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1. Introduction

To start from scratch (OED from a position of no advantage, knowledge, influence, etc., from nothing), *to face the music* (OED to face boldly the consequences of one's actions; to accept the inevitable without hesitation), *against the clock* (OED against time), *to let the cat out of the bag* (OED to disclose a guarded secret), *on pins and needles* (OED in state of excessive uneasiness) , *the early bird catches the worm* (LDEI the person who gets up early to work will be successful) and the derived *an early bird* (LDIE a person who gets out of bed early in the morning), and *every dog has its day* (LDEI every person, however unfortunate or unimportant, has a time in his life when he is successful or victorious) are not only strange expressions that may be funny to use in everyday language, or sometimes even constitute song titles such as *Every Dog has Its Day* by an American band called Flogging Molly, but in fact, they are more or less frequent instances of a peculiarity of language called 'idioms'. They might be expected to be very rare in everyday language because they usually do not even mean what the combination of words they consist of mean. This signifies that in contrast to other words in a sentence, where you know what the sentence means when you encounter it because you know the meanings of the single words, knowing the meanings of words of an idiom does not further your understanding at all. Therefore, idioms seem strange, have to be memorised as a whole and hence are difficult. Quite contrary to expectations that idioms are infrequent and rarely encountered in everyday language, figurative expressions, to which idioms surely belong, are extremely frequent. In effect, Pollio et al. (1977 referred to in Cieslicka 2007: 39) found out that approximately four of such figurative expressions are used in only a single minute of talking. Glucksberg (1989 referred to in Cieslicka 2007:39) even surpasses this approximation and in a frequency count finds out that speakers use roughly "1.8 novel and 4.08 figurative expressions per minute of discourse" (Cieslicka 2007: 39). This means that if speakers converse for about two hours per day, they would produce "4.7 million novel and 21.4 million frozen metaphors" (2007: 39) in

the course of sixty years (Cieslicka 2007: 39). Consequently, these figures show that idioms or figurative language are far from being an infrequent or even erratic phenomenon of language. But not only are idioms frequent, some exemplars also stay in a language for hundreds of years. If idioms seemingly pose such a difficulty and have to be memorised as wholes, why do languages have idioms and why do they keep existing for such long periods? In historical linguistics, such questions can only be answered hypothetically and therefore, I have chosen a different approach, namely that of an experiment. The experiment is going to focus on the question of which factors actually influence idiom memorisation. One might ask why my focus lies on memorisation, and the answer is simple: in order to stick in a language, idioms firstly have to be memorised by the speech community. We use idioms fairly frequently, and we also produce novel ones, but mainly, we use frozen metaphors, i.e. idioms which already exist for a long time and which are stable. The question which poses itself at this point is 'What causes this stability of idioms?'. So far we can only speculate, but an experiment on memorisation may offer some answers to this question as the key to historical stability lies in understanding why idioms are memorised. We cannot make experiments with history, but we can make an experiment with memorisation to get clues to the longevity of idioms.

1.1. Definitions

Before we get into detail about the theoretical issues evolving around idioms, the experiment and my hypotheses, we shall take a look at what an idiom, a peculiarity of language and also the centre of this thesis actually is. The definitions of idioms found in the literature are truly manifold. What Wray (2002) suggests for definitions of formulaic sequences equally applies to definitions of idioms, and that is that most of them are “exclusive” (Wray 2004: 44). ‘Exclusive’ means that different features are rejected as features of idioms in different definitions, and the choice of features which are left out seems to be determined by the range of idioms chosen in a particular study, or by the purpose of the study. Consequently, some scholars view a specific utterance as an idiom while other scholars do not. Furthermore, there are definitions that concentrate on linguistic features such as syntactic behaviour or semantics of the units, whereas other kinds of definitions assign more importance to the function of such multi-word units to which idioms surely belong. These different foci certainly also influence what is and what is not included in the definitions. Above all, there are definitions which are rather restrictive and allow only a small variety of multiword expressions to be considered idioms, while there are others which are more inclusive and therefore allow a greater range of utterances to be included. However, as Fernando (1996: 3) points out, three features are included in most of the definitions of idioms. These features are ‘compositeness’, ‘institutionalisation’, and ‘semantic opacity’. Compositeness means that generally, idioms are seen as “a type of multiword expression” (Fernando 1996: 3) and therefore consist of more than one word while referring only to a single concept. The feature of institutionalisation indicates that idioms are “conventionalized” (Fernando 1996: 3), i.e. they are taken over into the general knowledge of a speech community. Each speaker knows the idioms’ meanings as well as how and in which context to use them. The last feature is semantic opacity and denotes that “the meaning of an idiom is not the sum of its constituents” (Fernando 1996: 3). Therefore, idioms are frequently seen as non-literal (Fernando 1996: 3). In the literature, semantic opacity and non-literalness are often used interchangeably and seem to refer to the same

concept, but it is of paramount importance that these two terms are kept apart. As Fernando (1996: 65) argues, semantic opacity is actually a perception of the speaker or hearer, and is as such highly subjective and can differ among speakers. An idiom can be opaque for one speaker because the speaker does not find a link between the meaning of the constituent words and the idiomatic meaning, while for another speaker, it seems transparent because the speaker can see a link between the meaning of the constituent words and the overall figurative meaning of the whole expression. In chapter 2, this will be discussed in connection with the pilot study where the transparency ratings the participants were asked to do exemplify this phenomenon very well. Because opacity is only a perception of speakers, it is consequently not a feature of the idiom itself. Non-literality signifies that the words an idiom consists of do not retain their original or literal meaning but the whole unit of words is assigned a new idiomatic meaning. Take as an example the idiom *to kick the bucket*. The non-idiomatic, literal reading is applicable to the sentence *Ben accidentally kicked the bucket and hurt his foot*. In this sentence, a male person called Ben accidentally stroke a cylindrical vessel with his foot and thereby hurt himself, so all the words retain their literal meanings in the sentence meaning. On the other hand, with the sentence *Old John did not have any friends or family so when he finally kicked the bucket, nobody went to his funeral*, the literal reading would be nonsensical, so here, the idiomatic meaning 'to die' applies. In this reading, the literal meanings of the words *kick*, *the* and *bucket* is not plausible because they do not play a role in the idiomatic meaning where the words appear "semantically 'empty'" (Fernando 1996: 64) and the meaning is assigned only to the combination of words. This means that the idiom is non-literal. In contrast to semantic opacity, we can see that non-literality is always a feature of idioms themselves and does not vary from speaker to speaker. Thus, it is "intrinsic to the idiom" (Fernando 1996: 65). Furthermore, idioms are not either literal or non-literal, but there is a cline of literalness with utterly literal on the one, and non-literal on the other end, with many possibilities or degrees of literalness in between. Literalness means that the literal meanings of the constituent words of a unit contribute to the overall

meaning a unit has. For example, the idiom *to face the music* is not wholly non-literal because the literal meaning of *to face* is also contained in the idiomatic meaning 'to face boldly the consequences of one's actions; to accept the inevitable without hesitation' (OED) while the other part of the idiom is non-literal. The assumption of a cline of literalness also entails that idioms are not necessarily non-literal (Fernando 1996: 65). The feature of literalness will play an important role in the experiment, and is also the focus of one hypothesis. The vital question here is whether idioms which are more on the literal end of the literalness cline are remembered better than idioms which are more on the non-literal end or vice versa. If there is a difference between the memorisation of literal and non-literal idioms, then we can deduce the influence of literalness on the longevity of idioms.

However, before going into more detail about defining features and various definitions of idioms, a closely related, yet not similar concept has to be introduced, and this is the concept of 'formulaic sequences'. Sequences of words or other linguistic entities are considered formulaic when they "appear to be processed without recourse to their lowest level of composition" (Wray 2002: 4). Therefore, this concept spans a greater range of expressions than the concept of idioms does because it also comprises sequences "which do not embrace, or do not require, holistic storage" (2002: 10). Wray defines formulaic sequences as following:

a sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated: that is, stored or retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar. (2002: 9).

She suggests that the term should include as many sequences as possible so that it facilitates the discussion about the phenomenon of multiword units and makes reference to them as easy as possible without the need to exclude specific sequences because of definitions that arbitrarily focus on very specific and restrictive aspects of multiword sequences. But what now is the difference between an idiom and a formulaic sequence? Looking at Wray's definition, we might think that what is described in fact is an idiom. The linguistic entity here is prefabricated, this means that the speaker does

not have to construct it time and again from its constituent words or parts, it is stored and retrieved wholly in the brain, as idioms are said to be, and it is not generated or analysed grammatically when it is used, which is another feature of idioms. Nevertheless, the two concepts are not similar; rather formulaic sequences serves as a kind of umbrella term in which idioms are also included, but not referred to exclusively. Furthermore, for a long time, idioms have been considered as “the archetypical formulaic sequence” (Wray 2002: 56), but nowadays, it is recognised that the fixedness which was typically seen as one of the defining features of idioms is only applicable to a very limited extent of formulaic sequences. Therefore, true idioms are an exception within the different kinds of formulaic sequences (Wray 2002: 9-56).

Having discussed the place of idioms within the wide field of formulaic sequences, I shall now give an overview of theories or definitions of idioms. I will proceed chronologically in order to better trace the development of the term.

Hockett is one of the first modern scholars to treat idioms at length, and as such, his studies are important to the history of the term. He employs ‘idiom’ as a comprehensive umbrella term for both lexicographic and syntactic phenomena, the common denominator of which is that “the meaning is not predictable from the composition” (Makkai 1972: 28). Today, this feature is still one of the basic and most frequent defining features, as can be seen above in Fernando’s (1996) tripartite division of frequent defining features. It is used in definitions with greater or smaller restrictions. However, Hockett also suggests that morphemes in fact are idioms because they have no smaller internal units that could help in deducing meaning, but Makkai dismisses this argument exactly because of Hockett’s motive to include them: if a lexeme is monomorphemic, there is no internal structure that could cause wrong or unsatisfiable interpretations of the lexeme’s meaning (Makkai 1972: 28).

