examined for bilingual speakers before (Khodadady & Shamsaee, 2011). However, our results object earlier research. We found that speakers who reached a higher score on the proficiency task also reached a higher score when it comes to correct idiom interpretation.

Limitations of the Current Study

As argued above, we found significant main effects for all of the main variables. However, it must be noted that this study was limited when it comes to the number of participants and the number of judgements. Because there were only 25 participants in total for this study of whom 18

answered questions about a list of 20 randomly assigned items and the other 7 participants got a list containing of 16 items, some of the items have been judged by only one participant. However, we did get judgements for a relatively big number of idioms in general.

Furthermore, there might be a chance that participants simply guessed the right interpretation on the multiple-choice task during the experiment. In that case, this would make their accuracy higher for the statistics even though participants didn't actually know the correct meaning of the idiom.

Suggestions for Further Work

Further work on this topic could expand the present study concerning the number of participants and as a consequence the amount of judgements per item. Furthermore, the results of the present study for the different variables may be of value for future studies on idioms.

Conclusion

In this study, we focused on four variables that have an influence on the acquisition of Dutch idiomatic language by German learners: Lexical Familiarity, Imageability, Within Language-Transparency and Lexical Knowledge. We also examined the relationships between them and stated that all of the variables have an influence on the acquisition of Dutch idioms and can influence one another in their influence. All of these factors investigated in this study are important when German learners want to get Dutch idioms *under the knee* and succeed in gaining a native-like proficiency in Dutch.

References

- Cacciari, C. (2014). Processing multiword idiomatic strings: Many words in one?. *Language Complexity in Linguistics and Psychology ML The Mental Lexicon Words & Constructions*, 9(2), 267-293.
- Citron, F. M., Cacciari, C., Kucharski, M., Beck, L., Conrad, M., & Jacobs, A. M. (2015). When emotions are expressed figuratively: Psycholinguistic and Affective Norms of 619 Idioms for German (PANIG). *Behav Res Behavior Research Methods*, 48(1), 91-111.
- Khodadady, E., & Shamsaee, S. (2012). Formulaic Sequences and Their Relationship with Speaking and Listening Abilities. *English Language Teaching ELT*, 5(2), 39-49.
- Lemhöfer, K., & Broersma, M. (2012). Introducing LexTALE: A quick and valid Lexical Test for Advanced Learners of English. *Behavior Research Methods*, 44, 325-343.
- Lemhöfer, K. & Broersma, M. (2012). *LexTALE*. Retrieved December 1, 2015 from <http://www.LexTALE.com>
- Ortony, A., Schallert, D. L., Reynolds, R. E., & Antos, S. J. (1978). Interpreting metaphors and idioms: Some effects of context on comprehension. *Journal of Verbal Learning and Verbal Behavior*, 17(4), 465-477.
- Qualtrics (2015). *Qualtrics*. Retrieved December 1, 2015 from <https://www.qualtrics.com>
- Rommers, J., Dijkstra, T., & Bastiaansen, M. (2013). Context-dependent Semantic Processing in the Human Brain: Evidence from Idiom Comprehension. *Journal of Cognitive Neuroscience*, 25(5), 762-776.
- Siyanova-Chanturia, A., Conklin, K., & Schmitt, N. (2011, 021). Adding more fuel to the fire: An

eye-tracking study of idiom processing by native and non-native speakers. *Second Language Research*, 27(2), 251-272.

Titone, D .A. & Libben, M. (2014). Time-dependent effects of decomposability, familiarity and literal plausibility on idiom meaning activation: A cross-modal priming investigation. *ML Linguistic and Psycholinguistic Approaches to Formulaic Language The Mental Lexicon Bridging the Methodological Divide*, 9(3), 473-496.