Hockett subdivides idioms into various categories. They range from ‘substitutes’ such as personal pronouns, to ‘proper names’, to ‘abbreviations’

like “parts of quotations” (Makkai 1972: 36), to ‘English phrasal compounds’, ‘figures of speech’ and finally, to ‘slang’. With the inclusion of personal pronouns and their differing denotata, he unintentionally proposes that there are degrees of idiomaticity, and this concept of graded idiomaticity will be frequently encountered in later research. Furthermore, he also includes “idioms larger than lexemes” (Makkai 1972: 33), which later play a vital role as well. He however fails to include that idioms are institutionalised, which is one of the main defining features of idioms (Fernando and Flavell 1981: 6). To encapsulate, even though Hockett also included monomorphemic words such as names or personal pronouns in the category of idioms, which renders his definition too inclusive, he contributed significantly to the understanding of idioms (Makkai 1972: 31-38).

Other prominent scholars in early idiom research are Katz and Postal, who proposed their theory in 1963, five years after Hockett, and Weinreich who held lectures on idioms in 1966. A third position which should be briefly mentioned here is the one by Fraser from 1970. All of these scholars follow the transformational-generative approach to language. Katz and Postal’s definition of idioms is reminiscent of Hockett’s definition, because again, the basis is non-compositionality of the general meaning to “the idiom’s elementary grammatical parts” (Katz and Postal 1963 referred to in Makkai 1972: 47). But they already put forward a more elaborately functioning subdivision of idioms into ‘lexical’ and ‘phrasal idioms’. They have failed to properly define both categories, but their subdivision meant an important and far-reaching step forward in the categorisation of idioms (Makkai 1972: 47-48).

Weinreich, who is frequently mentioned in later research, defines idioms as follows:

[a] phraseological unit that involves at least two polysemous constituents, and in which there is a reciprocal contextual selection of subsenses, will be called an *idiom*. Thus, some phraseological units are idioms; others are not. (Weinreich 1969 referred to in Makkai 1972: 48)

While Weinreich's selection of subsenses is dismissed by Makkai (1972) because it can only be done once the speaker knows the meaning, and whilst his suggestion that the combination of subsenses which should stem from any logic before being aware of the meaning is implausible, Weinreich's definition nevertheless is highly valuable because it draws attention towards the fact that whereas a sequence might be formulaic, or phraseological as he terms it, it does not have to be an idiom (Makkai 1972: 48-50). This part of Weinreich's definition can be found in Wray's concept of formulaic sequences which also, but not necessarily includes idioms. Fernando (1996) states that Weinreich here differentiates between "the 'idiomaticity of expressions' and the 'stability of collocations'" (1996: 7). The latter refers to phraseological units which are not idioms because the unique semantic relationship between words that is found in idioms, namely the combination of subsenses, is amiss in the collocations. Furthermore, she notes that Makkai's objections to the choice of subsenses are valid, but nevertheless, Weinreich thereby draws more light on the semantic opacity of idioms (Fernando 1996: 7-8).

The last scholar of the transformational-generative group is Fraser. Fraser mainly deals with the degrees of variability which different idioms allow. His "Frozenness Hierarchy" (Fraser 1970 referred to in Makkai 1972: 53) describes the different operations which idioms allow; some allow more operations, whereas others do not allow any operation at all, i.e. they are frozen. Fraser puts forward six levels of frozenness: "L6-Unrestricted[,] L5-Reconstitution[,] L4-Extraction[,] L3-Permutation[,] L2-Insertion[,] L1-Adjunction[,] L0-Completely Frozen" (Fraser 1970 referred to in Makkai 1972: 53). Idioms which could be listed under category L6 do not exist because this group would also have to allow operations which are impossible for idioms, e.g. topicalisation. This means that the idioms with the greatest degree of variability, e.g. *to let the cat out of the bag* belong to level L5, while non-literal idioms, such as *to sit on pins and needles* belong to level L0. Level L0 does not allow any kind of operation or manipulation and represents the archetypal idioms. Fraser's hierarchy also entails that an idiom which belongs to a certain level at the same time belongs to all the levels below it, because the operations from the lower levels are also possible for this idiom (Fraser 1970

referred to in Makkai 1972: 53-54). Fernando (1996) adds here that Fraser's hierarchy was implemented in the *Oxford Dictionary of Current Idiomatic English* (1975, 1983), as well as in the *Longman Dictionary of English Idioms* (1979), and even more importantly, his article called attention to "the stylistic effects that transformations of idioms, especially less common ones, can achieve" (Fernando 1996: 9) (Fernando 1996: 8-9).

The next scholar I would like to discuss at this point is Makkai (1972). Makkai, whose work was published three years after Fraser's, divides idioms into two subcategories, i.e. 'idioms of encoding' and 'idioms of decoding'. Idioms of encoding are "phraseological peculiarities" (1972: 25) such as *to drive at seventy miles per hour* in contrast to **to drive with seventy miles an hour* which is ungrammatical. Idioms of decoding, on the other hand, are the "genuine, or semantic idioms" (1972: 25), and involve "[m]isunderstanding, unintelligibility, the ability to mislead, and ambiguity" (1972: 25). Listed examples are *red herring*, *hot potato*, or *to seize the bull by the horns*. The factors which are later summed up by Makkai as "disinformation" (Makkai 1972: 122), which stands in contrast to "misinformation" (1972: 122) in homophones, are not featured in idioms of encoding and consequently, they constitute a "natural line of division" (Fernando 1996: 4) (Makkai 1972: 24-122). Therefore, Makkai's definition of idioms is mainly based on what Fernando (1996) calls compositeness and, more importantly, on semantic opacity. He further subclassifies idioms of decoding into lexemic idioms and sememic idioms, which display a functional difference. Fernando critiques Makkai's main defining element of idioms, the disinformation potential, because she finds that usually, the co-text and context of an idiom trigger the idiomatic meaning and dismiss the different literal readings as improbable. Therefore, this criterion seems problematic (Fernando 1996: 4-6).

I shall now turn to Cowie et al. who published the two volumes of the *Oxford Dictionary of Current Idiomatic English*, the first in 1975 (Cowie and Mackin), and the second in 1983 (Cowie, Mackin, and McCraig). Their main identifying features of idioms are the frequently encountered features of semantic unity and compositeness. However, what was remarkable about their study was

that they also tried to investigate the balance of grammar and meaning in idioms, and the way in which variability of idioms affects their idiomaticity. Cowie et al.'s investigation led to the detection of one of the major classes or sub-groups of idioms, i.e. semi-idioms. They identify two different types of semi-idioms: the first type has "figurative senses in the non-literal member of the combination, for example *jog* in *jog sb's memory*" (Fernando 1996: 12). The second type, on the other hand, "allows restricted lexical variations as in *cardinal error/sin/virtue* and *grace*" (1996: 12) (Fernando 1996: 9-12).

The next step in the history of idiom studies after the transformational-generative period is what could be called the 'cognitive period' of the later 1970s and the 1980s. The most important scholars here are Cooper and Ross, as well as Lakoff and Johnson. The first two scholars, Cooper and Ross (1975) and Cooper (1980) mainly deal with the factors of iconicity together with the phonetics of the "frozen metaphors"¹. It is important to note that at this time, the scholars still consider idioms, or phrases, to be a kind of frozen metaphor. This means that they are seen as invariable, i.e. no adaptations, such as, for example, transferring the idiom from the present into the past tense, changing the number from third person singular to plural, or passivising the whole construction, are possible. And it also entails that the range of idioms their definition includes is highly limited. In fact, the examples that are given also include nominal composites, but predominantly, they are "irreversible binominals" ("irreversiblen Binominalen" Welte 1990: 76; my translation), e.g. "*bits and pieces*" (Welte 1990: 77), "*gin and tonic*" (Welte 1990: 85) or "*people and things*" (Welte 1990: 86). Cooper and Ross claim that the constituent order of the various idioms is "determined by phonetic [... as well as] semantic and pragmatic factors" (Welte 1990: 76, my translation). The phonetic factors are divided into seven rules: "number of syllables" (Welte 1990: 76, my translation) (the first content word is monosyllabic while the second consists of two syllables), "vowel length" (Welte 1990: 78, my translation) (short monophthong before long monophthong or diphthong), "quantity of the consonants at the beginning of the words" (Welte 1990: 79, my translation) (less consonants before more consonants), "quality of

¹ "erstarrte Redewendung" (Welte 1990: 76, my translation).

consonants at the beginnings of the words” (Welte 1990: 80, my translation) (weak obstruents, liquids and nasals before strong obstruents, fricatives and plosives), “vowel quality” (Welte 1990: 81, my translation) (higher vowel, if same height then front vowel before lower or back vowel), “quantity of final consonants” (Welte 1990: 82, my translation) (less before more consonants), and finally, “quality of final consonants” (Welte 1990: 83, my translation) (strong obstruent before weak obstruent). The semantic-pragmatic rules are firstly the “alcohol rule” (Welte 1990: 85, my translation) (stronger before weaker drink), and secondly, the “me-before-all rule” (Welte 1990: 86, my translation), which is subdivided into “close-before-far” (Welte 1990: 86, my translation), “animate-before-inanimate” (Welte 1990: 86, my translation), “human-before-nonhuman” (Welte 1990: 86, my translation), “adult-before-nonadult” (Welte 1990: 86, my translation) and “male-before-female” (Welte 1990: 87, my translation) (Welte 1990: 76-87).

Lakoff and Johnson (1980) and Lakoff (1987) are concerned with the motivation of idioms. In contrast to traditional theorists, such as Weinreich (1969), who observed that the meaning of idioms is “*arbitrary in principle*” (Weinreich 1969: 45 referred to in Welte 1990: 87), Lakoff and Johnson claim that idioms mostly “are not arbitrary” (Lakoff 1987: 448). What is more, they put forward the theory that

idioms are motivated, and that motivation may consist of a link of the form *image + knowledge + metaphors*. (Lakoff 1987: 448)

This means that speakers associate a specific picture with the literal meaning of an idiom, and this picture then triggers general knowledge which matches it. From the combination of the picture and related knowledge, the speakers are able to detect the metaphor which lies behind the figurative meaning of the idiom, and thus infer the idiom meaning. Therefore, the pictures support understanding, as well as memorisation of an idiom, and the metaphors further this process. An example which Lakoff gives is the idiom *to spill the beans*. The images or pictures he proposes are of a small container of beans which accidentally are spilled and now are all around the room and are not easy to pick up. The corresponding knowledge is that the container refers to

the head, the beans are information which is a secret, the spilling is giving away the information and the outcome is not neat. Finally, the corresponding metaphor, which is called the “conduit metaphor” (Lakoff 1987: 450), is “THE MIND IS A CONTAINER, IDEAS ARE ENTITIES” (Lakoff 1987: 450) (Lakoff 1987: 447-451, or Welte 1990: 87-89). This means that the idioms’ meanings are not inferred from the literal meanings of their constituents, but that there are “coherent conceptual organization[s]” (Lakoff 1987: 381) which underlie the connection between idiom constituents and idiom meaning, and which are chiefly of a metaphorical or metonymical nature. (Lakoff 1987: 381) However, he also points out that this does not mean that “the meaning of idioms [...] is predictable” (Lakoff 1987: 450), but he suggests that motivation simply means that the meanings “make sense” (Lakoff 1987: 450) (Lakoff 1987: 450-451). This theory functions very well and is certainly also applicable to some of the idioms used in the experiment, namely those that display what I have called ‘metaphorical transparency’. Nevertheless, it has to be kept in mind that this notion only applies to idioms that have a metaphor as their basis and that are relatively transparent. It is not relevant to idioms which are transparent on the level of literalness, or to idioms of which the meaning is truly opaque and does not have a metaphor as its basis, as for example *to be the cat’s pyjamas/ whiskers* (to be, in sb’s estimation, just what is wanted; be the best person, thing, idea, etc. (ODCIE 2 s.v. *be the cat’s pyjamas/whiskers*). Lakoff himself also draws attention to the fact that some idioms “are completely arbitrary for all speakers” (Lakoff 1987: 451). Nonetheless, looking at Lakoff’s theory, it becomes clear that the distinction of two kinds of transparency of idioms that is going to be introduced later, metaphorical transparency and literalness, is indeed an important one as the source for idiom meaning is different. Therefore, idioms of both categories should be treated differently. These two kinds of transparency will also play a great role in the experiment as they are two of the factors which may influence idiom memorisation.

After this overview of different theories on idioms and of the development of the concept ‘idiom’, I would now like to present how the term is used in the

present discussion. Then I am going to identify a number of issues about idioms which are related to the topics of memorisation and their longevity.

The two pivotal idiom features in this paper are what Fernando (1996) terms 'compositeness' and 'semantic opacity'. Compositeness here means that an idiom consists of more than one word, i.e. it is a "type of multiword expression" (Fernando 1996: 3) such as *to kick the bucket* which consists of three words, or, to take an idiom that will be featured in the experiment, *to set the plastic on fire* which is even longer and consists of five words. Even though an idiom consists of more than one word, it nevertheless only refers to one concept and not to as many concepts as is the number of words it is made of. This implicates that the unit of words has an overall meaning. However, this overall meaning is not made up of the individual meanings of the idiom's constituent words, but the unit as a whole attains a new and idiomatic meaning. Therefore, the literal meanings of the constituent words do not play a role in the idiomatic meaning and the connection between the idiomatic meaning and the meaning of the constituent words cannot be recognised, hence the idioms are semantically opaque. Again, take as an example the idiom *to kick the bucket*: the literal meaning of this idiom would be 'to strike a cylindrical vessel with a foot' which does not make sense in a context where the idiomatic meaning 'to die' is intended. What is more, and important, however, is that the literal meaning does not give any clues to the idiomatic and intended meaning 'to die' as none of the three constituent words would imply anything that synchronically is connected to dying. Historically, the case is different, because after swine were killed they were hanged on a pail which, in Norfolk, is called 'bucket', and because they were hanged on it by their heels, the phrase got the meaning 'to die' (OED). However, the diachronic perspective is not of importance because a speaker can only judge whether there is a connection between the constituent words and the overall idiomatic meaning, i.e. the idiom's transparency, from a synchronic point of view. Of course, as idioms are a truly heterogeneous group, there is not one single transparency. Instead, a cline of transparency can be discovered, ranging from transparent idioms where the idiomatic meaning can be inferred from the literal meanings of the constituent words on

one end, and intransparent idioms, such as *to kick the bucket* where there is no connection between the idiomatic meaning and the meaning of the constituent words on the other end.

However, when we look at idioms' semantic opacity and therefore at the transparency of idioms, we notice that transparency is not as unequivocal a concept as it appears to be: while for one speaker, an idiom can seem transparent, for another speaker it can seem rather intransparent. This has also been the case in the pilot study, which will be described in more detail in chapter 2, where the participants were asked to rate the transparency of the idioms which were used in the pilot. A closer investigation of transparency has therefore been conducted and it has shown that there seem to be two different kinds or subcategories of transparency which I am going to call 'metaphorical transparency' and 'literalness'. Metaphorical transparency indicates that the idiomatic meaning is connected to the meaning of the individual words through a metaphor. Therefore, if a speaker has discovered the metaphor for which the constituent word stands, the idiomatic meaning becomes clear and the idiom thus is transparent. Take for example the idiom *to smell a rat*. *To smell a rat* means 'to have a sense of something wrong, not clearly evident'², or 'to suspect that something is wrong, that someone is trying to deceive one' (LDIE) so we can see that *smell* is a metaphor for 'to have a sense of' or for 'to notice' and *rat* is a metaphor for 'something wrong' or 'not clearly evident'. Therefore, if we notice that *smell* stands for 'notice' or 'feel' and 'rat' stands for 'something bad', the idiomatic meaning suddenly becomes transparent. As the overall meaning becomes evident as soon as the metaphors are discovered, it can be said that the idiom is transparent on the metaphorical level. Again, there is a cline of metaphorical transparency with idioms which are metaphorically transparent on one end and idioms which are metaphorically intransparent and for which there is no metaphor that serves as basis for the idiomatic meaning on the other end. An example for a metaphorically intransparent idiom would be *to kick the bucket*. Actually, metaphorical transparency relates to Lakoff's theory of the motivation of idiom meanings where he claims that idiom meanings are not arbitrary, but in

² <http://dictionary.die.net/to%20smell%20a%20rat>

fact are motivated by a connection of an image the constituent words evoke, corresponding knowledge and a metaphor (Lakoff 1987: 446-450). Literalness, on the other hand, means that the idiomatic meaning can be deduced from the literal meanings of one or more of the idiom's constituent words, so instead of confusing the speaker, the literal meaning helps to find the idiomatic meaning and is frequently even part of the idiomatic meaning as well. The idiom *fat chance you've got* exemplifies this very well: its meaning is 'there is very little likelihood or very little possibility' so in other words, it means 'there is nearly no chance'. Therefore, *chance* does not only help in discovering the idiomatic meaning, but it is also the main part of the idiomatic meaning. *Fat* is used ironically and means 'very little'. This idiom is transparent on the level of literalness because the literal meaning of a constituent word acts as the basis for the idiomatic meaning. As with general transparency and metaphorical transparency, also with literalness, there is a cline with transparent on the literal level on the one, and intransparent on the literal level on the other end. Semantic opacity and thus the three kinds of transparency will play a pivotal role in the experiment as they are assumed to greatly influence the memorisation of idioms.

The transparency of idioms implicates that within the big group of formulaic phrases or formulaic language, idioms find themselves at the end where the least transparency is. This is to say that within formulaic language, knowing the meaning of constituent words of an idiom helps you the least for understanding the sequence. In contrast to this, on the other end of the formulaic language group, there are sequences which you hear once and instantly know what they mean and how to use them. These sequences are called stable or fixed collocations and an example would be *men and women*. Like with idioms, the sequence of words here is fixed as well and speakers would instantly realise that the sequence **women and men* is wrong. However, such stable collocations are utterly transparent and this discerns them from idioms.

Looking at the definition of idioms, it is noticeable that idioms are not easy. Rather, they pose a number of obstacles to the speaker, the foremost being

that a group of words only refers to one concept and even more, the meaning of the unit is not the combination of the meanings of the constituent words. Even this alone would lead to the belief that idioms are infrequent and very rarely encountered in daily speech. However, as has already been discovered, in the course of sixty years, a speaker would produce “4.7 million novel and 21.4 million frozen metaphors” (Cieslicka 2007:39) when speaking approximately two hours per day. This frequency, which is rather unexpected if the difficulty idioms pose for the speakers are taken into account, as well as the longevity of idioms raise a wealth of questions, above all the question of whether idioms have any special property which causes them to exist in such abundance. And if so, what is this special property that makes them stick out from the rest of the lexicon? And especially, what keeps them in the speakers’ minds? After all, one might think that idioms are not easy to remember because they consist of more than one word but only express one concept. This could lead to the belief that speakers prefer the single-word equivalent of idioms to express what they want to say. But since idioms are prevalent in everyday usage, they have to at least pose some facilitation to the language user in comparison to their single-word counter parts. So what, then, is this functional ease idioms seem to provide? A different issue arises when we look at the structure of idioms. As they consist of more than one lexical item, they should be prone to a variety of changes over time, and when we consider other areas of language history, it can be seen that the general trends are reduction and simplification, be it of syntax, morphology (for example the reduction of case endings), or phonology (as for example, the simplification of consonant clusters). Given that idioms often are very complex and often also lengthy units, why is it that a great part of them persists in the original form over long periods of time? And how can we account for their longevity? Of course changes such as the reduction of the inflectional system of English evolved over a much wider span of time, many idioms still have already retained their original form for a considerable period. Does that imply that idioms are fully lexicalised even though some appear not to be? Lexicalisation can be defined as follows: it

is the change whereby in certain linguistic contexts speakers use a syntactic construction or word formation as a new contentful form with formal and semantic properties that are not completely derivable or predictable from the constituents of the construction or the word formation pattern. Over time, there may be further loss of internal constituency and the item may become more lexical. (Brinton and Traugott 2005: 96).