Udem, P. (1999). *Redensarten Index*. Retrieved December 1, 2015 from <http://www.redensarten-index.de/suche.php>

Appendix

Appendix A

Transcript of the online questionnaire

Uitdrukkingen_Duits_Lab

Beste deelnemer, In deze test wordt jouw kennis van Nederlandse uitdrukkingen getest. Je ziet telkens een uitdrukking op het scherm verschijnen en je wordt gevraagd: hoe vaak je de uitdrukking gehoord of gelezen hebt (1 'heel weinig' tot 5 'heel veel'); hoe vaak je de uitdrukking zelf hebt gebruikt (1 'heel weinig' tot 5 'heel veel'); hoe bekend je bent met de betekenis van de uitdrukking (1 'helemaal niet bekend' tot 5 'heel erg bekend'); hoe lang je de uitdrukking al kent (op een schaal lopend van 'minder dan 2 jaar' tot 'meer dan 10 jaar'); in hoeverre je de uitdrukking kunt visualiseren (1 'erg moeilijk' tot 5 'erg makkelijk'); wat de uitdrukking betekent (betekenis in te typen in een tekstveld); welke definitie de beste is (meerkeuzevraag); hoe duidelijk de betekenis is op basis van de woorden in de zin (1 'erg onduidelijk' tot 5 'erg duidelijk'). Gebruik geen hulpmiddelen om de betekenissen van de uitdrukkingen op te zoeken. We zijn namelijk op zoek naar je intuïties. We beginnen eerst met wat algemene achtergrondinformatie en gaan dan door naar een oefensessie.

Achtergrondinformatie

Proefpersoonnummer:

Sex Wat is je geslacht?

- ☐ Vrouw (1)
- ☐ Man (2)

Wat is je geboortejahr?

Waar woon je op dit moment? Plaats:

Education Wat is je hoogst genoten opleiding?

- ☐ WO (1)
- ☐ HBO (2)
- ☐ MBO (3)
- ☐ VWO (4)
- ☐ HAVO (5)
- ☐ VMBO (6)

- ☐ Basisschool (7)
- ☐ Abitur (8)

Wat is je moedertaal?

Spreek je nog andere talen? Zo ja, welke?

- ☐ Nee (1)
- ☐ Ja, namelijk: (2) _____

Alle resultaten zullen anoniem worden verwerkt. Wij willen jouw resultaten van deze test gebruiken voor wetenschappelijk onderzoek. Vind je dat goed?

- ☐ Ja, ik geef hier toestemming voor (1)
- ☐ Nee, ik geef hier geen toestemming voor (2)

Nu volgt de oefensessie. Hier worden vragen gesteld over twee Nederlandse uitdrukkingen. Tijdens deze oefensessie zijn de vragen voorzien van een kleine uitleg. Klik op de knop om met de oefensessie te starten. Veel succes!

Hoe vaak heb je de onderstaande uitdrukking gehoord of gelezen?

- ☐ Heel weinig 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Heel veel 5

Geef hier op een schaal van 1 tot 5 aan hoe vaak je een uitdrukking tegenkomt in het dagelijks leven. '1' staat voor 'heel weinig' en '5' voor 'heel veel'.

Hoe vaak heb je de onderstaande uitdrukking zelf gebruikt?

- ☐ Heel weinig 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Heel veel 5

Geef hier op een schaal van 1 tot 5 aan hoe vaak je een uitdrukking zelf hebt gebruikt in het dagelijks leven. '1' staat voor 'heel weinig' en '5' voor 'heel veel'.

Hoe bekend ben je met de betekenis van de uitdrukking?

- ☐ Helemaal niet bekend 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Heel erg bekend 5

Geef hier op een schaal van 1 tot 5 aan hoe bekend je bent met de betekenis van een uitdrukking. '1' staat voor 'helemaal niet bekend' en '5' voor 'heel erg bekend'.

Hoe lang ken je de uitdrukking al? Als je de uitdrukking niet kent, vink dan "ik ken deze uitdrukking niet" aan.

- ☐ Minder dan 2 jaar
- ☐ 2 tot 4 jaar
- ☐ 4 tot 6 jaar
- ☐ 6 tot 8 jaar
- ☐ Meer dan 10 jaar
- ☐ Ik ken deze uitdrukking niet

Geef hier aan hoe lang je de uitdrukking al kent, als je deze kent. Als je dit niet helemaal zeker weet, doe dan een schatting. Als je de uitdrukking niet kent, vink dan "ik ken deze uitdrukking niet" aan.

In hoeverre kun je je een beeld vormen bij deze uitdrukking?