The idiom *to kick the bucket* is a good example for an idiom which has not changed its form for a considerable period: its first documented appearance was in 1785 (Vulgar Tongue s.v. kick the bucket), and since then, it still occurs in its original form. Since its semantics, i.e. its meaning is not predictable from its constituent words as well, it can be assumed that this idiom is now lexicalised. However, not all idioms are still commonly used in their original form. Many of them underwent minor changes, or a few items were even deleted and now they are used in a shortened form. Frequently, also more than one accepted truncated forms exist. This means that some idioms can be used in various lengths; take for example *to dangle a carrot before the donkey*. This idiom can be shortened to *to dangle a carrot*, or simply to *carrot*, both forms are encountered frequently and are accepted in the language community (Fernando 1996: 51). Now does that mean that all idioms are lexicalised, even in their truncated forms? Looking at the above definition, the truncated forms should even be more lexical than the original forms of an idiom.

A different question that is yet related to the last one is the issue of semiotic, i.e. sign quality. Do idioms, because they are a unit which consists of more than one word or linguistic entity differ as signs from their non-idiomatic counterparts? On a first thought, it is reasonable to assume that they at least differ in some ways because of their composite nature, but to what extent and also how do they really differ? Or put differently, might they not only be different, but even better signs in comparison to non-idiomatic signs because there is a number of signifiers and signifieds that contribute to one 'overall-signifier' and 'overall-signified' rather than only one signifier and signified in the non-idiomatic version of the concept? And does their semiotic quality vary within the group of idioms itself? After all, idioms cannot be considered a homogeneous group, rather, they are "heterogeneous in nature and vary

along a number of dimensions” (Cieslicka 2007: 2), so why should not semiotic quality also be one of these dimensions? Again, it is sensible to assume that there is some ‘intra-group’ diversity; hence the more appropriate question is in which way semiotic qualities of idioms differ, and, whether some idioms might be better signs in comparison to other idioms.

As can be seen, possible questions or issues evolving around idioms are truly manifold, but within the scholarly community, they have caught attention only recently. Especially within the field of generative linguistics, idioms have been considered anomalous and frequently were not included in scholarly discourse (e.g. Wray 2002: 7-8); however, since Sinclair (1991) has proposed that language functions mainly within two principles, the ‘open choice principle’ and the ‘idiom principle’, this research area has received more and more attention. Let me briefly explain what Sinclair meant by those two concepts: the open-choice principle purports that utterances are “the result of a very large number of complex choices” (1991: 109), and after every new word or linguistic unit, new choices come into being that broaden the possibilities for continuing the utterance. The only boundary is language grammar because the utterance has to be grammatical. Nonetheless, the open choice principle cannot explain all occurrences or restraints of language, and is thus complemented by the idiom principle. The idiom principle denotes that:

a language user has available to him or her a large number of semi-preconstructed phrases that constitute single choices, even though they might appear to be analysable into segments. (Sinclair 1991: 110)

Even though Sinclair also includes collocations in this principle, his concept mainly applies to idioms. Furthermore, because the idiom principle dictates more phenomena in language usage than the open-choice principle, it highlights the importance of idioms in language as a whole (Sinclair 1991: 109-114). Sinclair’s work can therefore be seen as a milestone within this area of studies.

1.2. Research Questions

Having now outlined numerous issues evolving around idioms, I would like to present the research questions of this thesis. As the topic indicates the thesis deals with the memory and transparency of idioms and through these two factors tries to find out more about the longevity of idioms. Thus the overall research question is

- ‘Does the idioms’ transparency influence their retention?’ If so, in what way does it influence it? Are transparent idioms remembered better, or more correctly than non-transparent ones, or vice-versa? The retention or memorisation of idioms is of great importance because only through memorisation are we able to understand why some idioms stick in language for a long time while others change or disappear. Only idioms which are memorised or retained by a speaker have the chance to stick in a language, and therefore, it is very interesting to find out whether transparency can actually influence an idiom’s retention. Furthermore, if transparency does influence retention, then it is interesting to see whether it positively influences transparent or intransparent idioms, i.e. if transparent or intransparent idioms are memorised better and thus have a better chance of staying in a language.
- Do other idiom-internal factors, aside from transparency, influence memorisation? Again, it is interesting whether factors other than transparency can influence the memorisation of idioms because if they do have an influence on memorisation, then also they, and not only transparency can determine which idioms stay in a language and which idioms do not. Here, I am taking into consideration the length of the idioms (number of syllables), whether the idiom does or does not contain a nonsense-word, as well as a semantic criterion, i.e. that of the idioms’ semantic areas. Is the idiom remembered better if a semantic area is especially prominent in daily life, such as shopping, or is there no difference between prominent areas and areas which do not play such an important role, as, for example, bad consequences or

cheating? But the semantic area could also be cognitively prominent and therefore important because it is suppressed in daily life by the decorum of society. An example for such a semantic area could be sexuality. Therefore, are idioms for cognitively prominent semantic areas remembered better as well? Furthermore, I am going to take a look at what is best referred to as 'pleasantness'. Pleasantness is a speaker-related factor which indicates whether speakers actually like an idiom and find it funny, or if they find it boring.

Some hypothesising about answers to the research questions can be done by just looking at what the literature has to say, but the only way to really get a glimpse at the actual situation is to conduct an experiment. With the outcome of the experiment, which is going to be described in chapter 3, further research questions arise:

- If we assume that the idioms which are remembered better have a better semiotic quality, which idioms are better signs, transparent or intransparent ones?
- What do the results say with regard to the possible status of lexicalisation of idioms? And thirdly,
- can the results give any indications of the status of idioms in language change or language development – put differently, can they explain the longevity of some idioms?

1.3. Hypotheses

After having highlighted the research questions, I would now like to present the resulting hypotheses: The first hypothesis deals with the possible predominance of transparent idioms over opaque idioms in memorisation. Cieslicka (2006) has developed the "literal-salience resonant model of L2 idiom comprehension" (2006: 115) on the basis of the 'graded salience hypothesis' by Giora (1997 referred to in Cieslicka 2006: 118-119). Giora's

hypothesis is concerned with the figurative meanings of idioms and the combined or “overall literal meanings” (Cieslicka 2006: 18) the constituent words of idioms have, so literal meaning does not signify that the literal meaning of each constituent word is treated separately, but it deals with the literal meaning all words of an idiom have as a unit. Saliency signifies that certain meanings are cognitively salient or prominent, i.e. they stand out from other meanings in the lexicon because they “enjoy prominence due to their conventionality, frequency, familiarity, or prototypicality” (Giora 2002: 490 referred to in Cieslicka 2006: 118). The ‘graded saliency hypothesis’ predicts that salient meanings (be they the literal or figurative meanings of an idiom, either the one or the other can be cognitively salient) are always activated prior to the non-salient meaning in L1 idiom processing. For example, should the literal meaning of the idiom *to spill the beans* be salient, it will always be activated first, even if a particular context suggests that the figurative meaning is intended. In her model, Cieslicka borrows Giora’s term saliency and designates saliency status (i.e. cognitive prominence and thus processing prominence) to literal meanings of decomposable as well as to non-decomposable idioms, i.e. of transparent and semantically opaque idioms. Literal meanings of constituent words in decomposable idioms are salient because when L2 speakers learn an idiom, they extend the literal meanings with the respective figurative meanings of the idiom. Literal meanings of constituent words in non-decomposable idioms are salient as well because just as with decomposable idioms, according to Glucksberg, the meaning of the constituent words of an idiom “become polysemous and extend their meanings from the originally literal to the figurative meanings present in idiomatic phrases” (Glucksberg 1989, 2001 referred to in Cieslicka 2006: 118). This suggests that literal meanings of constituent words are more salient than figurative meanings, which insinuates that the literal meanings are represented better in the mental lexicon than figurative meanings, and are always activated before figurative meanings are activated. Furthermore, they are activated more strongly. It is important to note that Cieslicka treats the literal meanings of individual constituent words as salient while Giora considers either the figurative meaning of an idiom or the literal meaning of

the unit as a whole as salient. Cieslicka's theory also agrees with the usual procedure of L2 learning where students are most likely to know the literal meaning of a word already before they learn an idiom which incorporated the figurative meaning of a certain word. Cieslicka claims in advance that the salience status of literal meanings continues throughout the further learning process, because L2 speakers are more likely to encounter the words more often in their literal sense than in their figurative one. An experiment conducted by Cieslicka with Polish L2 speakers of English supports her model (Cieslicka 2006: 118-140). In a further experiment (Cieslicka 2007), which again was conducted with Polish speakers who had English as their L2, Cieslicka also managed to confirm the literal-salience resonant model, because literal meanings once more were activated more strongly than figurative meanings (Cieslicka 2007: 50). Cieslicka's experiments and her subsequent model show that literal meanings are of greater importance in L2 idiom processing and comprehension than the figurative or idiomatic meanings. And if they are more important and salient in idiom processing, it can be assumed that they also play a pivotal role in idiom memorisation, while figurative meanings should be secondary. Therefore, participants should remember transparent idioms better than intransparent or opaque ones where literal meanings are not directly linked to idiomatic or figurative meanings. An interesting question that surfaces with this hypothesis stands in relation to research about formulaic sequences. Schmitt and Carter (2004) describe idioms as "semantically opaque formulaic sequences" (2004: 4), therefore, idioms form part of the wide range of formulaic sequences. Furthermore, the authors suggest that the transparency of formulaic sequences influences the effort which has to be put into learning a sequence, and they hypothesise that opaque sequences, i.e. idioms, could be learned differently than transparent sequences such as *men and women* or *of course* which a speaker can immediately understand and put into use but which nevertheless have a fixed order of words (Schmitt and Carter 2004: 6). In an experiment, Schmitt, Grandage and Adolphs (2004) found out that with non-native speakers, performance was significantly higher when the sequences were transparent, and moreover, transparent formulaic sequences were also

more constantly remembered than intransparent sequences. This seemed to hold true for native, as well as non-native speakers of English (Schmitt, Grandage and Adolphs: 141-143). What is interesting now is whether this result can also be corroborated as regards idioms. Taking into account that idioms are intransparent formulaic sequences, as Schmitt and Carter have put forward, then the results should not be comparable. But when we take into consideration that idioms are not homogeneous and hence, there are transparent as well as intransparent idioms, we can conjecture that transparent idioms should be remembered better than intransparent idioms. They might be on the opaque end of the continuum of formulaic sequences, but there still are more transparent exemplars. Accordingly, it is reasonable to assume that the results for idioms are in line with the results for formulaic sequences.