- ☐ Erg moeilijk 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Erg makkelijk 5

Hier wordt gevraagd hoe gemakkelijk je de uitdrukking kunt visualiseren. Hoe gemakkelijk kun je voor je zien wat er gebeurt? Een uitdrukking waarbij je je waarschijnlijk makkelijk een beeld kunt vormen is: in de gordijnen klimmen. De betekenis van deze uitdrukking is misschien niet meteen duidelijk op basis van de woorden in de zin, maar je kunt je waarschijnlijk wel voorstellen dat iemand in de gordijnen klimt - daar kun je je waarschijnlijk een beeld bij vormen. Een uitdrukking waarbij dit erg moeilijk is: het loodje leggen

Geef de betekenis van de onderstaande uitdrukking:

Typ hier de betekenis van de uitdrukking in het tekstveld. Gebruik geen hulpmiddelen om de betekenis op te zoeken. Als je echt niet weet wat de uitdrukking betekent, zet dan een streepje ('-').

Kies de beste betekenis van de onderstaande uitdrukking:

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

Kies hier de beschrijving die het best past bij de betekenis van de uitdrukking. Dit kan afwijken van hoe je de uitdrukking normaal gebruikt.

Hoe duidelijk is de niet-letterlijke betekenis op basis van de woorden in de zin?

- ☐ Erg onduidelijk 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Erg duidelijk 5

Hier wordt de betekenis gegeven. De vraag is: Hoe duidelijk is de niet-letterlijke betekenis op basis van de woorden in de zin? Voorbeeld van uitdrukking waarvan de niet-letterlijke betekenis duidelijk is op basis van de woorden van de zin: geen vlieg kwaad doen = niemand kwaad doen Voorbeeld van uitdrukking waarvan de niet-letterlijke betekenis onduidelijk is op basis van de woorden van de zin: het loodje leggen = doodgaan

Je gaat nu oefenen met een tweede uitdrukking.

T Dit was de oefensessie. Nu start de echte test, waarin ____ uitdrukkingen zullen worden gepresenteerd. Na afloop van de test krijg je te zien van hoeveel uitdrukkingen je de juiste betekenis wist te noemen. Succes!

Hoe vaak heb je de onderstaande uitdrukking gehoord of gelezen?

- ☐ Heel weinig 1
- ☐ 2
- ☐ 3
- ☐ 4

- ☐ Heel veel 5

Hoe vaak heb je de onderstaande uitdrukking zelf gebruikt?

- ☐ Heel weinig 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Heel veel 5

Hoe bekend ben je met de betekenis van de uitdrukking?

- ☐ Helemaal niet bekend 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Heel erg bekend 5

Hoe lang ken je de uitdrukking al? Als je de uitdrukking niet kent, vink dan "ik ken deze uitdrukking niet" aan

- ☐ Minder dan 2 jaar
- ☐ 2 tot 4 jaar
- ☐ 4 tot 6 jaar
- ☐ 6 tot 8 jaar
- ☐ Meer dan 10 jaar
- ☐ Ik ken deze uitdrukking niet

In hoeverre kun je een beeld vormen bij deze uitdrukking?

- ☐ Erg moeilijk 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Erg makkelijk 5

Geef de betekenis van de onderstaande uitdrukking: _____

Kies de beste betekenis van de onderstaande uitdrukking:

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

Hoe duidelijk is de niet-letterlijke betekenis op basis van de woorden in de zin?

- ☐ Erg onduidelijk 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Erg duidelijk 5

Je kunt nu een korte pauze nemen als je wilt. Druk op "volgende" om verder te gaan.

(...)

Je hebt ____ van de ____ uitdrukkingen goed beantwoord in de meerkeuzevragen.

Heb je nog algemene opmerkingen over de test of suggesties voor verbeteringen, vul ze dan hieronder in.

Ontzettend bedankt voor je deelname aan het onderzoek!

Appendix B

Questionnaire on Language Background

Achtergrondvragenlijst bij experiment

Leeftijd: _____
Geslacht: _____

In de volgende vragen wordt gevraagd naar uw kennis van talen. Belangrijk is dat u

probeert alle vragen zo nauwkeurig mogelijk te beantwoorden.

1. Wat is uw moedertaal ?
2. Als Nederlands niet uw moedertaal is, hoeveel jaar gebruikt u de Nederlandse taal ?
3. Bent u langer dan 3 maanden in Nederland geweest? Zo ja, hoe lang is de langste periode dat u in Nederland bent geweest?
4. In welk(e) land(en) anders dan Nederland bent u langer dan drie maanden geweest?
Hoe lang was u daar ?
5. Welke taal wordt bij u thuis gesproken? [dat kan er meer dan 1 zijn]
6. In welke regio bent u geboren / opgegroeid?
7. Vermeld hieronder alle talen die u kent. Begin met de taal die u het beste beheerst (vaak zal dat de moedertaal zijn, maar dat hoeft niet zo te zijn). Noem vervolgens de taal die u daarna het beste beheerst en ga zo door tot de taal die u het minst beheerst. Specificeer bij elk van de genoemde talen de leeftijd waarop u met het leren van die taal begon, en waar u de taal leerde (bijv. thuis of op school). Als u de taal op school leerde, vermeld dan ook in welke klas. Geef tot slot aan hoeveel jaren u les hebt gehad in de taal.

	<u>taal</u>	<u>leeftijd</u>	<u>leersituatie</u>	<u>aantal jaren</u> <u>les gehad</u>
1.	-----	-----	-----	-----
2.	-----	-----	-----	-----
3.	-----	-----	-----	-----
4.	-----	-----	-----	-----
5.	-----	-----	-----	-----
6.	-----	-----	-----	-----

8. Geef op de volgende schalen aan hoe uw spreekvaardigheid in elk van de bij vraag 10 genoemde talen is vergeleken met uw spreekvaardigheid in de moedertaal. Omcirkel een 7 als die spreekvaardigheid gelijk is aan die in uw moedertaal. Omcirkel een 1 als u de taal niet verstaat.

Spreekvaardigheid

<u>taal</u>	<u>niet</u>							<u>gelijk aan moedertaal</u>
1. -----	1	2	3	4	5	6	7	
2. -----	1	2	3	4	5	6	7	
3. -----	1	2	3	4	5	6	7	
4. -----	1	2	3	4	5	6	7	
5. -----	1	2	3	4	5	6	7	
6. -----	1	2	3	4	5	6	7	

9. Geef op de volgende schalen aan hoe uw schrijfvaardigheid in elk van de bij vraag 10 genoemde talen is vergeleken met uw schrijfvaardigheid in de moedertaal. Omcirkel een 7 als die schrijfvaardigheid gelijk is aan die in uw moedertaal. Omcirkel een 1 als u de taal niet schrijft.

Schrijfvaardigheid

<u>taal</u>	<u>niet</u>							<u>gelijk aan moedertaal</u>
1. -----	1	2	3	4	5	6	7	
2. -----	1	2	3	4	5	6	7	
3. -----	1	2	3	4	5	6	7	
4. -----	1	2	3	4	5	6	7	
5. -----	1	2	3	4	5	6	7	
6. -----	1	2	3	4	5	6	7	

10. Geef op de volgende schalen aan hoe uw luistervaardigheid in elk van de bij vraag 10 genoemde talen is vergeleken met uw luistervaardigheid in de moedertaal. Omcirkel een 7 als die luistervaardigheid gelijk is aan die in uw moedertaal. Omcirkel een 1 als u de taal niet verstaat.

Luistervaardigheid

<u>taal</u>	<u>niet</u>							<u>gelijk aan moedertaal</u>
1. -----	1	2	3	4	5	6	7	
2. -----	1	2	3	4	5	6	7	
3. -----	1	2	3	4	5	6	7	
4. -----	1	2	3	4	5	6	7	
5. -----	1	2	3	4	5	6	7	
6. -----	1	2	3	4	5	6	7	

11. Geef op de volgende schalen aan hoe uw leesvaardigheid in elk van de bij vraag 10 genoemde talen is vergeleken met uw leesvaardigheid in de moedertaal. Omcirkel een 7 als die leesvaardigheid gelijk is aan die in uw moedertaal. Omcirkel een 1 als u de taal niet leest.