The second hypothesis is concerned with the retention of metaphorically transparent idioms. Lakoff (1987) claims in connection with polysemy and assemblies of polysemous constructions ranging from idioms to complex word forms, such as *oversee*, or *overlook*, that they are learnt and remembered more easily when they “use existing patterns” (Lakoff 1987: 438) than compounds which do not use such patterns, because the existing patterns are ‘motivated’ by metaphors or metaphorical senses of the words. Let us take *overlook* and *oversee* as examples: Lakoff claims that for the *over* in *overlook*, two metaphors apply. The first one is “SEEING IS TOUCHING” (Lakoff 1987: 437) where a gaze ‘touches’ whatever is seen. But if a certain thing is not touched by the gaze, then there is no contact, so it is not seen or not looked at. Hence, *overlook* means ‘to not see something’. The other metaphor which applies to *overlook* is “MIND-AS-BODY” (Lakoff 1987: 437), and to be more specific, the “LOOKING AT SOMETHING IS TAKING IT INTO CONSIDERATION” (Lakoff 1987: 437) – part of the metaphor. So if looking at something means considering it, then not looking at it or overlooking it means to not consider something. In contrast to *overlook*, in *oversee*, the metaphor which applies to *over* is a different one, namely “CONTROL IS UP” (Lakoff 1987: 437). Therefore, *oversee* signifies ‘to be in control’. As these two examples show, motivation cannot explain

why complex word forms mean what they do; however, it can show that what they mean actually makes sense within the conceptual system of a speech community. Motivation is not to be confused with predictability which would explain why idioms or such compounds mean what they mean (Lakoff 1987: 437-9). Motivation in idioms can be well exemplified with the help of the idiom *to keep someone at arm's length*. This idiom is motivated partly by a conventional image, an image that is shared by a speech community, which depicts a person stretching one arm towards another person with an open palm and tense muscles. The other parts which contribute to the motivation of this idiom are two metaphors, namely "INTIMACY IS PHYSICAL CLOSENESS" (Lakoff 1987: 448) and "SOCIAL (or PSYCHOLOGICAL) HARM IS PHYSICAL HARM" (Lakoff 1987: 448). Therefore, if we take the image and the two metaphors into consideration, it makes sense that *to keep someone at arm's length* means 'to keep someone from becoming intimate, so as to avoid social or psychological harm' and we can thus say that this idiom is motivated (Lakoff 1987: 438-448). Therefore, Lakoff treats word formation patterns and the formation of idioms similarly as both are motivated by metaphors and are remembered more easily if they adhere to patterns or meanings which are already known in a speech community. So if we transfer Lakoff's claim that polysemous constructions, which entails idioms, are learnt more easily if they make use of existing patterns such as conventional images or metaphors to idioms which are transparent on the metaphorical level, or motivated to use Lakoff's term, they should be easier to learn than idioms which are intransparent on the metaphorical level. And not solely because of the metaphor that is related to the constituent words, but also because of the common knowledge of a speech community which stands behind each metaphor and which relates to concepts that are frequently encountered within a speech community. Idioms lacking metaphorical transparency are also lacking the relation to common knowledge which metaphors entail, hence they are not motivated. Therefore, they should be more difficult to remember.

The third hypothesis deals with the relationship between literalness and the retention of idioms. Cieslicka (2007), in an experiment about the activation or

suppression of literal meanings of idioms, dealt with the concept of literality. Literality indicates “the degree to which an idiomatic string can be interpreted in a literal fashion” (Cieslicka 2007: 40), hence it specifies the plausibility that the literal meanings of the words which form an idiom and not the figurative meanings constitute the appropriate meaning in a particular context. A good example for literality is the idiom *to spill the beans*. While it is clear that in some contexts only the idiomatic meaning (‘to reveal or make known a secret, piece of information, etc.’ LDIE) is possible, in other contexts, also the literal meanings of the constituent words and therefore of the unit as a whole are the appropriate meaning. While in the sentence *Amy is mad at Adam because he spilled the beans and now she has to cope with the consequences of everybody knowing.*, the appropriate meaning can only be the idiomatic meaning, in the sentence *Adam spilled the beans so now he has to pick them up again.*, the literal interpretation of the idiom is the correct interpretation. Therefore, the idiom *to spill the beans* is literal. Cieslicka differentiates between literal idioms such as *to spill the beans* and nonliteral idioms such as “*make a clean sweep*” (Cieslicka 2007: 40) which can only be interpreted idiomatically. Cronk and Schweigert (1992) use ‘literalness’ instead of literality. However, my use of the term literalness should not be confused with the meaning Cronk and Schweigert assign to it, because in my use, literalness refers to the degree to which the idiomatic meaning of a string or unit can be deduced from the literal meanings of the constituent words, i.e. the degree to which the literal meanings form the basis of the figurative meanings. An example for my use of ‘literalness’ is the idiom *to be an Ignorant Lindsay* where *Ignorant* is the basis for, and also the main part of the idiomatic meaning ‘to focus only on one’s own needs and wishes and ignore the consequences for other people’. Titone and Connine (1994) found that high literality causes stronger activation of literal meanings than activation of idiomatic meanings in L1 speakers, and also, literal meanings stay activated if plausible for the strings’ interpretations. This means that for L1 speakers, if the literal meanings of the constituent words of an idiom are a possible reading which makes sense, i.e. the idiom has high literality, then the literal meanings of the constituent words are activated more strongly than

the overall idiomatic meaning which is actually intended in a certain context. Furthermore, if the literal meaning is a possible and therefore plausible interpretation in a certain context, then it stays further activated, together with the idiomatic meaning. Otherwise, so if the literal meanings do not offer a plausible interpretation in a certain context, they can be suppressed and only the idiomatic meaning continues to be activated. As regards L2 speakers, Cieslicka (2007) found out that literality also favours the activation of literal meanings. This means that there are certain similarities in the processing of idioms between L1 and L2 speakers (Cieslicka 2007: 40-51). If we map the findings on literality over to literalness, where the literal meanings are important for correct interpretation of an idiom, we can hypothesise that literal meanings will also be highly activated. Should they be suppressed, they would have no effect on how well idioms are remembered, but if they are activated, then idioms with high literalness or transparent idioms should be remembered better than opaque ones or those displaying low literalness.

Another possible determining factor for idiom memorisation is the length of idioms. Here, length will not be indicated by the number of constituent words as it would seem self-evident since idioms belong to the group of multiple-word units, but rather, length is going to be measured by the number of syllables an idiom displays. As there are short and long words, i.e. words with only one or two syllables, or words with four or even more syllables, idioms are also of different lengths. When we think of different language principles like, for example, the principle of least effort, or the Chomskyan principle of economy, we might be lead to believe that it is more probable for speakers to also remember short idioms better than longer ones, because economy or little effort (in different ways) seems to play an important role in language storage as well as usage. The principle of least effort applies to all human behaviour and denotes the quest for “the *least average rate of probable work*” (Zipf 1972: 6). This means that all behaviour is determined to be phoneme of one word to the first phoneme of the directly following word, e.g. accomplished with as little exertion as possible, and also the process of thinking about how to do this has to be counted as effort (Zipf 1972: 6-7). Examples for this principle in language could be the assimilation of the final

[kwaɪk ɡʊd] for *quite good* (Roach 2000: 139) or the contraction of *going to* to *gonna* which results in least effort because it is shorter and also phonetically, it is easier to pronounce. When applied to idioms, the principle of least effort suggests that shorter idioms are favoured over longer idioms, because they pose lesser effort in storing them in the mental lexicon because they consist of a smaller number of syllables. In their usage, shorter idioms pose less effort as well, because it takes less time to produce them, either in written form or in actual speech. The principle of economy differs only slightly from the principle of least effort and can be found in many linguistic theories. In the Chomskyan theories, it can, among others, be found in generative phonology where it signifies that the preferred analyses use “fewer FEATURES and RULES” (Chrystal 2003: 155) (Chrystal 2003: 155). If we apply the ‘fewer features’ part to idioms, it should be clear that shorter idioms are preferred over longer ones as they are more economical to analyse. In structuralist theories, economy refers to “the systematic organisation of linguistic inventories” (Rizzi 2004: 336) and according to this view, shorter idioms are more economic because less information has to be stored in the mental lexicon than for longer idioms. Length also seems to be a determining factor for formulaic sequences. Schmitt, Grandage and Adolphs (2004) already found out that native-, in addition to non-native speakers remember short formulaic sequences better than long ones (Schmitt, Grandage and Adolphs 2004: 143). And because idioms belong to the vast group of formulaic sequences, I consequently hypothesise that participants will remember the shorter idioms better than the longer ones of the experimental sample.