Leesvaardigheid

<u>taal</u>	<u>niet</u>							<u>gelijk aan moedertaal</u>
1. -----	1	2	3	4	5	6	7	
2. -----	1	2	3	4	5	6	7	
3. -----	1	2	3	4	5	6	7	
4. -----	1	2	3	4	5	6	7	
5. -----	1	2	3	4	5	6	7	
6. -----	1	2	3	4	5	6	7	

12. Heeft u nog iets te melden over uw talenkennis dat hierboven niet aan de orde is geweest?

Andere vragen

13. Wat vindt u ervan als Nederlanders Duitse woorden gebruiken wanneer ze in het Nederlands praten?

Ik erger mij eraan

☐

☐

Maakt me niks uit

☐

☐

Ik vind het leuk

☐

14. Gebruikt u zelf Duitse woorden als u in het Nederlands praat?

<i>nooit</i>	<i>zelden</i>	<i>soms</i>	<i>regelmatig</i>	<i>heel</i>
<i>vaak</i>				
☐	☐	☐	☐	☐

15. Als u zelf wel eens Duitse woorden gebruikt wanneer u in het Nederlands praat, waarom doet u dat dan?

	<i>nooit</i>	<i>zelden</i>	<i>soms</i>	<i>regelmatig</i>	<i>heel vaak</i>
<i>A. Ik vind het leuk</i>	☐	☐	☐	☐	☐
<i>B. Kan niet op 't Nederlandse woord komen</i>	☐	☐	☐	☐	☐
<i>C. Iedereen doet het</i>	☐	☐	☐	☐	☐
<i>D. Andere reden, nl.:</i>	☐	☐	☐	☐	☐

16. Gebruiken uw vriend(inn)en Duitse woorden als ze in het Nederlands praten?

<i>nooit</i>	<i>zelden</i>	<i>soms</i>	<i>regelmatig</i>	<i>heel</i>
<i>vaak</i>				
☐	☐	☐	☐	☐

17. Wat denkt u dat er met dit experiment onderzocht wordt?

Appendix C

Number of the judgements, percentage of correct judgements, means for Frequency, Usage, Familiarity, Imageability and Transparency per item

Expression	Num- ber Judge- ments	% correc t judge- ments	Mean Fre- quency	Mean Usage	Mean Famili- arity	Mean Image- ability	Mean Trans- parency	Mean Lexical Famili- arity
aan de slag gaan met iets	2	100.00	4.50	3.00	5.00	3.00	3.00	4.17
alles uit de kast halen	2	100.00	2.50	1.00	3.00	4.00	4.50	2.17

de moed in de schoenen zakken	3	100.00	1.00	1.00	1.00	1.50	3.67	1.00
de spijker op de kop slaan	3	100.00	3.00	1.00	3.00	3.00	3.67	2.33
de vruchten plukken van iets	2	100.00	2.00	1.00	3.00	3.00	3.00	2.00
door het lint gaan	4	100.00	2.00	1.00	1.50	2.00	2.75	1.50
een gat in de lucht springen	4	100.00	1.75	1.25	1.75	2.75	4.50	1.58
geld over de balk gooien	3	100.00	1.67	1.00	1.33	3.00	4.33	1.33
iemand de hand boven het hoofd houden	2	100.00	1.00	1.00	1.50	3.00	3.50	1.17
iemand om de tuin leiden	4	100.00	1.75	1.50	1.75	3.25	4.50	1.67
iemand op de kast jagen	4	100.00	2.00	2.00	2.00	4.00	3.75	2.00
iemand voor geen cent vertrouwen	3	100.00	2.67	1.00	2.33	3.00	4.67	2.00
iets boven tafel krijgen	4	100.00	3.25	1.75	2.33	4.00	3.25	2.44
iets onder de knie hebben	4	100.00	4.00	2.50	4.50	4.00	4.50	3.67

iets op zijn duimpje kennen	2	100.00	2.00	1.00	1.50	1.50	3.00	1.50
in de soep lopen	3	100.00	2.33	1.67	2.33	3.00	3.00	2.11
kort door de bocht	4	100.00	3.00	2.00	3.00	2.00	2.75	2.67
met een schone lei beginnen	2	100.00	1.00	1.00	2.00	2.00	3.50	1.33
oogje in het zeil houden	3	100.00	1.67	1.00	1.00	1.67	3.00	1.22
zich in de vingers snijden	3	100.00	2.67	1.33	3.33	4.33	4.00	2.44
boven water komen	4	75.00	1.25	1.00	1.00	3.00	3.00	1.08
brood op de plank	4	75.00	1.00	1.00	1.25	3.25	3.00	1.08
de sterren van de hemel spelen	4	75.00	1.50	1.00	2.00	3.00	3.00	1.50
door de mand vallen	4	75.00	2.50	1.25	1.75	2.00	1.50	1.83
een gat in je hand hebben	4	75.00	2.25	2.00	2.50	3.50	4.75	2.25
een vinger aan de pols houden	4	75.00	1.25	1.00	1.25	3.50	3.50	1.17
het klopt als een bus	4	75.00	1.75	1.00	1.75	2.00	2.75	1.50