Another hypothesis is concerned with the semantic areas of idioms³. The semantic area or field of an idiom can be defined as the semantic area of the concept to which the idiom refers to belongs. Therefore, what is meant here

³ The author is aware that the label ‘semantic area’ is not entirely consistent and systematic. The classification of idioms around what can loosely be described as their meaning at first was only an attempt to group the idioms around a category other than transparency. Only later it was noticed that this classification around ‘semantic areas’ was of importance for the memorisation of idioms. For the sake of convenience, the label and classification were kept. To be concise, however, the label ‘semantic area’ only retains its actual sense for the categories other than IRONY and COLOURS. The category IRONY actually denotes the special relationship between literal and idiomatic meanings in these idioms, and the category COLOURS refers to the fact that one of the constituents of the idioms is a word denoting colours.

are not the semantic areas the individual constituent words belong to, such as EATING and FLOWERS for the idiom *to eat the lily*, but the semantic area to which the signified of an idiom belongs, such as SHOPPING because the idiomatic meaning of *to eat the lily* is ‘to make a bad deal when shopping, to pay too much’. The semantic area of the idiom *to kick the bucket* is DYING or DEATH and not MOVEMENT and VESSEL as the constituent words would imply. As there are idioms with different numbers of syllables, there are also idioms that belong to different semantic areas or fields. These different semantic areas play a different role in individual speakers’ lives. But it can be said that the importance of semantic areas or concepts is not only different for each speaker, there are also some correlations between speakers of a language community, and some concepts can be said to be generally more salient, or of more importance in the language community than others. Therefore, it is sensible to assume that idioms belonging to certain semantic areas are retained better than idioms belonging to other areas. If we again take a look at Giora’s (2002) hypothesis of graded (cognitive) salience, she proposes that salient meanings, i.e. meanings which “enjoy prominence [in the way in which they are stored in the mental lexicon] due to their conventionality, frequency, familiarity, or prototypicality” (Giora 2002: 490 referred to in Cieslicka 2006: 118) are more significant or outstanding than other meanings which are rarely used (Cieslicka 2006: 118). To put it differently, meanings or concepts which are frequently referred to are more strongly represented and stored in the mental lexicon than concepts which are hardly referred to. This use of salience must not be confused with the common use of the term in corpus linguistics where salience does not mean familiarity and cognitive salience. In corpus linguistics, if an item is salient, it is infrequent and thus stands out from the rest of items which are frequent and therefore are not noticed. We could say that in corpus linguistics, salience actually means the contrary of the sense which is intended here. Turning back to Giora’s use of the term, if we now translate her model to semantic areas, we can say that concepts belonging to semantic areas which are more prominent in daily life are referred to more frequently and therefore are also more familiar, prototypical and conventional to a single speaker and

also to the whole speech community than concepts belonging to areas to which is referred scarcely. This suggests that such prominent semantic areas are more salient in the mental lexicon and idioms referring to them benefit from the greater salience status and the thus stronger representations of their meanings in the mental lexicon. As a result, they should be remembered better by participants than idioms of which the semantic areas only have low salience status. Of the semantic areas which are featured in the experiment, the most salient or prominent ones should be 'shopping' and 'sexuality' because our society stereotypically is consumerist and also assigns great importance to sexuality, probably because decorum demands us to suppress an open display of sexual desires and needs. Also, we find sexuality everywhere, in advertisements, music videos, magazines, etc. In the experiment, to ensure that semantic areas really do influence idiom retention, idioms containing nonsense-words were added to the two semantic areas which presumably are most salient, i.e. sexuality and shopping. If salience of semantic areas does play a role in the memorisation process, then the idioms containing nonsense-words should also be remembered well.

Word pleasantness is the focus of the next hypothesis. It has been noted by Monnier and Syssau (2008) that the representations of words in the mental lexicon are stronger if the words are pleasant than if the words are neutral. Therefore, emotion, or, to be more precise, word emotionality, influences representations of words in the mind. Various studies have led to the conclusion that words which are unpleasant are remembered better in long term memory than neutral words, and the same results were obtained for pleasant words. The reason for this 'pleasantness effect' has been found in the manner in which words are stored in the mental lexicon: pleasant or unpleasant words have emotion nodes connected to their semantic nodes, while neutral words only have semantic nodes. Hence, their representation in the mental lexicon is stronger than that of emotionally neutral words (Monnier and Syssau 2008: 35-36). In contrast to non-idiomatic words or expressions, idioms should have a special position as pleasantness is concerned. Because of their composite nature (they consist of more than one word), idioms can already be regarded as more pleasant: the combination of the

literal meanings of the constituent words is often a source of amusement because quite frequently, the outcome in itself is nonsensical, or it does not make any sense in its context. This means that the overall literal meanings are often funny, and as Cieslicka (2006) describes in her 'literal-salience resonant model of L2 idiom comprehension', literal meanings are salient over the figurative meaning in second language speakers. Therefore, idioms in general should have stronger representations in the mind than their non-idiomatic counterparts. It should be noted, however, that pleasantness is not assigned to the overall figurative meaning because frequently, the idiomatic meaning is neutral or unpleasant, but is solely ascribed to the combination of the constituent words' literal meanings. Nevertheless, this does not explain why some idioms will be remembered better than others, so there has to be something more behind it. In general, when we think of something pleasant, it does not only have to be something relaxing or beautiful, it can also be something funny in contrast to something boring which is not pleasant, but rather tedious. This is exactly where the pleasantness principle could be applied to idioms. Some combinations of the overall literal meanings of the constituent words may cause more amusement than other combinations which are rather boring or neutral, and therefore, idioms which speakers find funny should be remembered better than idioms which speakers find boring. But why can idioms which are funny be remembered better than idioms which are boring and thus neutral? Boring and neutral idioms could be said to lack the special emotion node in their representation, while funny idioms have to their benefit this node attached to their mental representation. Of course 'funniness' and hence pleasantness are not idiom internal, but speaker-dependent factors, but if we view pleasantness in this light, speakers should remember more idioms which they rated funny correctly than idioms which they rated boring.

2. The experiment

As already mentioned, the aim of this thesis is to find out about different possible influences on idiom retention, such as transparency, metaphorical transparency, literalness, length, pleasantness, or the semantic areas of idioms. When presenting my hypotheses, I have already explained what the literature indicates about the possible effects of these different factors, but this is only guess-work. To find out how the factors really influence idiom retention and to possibly further investigate the longevity of idioms, an experiment is needed. Let me briefly outline the experimental setup: the experiment is going to take place in two sessions with a one week interval and the overall goal is to find out how idioms are remembered. In the first session, idioms will be presented and after the presentation, vocabulary tests will be distributed so that the idioms which were just learned are applied and thereby their retention is supported. Therefore, session one is the learning-session. The second session is where the crucial testing takes place: this session consists of vocabulary tests with the idioms which were presented the week before. The results then should indicate whether there are differences in the retention of these idioms, in which direction these differences point, and whether the tested factors really influence the memorisation of idioms. The sample of twenty idioms will be chosen according to the factors which are assumed to be most important and which allow clear guiding lines for the choice, i.e. transparency and semantic area. After the idioms are chosen, they will be described in accordance to their other factors, which are metaphorical transparency, literalness, and length (number of syllables). The experiment will be held in a linguistics lecture at the Department of English of Vienna University and the participants will have an average age of 20 years. This setup was chosen because the results provide appropriate data for verifying or dismissing the hypotheses. The results can easily be analysed pertaining to the factors which may or may not influence the memorisation of idioms and which are under scrutiny in the different hypotheses. We can easily see whether idioms with a certain factor were remembered better or correctly more often than others or not, for

example whether transparent idioms were remembered better than intransparent idioms, and thereof we can infer whether, and in which direction, this factor influences the retention of idioms. To recapitulate, the factors are transparency, metaphorical transparency, literalness, length (syllable number), semantic area of the concept the idiom is referring to, and pleasantness (whether participants find more idioms they remembered funny than boring or vice versa).

After deciding on the setup, the first step in the preparation of the experiment was to resolve which idioms would be featured and here an issue arose: to keep the results valid, each participant had to have the same learning conditions and therefore the same knowledge of idioms which are featured in the experiment. This means that already existing idioms could not be used, because even if they had a low frequency in everyday language use, or were already obsolete, the chance that some participants already knew them and that consequently, the results were invalid was too high. So to ensure that each participant had the same conditions for memorising the idioms, it was of major importance that no participant knew one of the idioms beforehand and hence, the only possibility was to use newly coined ones. Therefore, the task was to invent a great number of English idioms which sound native-like and thus can actually mirror the memorisation of existing idioms. Would they be palpably invented, the results could not answer any questions about idioms memorisation because there simply would be no valid basis for comparison.

Furthermore, it was important that the participants could relate to the concepts the invented idioms referred to because minimal retention was made certain. To ensure that this was the case, and that concepts were not completely alien, idioms were invented around concepts that participants were likely to encounter in their daily life, for example university life, friendship, sexuality and general aspects of everyday life such as shopping or nosiness. After a number of approximately seventy idioms were invented, they were rated for transparency and their number of syllables was counted in order to get a first impression on how to categorise or chose them for the experiment. Furthermore, the idioms were entered into Google to get a rough

idea on how frequent the combinations of words were in actual language use, and the *Longman dictionary of English idioms* and the *Oxford dictionary of current idiomatic English 2 Phrase, clause and sentence idioms* were consulted to make certain that the syntactical patterns of the invented idioms also existed in idioms in actual language use. Consequently, this should ascertain that the invented idioms resembled existing English idiom patterns and thus were native-like and thus the results of how idioms were memorised could be transferred to actually existing English idioms.