iemand onder de duim hebben	4	75.00	2.25	1.25	1.75	3.50	3.50	1.75
iemand van de wal in de sloot helpen	4	75.00	1.00	1.00	1.00	2.33	2.75	1.00
iets over het hoofd zien	3	66.67	3.00	2.33	3.33	4.00	3.67	2.89
in goede aarde vallen	3	66.67	1.33	1.00	1.67	3.00	2.33	1.33
van de baan zijn	3	66.67	1.33	1.00	1.33	1.67	2.33	1.22
de dans ontspringen	4	50.00	1.00	1.00	1.00	1.75	1.75	1.00
hard van stapel lopen	4	50.00	1.50	1.00	1.75	1.75	2.00	1.42
iemand een hart onder de riem steken	4	50.00	1.00	1.00	1.25	2.00	2.00	1.08
iemand een rad voor de ogen draaien	2	50.00	1.00	1.00	1.00	1.50	2.50	1.00
iets komt voor de bakker	4	50.00	1.00	1.00	2.00	2.67	1.00	1.33
iets op prijs stellen	2	50.00	1.00	1.00	1.00	1.50	1.00	1.00
niet door de beugel kunnen	4	50.00	1.00	1.00	1.00	1.50	2.25	1.00

van streek zijn	4	50.00	2.00	1.00	1.67	1.33	1.75	1.56
zich in bochten wringen	2	50.00	1.00	1.00	1.00	2.00	1.50	1.00
een hoofd als een boei krijgen	3	33.33	1.00	1.00	1.00	2.33	2.33	1.00
naar de haaien gaan	3	33.33	1.00	1.00	1.00	2.67	2.00	1.00
buiten westen zijn	4	25.00	1.00	1.00	1.00	1.00	1.25	1.00
het ver schoppen	4	25.00	1.00	1.00	1.00	1.25	2.75	1.00
iemand van het kastje naar de muur sturen	4	25.00	1.25	1.00	1.25	3.00	3.00	1.17
iets door de vingers zien	4	25.00	2.25	1.25	2.25	3.00	1.75	1.92
voet bij stuk houden	4	25.00	1.75	1.00	1.25	1.75	1.50	1.33
ergens een potje van maken	4	0.00	1.25	1.00	1.25	3.00	1.75	1.17
iemand in de maling nemen	2	0.00	1.00	1.00	2.50	2.50	2.00	1.50
iets op je buik kunnen schrijven	2	0.00	1.00	1.00	1.00	2.50	1.50	1.00
zich in de nesten	2	0.00	1.00	1.00	1.50	2.50	1.00	1.17

werken								
zijn borst nat maken	2	0.00	1.00	1.00	1.00	2.00	1.00	1.00
aan lager wal raken	4	100.00	1.00	1.00	1.00	1.00	2.25	1.00
de hand over het hart strijken	2	100.00	1.00	1.00	1.00	2.50	4.00	1.00
iemand iets op de mouw spelden	4	100.00	1.00	1.00	1.00	1.75	2.50	1.00
iemand in de wielen rijden	4	100.00	1.00	1.00	1.25	3.25	4.25	1.08
iets aan je broek krijgen	2	100.00	1.50	1.00	2.00	2.50	3.00	1.50
iets onder de pet houden	2	100.00	1.50	1.00	1.50	2.00	4.00	1.33
uit zijn dak gaan	3	100.00	3.00	1.67	2.33	3.67	3.67	2.33
het loopt storm	4	75.00	2.25	1.00	2.25	2.00	3.50	1.83
dat gaat boven mijn pet	2	50.00	1.50	1.00	1.50	2.00	3.00	1.33
duit in het zakje doen	4	50.00	1.00	1.00	1.00	1.50	1.50	1.00
het bij het verkeerde eind hebben	4	50.00	2.00	1.00	2.50	2.25	3.00	1.83
iemand een	4	50.00	2.25	2.00	2.75	3.25	4.50	2.33

koekje van eigen deeg geven								
iemand in de pan hakken	4	50.00	2.75	1.25	2.25	3.50	3.00	2.08
iemand voor het blok zetten	4	50.00	1.25	1.00	1.25	1.50	2.50	1.17
in de put zitten	4	50.00	2.25	1.50	2.25	2.50	2.00	2.00
uit zijn slof schieten	2	50.00	2.50	1.50	2.50	2.50	3.00	2.17
buiten zijn boekje gaan	5	40.00	1.80	1.00	1.50	2.25	2.20	1.43
ergens geen kaas van gegeten hebben	5	40.00	2.20	1.00	1.00	2.50	1.80	1.40
iemand op zijn nummer zetten	3	33.33	2.00	1.00	1.00	2.33	2.00	1.33
iemand een loer draaien	2	0.00	1.00	1.00	1.00	1.50	1.50	1.00
onder de pannen zijn	4	0.00	1.25	1.00	1.25	2.75	1.25	1.17
geen hemd aan het lijf hebben	3	100.00	2.00	1.00	2.00	5.00	3.33	1.67
iemand in de steek laten	2	100.00	3.00	1.50	2.50	2.00	3.50	2.33
iets op de	2	100.00	3.50	1.50	4.00	3.00	2.50	3.00

lange baan schuiven								
van de oude stempel zijn	2	100.00	1.00	1.00	2.00	4.00	4.00	1.33
druk van de ketel halen	4	75.00	2.25	1.00	2.33	4.67	3.50	1.86
buiten de boot vallen	2	50.00	2.00	1.00	1.00	2.00	2.50	1.33
door het oog van de naald kruipen	4	0.00	2.75	1.00	2.75	4.25	2.00	2.17
met de hakken over de sloot	4	0.00	1.00	1.00	1.25	2.75	1.25	1.08
schoon schip maken	2	0.00	1.50	1.00	2.00	3.50	2.00	1.50
iemand onder de tafel kletsen	4	75.00	2.50	1.00	2.50	3.75	3.25	2.00
op zijn strepen staan	3	66.67	1.00	1.00	1.00	2.00	2.33	1.00
lange tenen hebben	4	25.00	1.75	1.00	1.00	3.75	1.50	1.25
niet goed uit de verf komen	4	25.00	2.25	1.00	2.00	2.50	1.75	1.75
op de tocht staan	4	25.00	1.25	1.00	1.25	2.00	1.50	1.17
een vinger in de pap hebben	4	100.00	1.50	1.00	1.25	1.50	3.50	1.25

ergens niet zo zwaar aan tillen	5	100.00	2.40	1.00	1.50	2.00	3.20	1.63
het hart in de schoenen zinken	2	100.00	2.50	1.00	2.50	4.00	4.00	2.00
hartzeer van iets hebben	3	66.67	1.00	1.00	1.33	3.00	2.33	1.11
iemand het hemd van het lijf vragen	3	66.67	2.33	1.00	2.00	3.00	2.67	1.78
veel noten op zijn zang hebben	3	66.67	1.00	1.00	1.00	1.33	1.67	1.00
het onderste uit de kan halen	4	50.00	1.75	1.00	2.00	4.67	3.00	1.58
met zijn ziel onder de arm lopen	3	33.33	1.33	1.00	1.67	4.33	1.33	1.33
naast zijn schoenen lopen	4	25.00	1.75	1.00	1.50	3.25	2.50	1.42
op je tenen lopen	4	100.00	2.75	1.25	2.50	4.25	2.50	2.17
de boot missen	4	100.00	1.25	1.25	1.25	3.75	4.25	1.25
een slag om de arm houden	5	100.00	1.20	1.00	1.20	1.80	2.20	1.13
hoog van de toren blazen	2	100.00	1.50	1.00	1.00	3.00	3.00	1.17