As a next step, the experimental setting was developed in detail. It encompasses two experimental sessions with the interval of one week. In the first session, the participants are presented twenty idioms together with explanations of their meanings and one example sentence per idiom thrice in three distinct rounds. The number of rounds was chosen to give the participants the possibility to become familiar with the mode of presentation and the idioms in the first round and then to really try and memorise the idioms in rounds two and three. Since the success of the experiment depends on the participants remembering a certain number of idioms together with their meanings, three tests were designed. The first test should be filled out after round one, the second after round two and the third after the last round. These tests however would not be integrated in any error analysis, nor would they act as evidence for the participants' memory capacities, but they merely were incorporated to support the process of memorisation. It is generally acknowledged that applying or writing down new information facilitates its retention, and the three tests aim at achieving this effect. In addition, assigning the participants tests is the only possibility to ensure that they write down the same information. In order to get appropriate results, it was vital that participants remembered around five to fifteen idioms rather than all of them or none. Would they remember all, the setting would be too easy and no results could be obtained. On the other hand, if they remembered too few, the setting would be too difficult and again, there would be no results to analyse. To ensure that the setting was valid and that all participants received the same input, it was decided that they would not be allowed to take the tests with them, but that they would have to be handed

back to the examiner in order to prevent any studying at home. To re-emphasise, the experiment's goal is to find out if some idioms are remembered better than others and consequently, also to see which idioms are remembered better and which factors are found to influence idiom retention. Only then, some clues are offered to the question of why some idioms stick in a language in spite of the many difficulties they pose to language users and learners. Therefore, it is logical that the tests adhere to the "trait" view" (Laufer and Goldstein 2004: 401) of vocabulary knowledge. This means that vocabulary knowledge is viewed as consisting solely of "the knowledge of discrete word items independent of the context in which they appear" (Laufer and Goldstein 2004: 401). Even though this approach is rather simplified when we consider the many factors that are incorporated in vocabulary or lexical knowledge, i.e. context knowledge or communicative skills⁴, to mention but a few, it is well applicable to the experiment. Again, the experiment's main intent is to find out which idioms are remembered better by participants, thus it focuses on the aspect of vocabulary knowledge that Laufer and Goldstein (2004) call 'knowledge of discrete word items'. Featuring aspects like context knowledge in the experiment would certainly be interesting, but it does not add to answering questions of how different idiom features such as transparency, semantic areas of the concepts to which the idioms refer, or the length (i.e. syllable number) of idioms influence idiom memorisation and hence possibly determine their longevity. What is more, it would go far beyond the scope of this thesis. Consequently, the trait view serves as a suitable basis for the experiment (Laufer and Goldstein 2004: 401).

In Test 1, which is to be distributed after the first round of idiom presentation, the participants are given all idioms and are required to fill in their respective meanings. In Test 2, to be filled out after the second round of the presentation, the meanings are given and participants are assigned to fill in the respective idioms. Test 3 is a mixture of both, Test 1 and 2: participants

⁴ These competences are featured in an interactionalist model of vocabulary knowledge. For more information c.f. Laufer and Goldstein (2004: 401) or Read and Chapelle (2001).

are given ten idioms and are asked to fill in the meanings and ten meanings to which they have to add the idioms.⁵

The second session takes place exactly one week after the first session to ensure partial forgetting, but it is not too long a period so that the participants would not forget too many idioms. For this session, again three tests were prepared. The participants would be divided into three groups and each group would be administered one test group. For the first test, Test Group 1, solely a blank sheet with lines was prepared for which the participants are required to write down all the idioms they remember from the previous week. This test will provide the most interesting results because there are no factors which could influence what the participants remember and what they do not remember. Therefore, this Test Group will provide the most significant answers to the hypotheses. In the second test, Test Group 2, the participants are given the meanings of the transparent idioms and are asked to fill in the idioms, and in the third test, Test Group 3, participants are given the opaque idioms and should fill in the meanings. The design of Tests 2 and 3 was aimed at ensuring that the meanings of the transparent idioms, which possibly are deduced fairly easily, do not influence the results in this direction. After all this work was done, a pilot study was needed to test whether the experiment really does test what it should test, whether the mode of presenting the idioms was appropriate, and moreover to find out whether participants remember enough but not too many idioms within the course of one week

⁵ For the tests cf. Appendix 1.

2.1. The pilot study

The pilot was conducted in a seminar for students writing their master or doctoral thesis in Linguistics or Cultural Studies at the English Department of Vienna University, and a group of 6 students took part. Ten transparent and ten opaque idioms were chosen and the students were informed of the experimental procedure. Table 1 shows the idioms chosen for the pilot:

Idiom	Meaning of Idiom	Transparency
<i>to balance words</i>	to be very cautious of what you are saying in order to not spill a secret	2
<i>to open the cardamom pot</i>	to start sexual relations, to make sexual advances	5
<i>to put the blinds to use</i>	to hide or turn away from the world	2
<i>to carry one's head round</i>	to be very prudish	5
<i>to muck over the ruck</i>	to hush up something	3
<i>to be bitten by the snake</i>	to be caught cheating	5
<i>to make a sandwich</i>	to have a threesome	2
<i>to hide from the kettledrum</i>	to run away from bad consequences	4
<i>to be an Ignorant Lindsay</i>	To focus only on one's own needs and wishes and ignore the consequences for other people	1
<i>to get an Ylang-Ylang rub</i>	to get an erotic massage	4
<i>to have the knowledge up one's sleeve</i>	to cheat	1
<i>to drown the orchid</i>	to do too much of a good thing so that it turns out bad	5
<i>the yellow spot on the picture</i>	the bright side of something	2
<i>as cozy as a kerchief</i>	uncomfortable	4
<i>to blow up the first balloon</i>	to be the first to congratulate	3
<i>as handsome as Ken</i>	to have a slippery appearance	5

<i>to stack books</i>	to get an amount of work that is unmanageable	1
<i>guppy disguises nausea</i>	a situation seems better than it really is	3
<i>to turn on the heating</i>	to raise the level of competition	2
<i>to peel peaches with a butcher's knife</i>	to ask very unfitting, direct and indiscrete questions	5

Table 1: Idioms which were chosen for the pilot, together with their meaning as well as their transparency.

The participants were also instructed to neither take notes nor talk, but just to listen and read while being presented the idioms. Following the introductory phase, session one was conducted as described above. However, seeing that the transparency of idioms can often be a subjective impression rather than an objective fact, especially to the person who invented them, the students were asked to do a transparency rating test after the original experimental session. They were given a sheet with the idioms and were directed to rate the transparency of the idioms from 1, being the least transparent, to 5, being most transparent or opaque, while always bearing in mind the idioms' meanings. The rating test led to very interesting results: It firstly showed that for seven out of twenty idioms, the researcher's intuitions of idiom transparency were supported by the participants as the majority assigned the same transparency ratings to the idioms as the researcher. Secondly, and this is of particular interest, three idioms received an equal number of votes for two quite contrasting transparency ratings, that is one idiom received two votes for 4 (intransparent) and 2 (transparent) respectively, another one two votes for 5 (opaque) and 3 (more on the transparent side), and a third idiom even received two votes for 4 (intransparent), 3 (more transparent) and 1 (the most transparent rating). While with every idiom, there was one rating that pointed into another direction as the majority, two out of six ratings seems unusual. This actually gives the impression that there is not one, but there are different kinds of transparencies that are responsible for these results. The ones that come to

mind are what I am going to call ‘metaphorical transparency’ on the one, and ‘literalness’ on the other hand. Metaphorical transparency means that an idiom is transparent on a metaphorical level, i.e. once a speaker has noticed or understood the metaphoricity of the expression and realises what it stands for, the idiom becomes transparent despite the metaphor. A good, yet slightly obscene example here would be *to do a snake-shake* (to give a hand-job). As soon as we have realised that snake refers to the male sexual organ on a metaphorical level, it is fairly easy to deduct the idiom’s meaning, and hence it has become transparent. In contrast to this, literalness indicates that the literal meanings of the idiom’s constituent words or of one of the constituent words give or gives away the idiom’s meaning. A good example for literalness is the idiom *to be an Ignorant Lindsay* (to focus only on one’s own needs and wishes and ignore the consequences for other people). The literal meaning of the adjective ‘ignorant’ implies the most important part of the idiom’s meaning, namely egocentrism and ignorance. Here, no metaphor is involved, and as a result, the idiom is transparent on the literal and not on the metaphorical level.

The question that now poses itself is how the categories of metaphorical transparency and literalness relate to each other. Looking at the two examples, it seems to that the two kinds of transparency are complementary, i.e. the idiom is transparent on either the metaphorical or the literal level, but not on both levels. With the possible ratings 1, 2, 4, 5, and 1 being the most transparent and 5 the most intransparent or opaque for both categories, *to do a snake-shake* has the metaphorical transparency 1 (the meaning indeed is very clear once it is known what snake refers to), and its literalness is 5 as no literal meaning of a constituent word is important for the overall meaning of the idiom. *To be an Ignorant Lindsay*, on the other hand has a metaphorical transparency of 5, while its literalness is 1 (‘*Ignorant*’ actually is the most important part of the meaning here). Nevertheless, the two kinds of complementarity are only one possible relationship between the categories. The other possibility that is quite apparent when looking at various idioms is that an idiom can be either transparent or intransparent in both kinds of transparency: take, for example, *to get an Ylang-Ylang rub* (to get an erotic

massage). The metaphorical transparency of *to get an Ylang-Ylang rub* is 1, because it is fairly easy to infer its meaning when it is known that 'Ylang-Ylang', an essential oil, is a metaphor for 'erotic'. Yet, the literalness of the idiom is 2, since 'rub' is a more informal term for 'massage'. Here, we can see that it is possible that an idiom can be transparent on the metaphorical as well as on the literal level of meaning and thus, it generally belongs to the very transparent idioms. There are two possible starting points of inferring its meaning. An example for intransparency on both levels would be the idiom *to carry one's head round* (to be very prudish). Its metaphorical transparency is 5, as even if it is known what the idiom refers to, the relationship between the meaning and the constituent words is still very unclear. It can still never be inferred that the idiom refers to being prudish, the only guess that comes to mind is that the idiom could mean 'to be snobbish' or something similar. Its literalness is also 5 because, again, the meaning cannot be deduced from any of the constituent words. Therefore, the idiom generally belongs to the most opaque ones as on no level, there is a possibility to deduce its meaning. Only idioms that are opaque or intransparent on both levels can be said to have, at least synchronically for idioms which actually exist in English, no motivation, i.e. they are truly arbitrary. Diachronically, motivation is still possible, but as Fernando and Flavell (1981) state, motivation can only be judged synchronically and not throughout language history, because usually, we do not know the idioms' etymologies. The synchronic transparency status of idioms is crucial, while their roots and etymologies are only secondary (Fernando and Flavell 1981: 27- 29).