met de hand op het hart	3	100.00	3.33	1.67	3.67	5.00	4.33	2.89
van de kaart zijn	4	25.00	2.00	1.00	1.67	2.00	2.25	1.56
tegen de lamp lopen	2	100.00	1.00	1.00	1.00	3.00	3.00	1.00
iets op stal zetten	4	25.00	1.50	1.00	1.50	1.75	1.75	1.33
een open deur intrappen	4	75.00	2.25	1.00	2.25	3.75	2.75	1.83
iets op je lever hebben	4	75.00	1.75	1.50	2.75	2.50	2.75	2.00
het hoofd in de schoot leggen	3	66.67	1.00	1.00	1.67	2.67	2.67	1.22
het varkentje wassen	4	0.00	1.00	1.00	1.00	3.25	2.50	1.00
koek en ei zijn	3	33.33	1.67	1.00	1.33	1.67	1.33	1.33
de wind van voren krijgen	4	0.00	2.50	1.00	2.25	4.00	2.25	1.92
op de kast zitten	4	75.00	1.25	1.00	1.00	3.00	3.00	1.08
er hangt iemand iets boven het hoofd	4	0.00	1.25	1.00	1.25	2.75	1.50	1.17
uit de school klappen	4	25.00	1.00	1.00	1.25	1.25	1.75	1.08

iemand het net over het hoofd halen	2	50.00	1.00	1.00	1.00	1.50	1.50	1.00
het hoofd buigen	2	100.00	2.00	1.00	1.50	4.00	2.50	1.50
aan de grond zitten	2	0.00	3.50	1.50	1.50	3.50	2.00	2.17
iemand op stang jagen	2	50.00	1.00	1.00	1.00	1.50	3.50	1.00
op een laag pitje staan	4	25.00	1.25	1.00	1.25	1.75	2.00	1.17
voor spek en bonen	3	0.00	2.00	1.00	2.00	2.33	1.33	1.67
iets in de wind slaan	2	50.00	2.50	1.00	2.50	4.00	1.00	2.00
een stalen voorhoofd hebben	3	33.33	1.33	1.00	2.00	4.67	2.67	1.44
ergens mee voor de draad komen	4	0.00	1.25	1.00	1.00	1.50	1.25	1.08
in het stof bijten	2	0.00	1.00	1.00	1.50	1.50	2.50	1.17
een klein hartje hebben	3	66.67	1.33	1.00	1.33	4.67	2.67	1.22
zo groen als gras zijn	5	80.00	1.40	1.00	1.00	2.25	2.60	1.13
op een houtje bijten	4	50.00	1.50	1.00	1.00	3.00	3.25	1.17
met zijn	3	33.33	1.00	1.00	1.00	2.33	1.33	1.00

neus in de boter vallen								
het op zijn heupen krijgen	2	0.00	1.00	1.00	2.50	2.50	1.00	1.50
iemand de oren van het hoofd eten	3	33.33	1.00	1.00	2.00	5.00	3.00	1.33
iemand de kroon van het hoofd nemen	3	0.00	2.67	1.33	3.33	5.00	2.67	2.44
iets soldaat maken	4	0.00	1.00	1.00	1.00	1.25	2.00	1.00
tussen wal en schip terechtcome n	2	0.00	1.50	1.00	1.50	4.00	1.50	1.33
iemand in de kaart spelen	5	20.00	2.60	1.00	2.00	1.75	2.60	1.87
met het hoofd tegen de muur lopen	3	100.00	3.00	1.33	3.67	4.67	2.67	2.67
varkensvlee s onder de arm hebben	2	0.00	1.00	1.00	3.00	3.00	1.00	1.67
het op zijn heupen hebben	2	0.00	1.50	1.00	2.00	2.00	1.00	1.50
iemand van het hoofd tot de voeten meten	3	0.00	1.33	1.00	1.33	5.00	2.67	1.22

de boeken sluiten	2	0.00	2.00	1.00	2.00	4.00	2.00	1.67
iemand iets in de maag splitsen	4	25.00	1.00	1.00	1.00	2.25	1.75	1.00

Appendix D

Percentages of correct judgements and LexTALE score per subject

Subject	LexTALE score	Percentage correct items
1	66.25	40
2	70	40
3	72.5	60
4	75	60
5	58.75	65
6	62.5	40
7	60	65
8	51.25	50
9	91.25	55
10	87.5	50
11	57.5	30
12	78.75	55

13	85	80
14	77.5	65
15	72.5	65
16	61.25	35
17	65	45
18	90	90
19	73.75	68.75
20	63.75	75
21	65	62.5
22	82.5	37.5
23	71.25	56.25
24	83.75	43.75
25	71.25	81.25