The differences in the transparency rating of the participants did not only lead to a more close investigation of transparencies, but also resulted in the change of the tests for the second experimental session. Test Group 2 were now given all the idioms instead of only the transparent ones and were asked to fill in the respective meanings, and Test Group 3 were given the meanings of all idioms and not only the ones of the idioms which were perceived as opaque by the researcher, and were asked to add the corresponding idioms. The six participants of the pilot were instructed to complete the tests within a period of ten minutes. After this period, the tests were collected and

analysed. The focus of the analysis lay on how many idioms the participants remembered correctly, but in order to also be able to assess the rest of their performance, five categories of correctness were developed: correct, nearly correct, slightly correct, nearly incorrect, and incorrect/ no answer given. 'Correct' means that with the idioms, there is no mistake whatsoever, 'nearly correct' means that articles or prepositions are wrong as long as they do not impose the meaning of the idiom. If, for example 'up' and 'down' are mixed up, this does influence the idiom's meaning and thus, this mistake counts as 'slightly correct'. 'Slightly correct' then means that a content word is wrong and 'nearly incorrect' means that more than half of the idiom is wrong. 'Incorrect/no answer given' means that the idiom cannot be recognised, nearly everything is wrong, or thirdly, that no answer is given at all. These categories also apply to the evaluation of Test Group 2, where the meanings were asked. Only with this test, the exact wording of the definition was not of great importance, but the degree to which the meanings of the idioms were reproduced correctly were the essential factor for grading.

The two participants of Test Group 1 remembered seven and five idioms correctly, the two participants of Test Group 3 remembered nine and fifteen idioms correctly, and the two participants of Test Group 2 remembered the meaning of nine and eight idioms correctly. This means that with this design, the experiment delivers results between the approximately five and fifteen idioms that were wanted. Additionally, an evaluation of session one confirms that indeed, three rounds of idiom presentation followed by tests are necessary for the participants to remember most of the idioms and their meanings. The results of Test Three proved considerably better than those of the test after the second round. Therefore, it can be said that the setting proves a suitable means for investigating the research questions. Nevertheless, some minor alterations were made: due to the surprising results of the transparency rating test in session one, it was decided to change a number of idioms for the real run of the experiment: for each semantic area (shopping, personality, studying, sexuality, cheating, bad consequences, privacy invasion, no specific semantic area but contrary of what literal meaning would imply/irony, and no specific semantic area but

idioms containing colour terms), a transparent and an intransparent or opaque idiom was chosen, and for the areas 'shopping' and 'sexuality', two idioms with nonsense-words were invented. These two concepts are very prominent in daily life and it would be interesting to see whether idioms about them would be remembered even if they contained words which do not exist. These two idioms are *to ming the bing* (to have sexual intercourse) and *to spleeve it* (to buy something on credit). Also, the transparency ratings were altered from 1 (most transparent) to 5 (opaque) to 1 (most transparent), 2, 4, and 5 (opaque) for the reason that rating 3 can mean either more transparent or more opaque, or simply 'I do not want to decide'. The individual idioms' transparencies were ranked according to the degree to which there seems to be a connection between the constituent words and the idiomatic meaning. Transparency 5 means that no connection can be seen, 4 means that there is a hint of a connection, 2 that there is some connection and 1 means that the connection is obvious and the idiom is very transparent. Yet, despite the attempt to be fully objective, the ratings nevertheless represent the researcher's intuitions to a certain degree.

Another two alterations that were made for the real experiment are that firstly, the order of idioms was changed from round to round to prevent a prominent concept such as sexuality from influencing the retention of the idioms that immediately follow, and that not always the same idioms come at the beginning and the end of the presentation as this can also influence their retention. Secondly, each idiom, together with the explanation of its meaning and an example sentence, was allotted the same amount of time in the presentation so as to not show any preferences when presenting the power point slides. The last change of the experiment has something to do with pleasantness: Ferré (2003 referred to in Monnier and Syssau 2008: 36) found out that in long-term memory, words which refer to a pleasant concept have richer semantics than words which refer to unpleasant concepts or words which are neutral and therefore are remembered more easily and better. This is because they are more emotional for the speaker than neutral words and the emotions are added to the semantics of a word (Monnier and Syssau 2008: 36). Could this mean that idioms which are pleasant are

remembered better as well? Here, the case is not so simple because firstly we have to decide what pleasant actually means in connection to idioms: Idioms have two levels of meaning and together with the two levels of meaning, they also have two concepts standing behind them, i.e. the individual meanings of the constituent words, in other words, the picture that builds up in our minds when we first encounter the idioms and yet do not know their figurative meanings, as the base level of meaning or concept. This is contrasted by the idiomatic or figurative meanings of the entity as a whole, irrespective of the meanings of the constituent words, as second level of meaning and the second concept behind the entity. So to which level does pleasantness refer? It can be argued that on the literal level, idioms as such are already 'pleasant' entities because even when they refer to an unpleasant concept or a taboo concept on their second level, their constituent words nevertheless mostly are pleasant. Let us take the widely-used idiom *to kick the bucket* (VT to die) as an example. It is very intransparent because the idiomatic meaning cannot be inferred from the meanings of the constituent words. Therefore, the two levels of meanings or concepts are recognisable or distinguished very easily. On the base level, the meaning of the individual words is either neutral or pleasant, but as an entity, its meaning is surely pleasant, just imagine a person literally kicking a bucket. This picture may cause you to smile or laugh, or remind you of a slapstick film. On the second level, namely the figurative one, the meaning is not funny or pleasant at all because it refers to a person dying. In other words, there is a collision of pleasantness and unpleasantness on the different levels, especially when idioms refer to taboo concepts. So how pleasant are idioms actually? And are there differences of pleasantness between different idioms? Or is it possible that the clash of pleasantness and unpleasantness is what makes an idiom pleasant? To get a first glimpse at the answer to these questions, the participants were asked to tick whether they found the idioms they remembered or the idioms to the meanings they remembered funny or boring. The assumption here is that when the 'funny' box is ticked, the participants find the idiom more pleasant than when the 'boring' box is ticked, and consequently, more funny than boring idioms should be

remembered. The possible theoretical implications of the results shall then be looked at in chapter 4. Furthermore, the funny/boring task could provide some answers to the issue of idioms and word play. After all the adaptations were made, it was time to conduct the real experiment.

2.2. The experiment proper

The experiment was conducted at the lecture ‘Introduction to the History of English’ at the Department of English at Vienna University in the Winter Term 2008/09, and a number of 58 students of English participated in session one. Table 2 exhibits the final choice of idioms the students were presented, together with their semantic area, their meaning, their transparency as well as their metaphorical and literal transparency (literalness), and finally, whether they do or do not contain a nonsense-word:

Semantic area	Idiom	Meaning of idiom	Transparency	Nonsense -word?	Metaphorical transparency	Literalness
Shopping	<i>to set the plastic on fire</i>	to shop excessively	1	no	1	5
	<i>to eat the lily</i>	To make a bad deal when shopping, to pay too much	5	no	5	5
	<i>to spleeve it</i>	to buy something on credit	5	yes, <i>spleeve</i>	5	5
Personality	<i>to carry one's head round</i>	to be very prudish	5	no	5	5
	<i>to be an Ignorant Lindsay</i>	to focus only on one's own needs and wishes and ignore the consequences for other people	1	no	5	1
Studying	<i>to stack books</i>	to get an amount of work that is unmanageable	2	no	4	2
	<i>to upper-cut Ulysses</i>	to start studying a difficult subject in	4	no	1	5

		a very determinate way				
Sexuality	<i>to get an Ylang-Ylang rub</i>	to get an erotic massage	2	no	1	2
	<i>to open the cardamom pot</i>	to start sexual relations, make sexual advances	5	no	4	5
	<i>to ming the bing</i>	to have sexual intercourse	5	yes, <i>ming</i> and <i>bing</i>	5	5
Cheating	<i>to be bitten by the snake</i>	to be caught cheating	1	no	1	5
	<i>to fondle the splinters</i>	to cheat	5	no	5	5
Bad consequences	<i>to drown the orchid</i>	to do too much of a good thing so that it turns out bad	2	no	2	5
	<i>to hide from the kettledrum</i>	to run away from bad consequences	4	no	2	4
No specific semantic area but contrary of what literal meaning would imply/irony	<i>to have fire in one's soul</i>	to be a rather boring person	2	no	5	1
	<i>as cozy as a kerchief</i>	uncomfortable	4	no	5	1
Privacy invasion	<i>to peel peaches with a butcher's knife</i>	to ask very unfitting, direct and indiscrete questions	1	no	1	5
	<i>to saddle sb's zebra</i>	to dig into sb's past	5	no	5	5
No specific semantic area but idioms containing colours	<i>the yellow spot on the picture</i>	the bright side of something	2	no	1	5
	<i>to stick the green ribbon onto the book</i>	to be the first to congratulate	5	no	5	5

Table 2: Idioms used in the experiment. transparency: ratings 1, 2, 4, 5, 1 = very transparent, 5 = opaque (intransparent); metaphorical transparency vs. literalness: is the idiom transparent on a metaphorical level or do the literal meanings of the words give the meanings away (literalness)? Metaphorical transparency ratings 1 (very transparent), 2, 4, 5 (intransparent), literalness ratings 1 (great literalness), 2, 4, 5 (not literal at all).

At the beginning of the lecture, the students were informed by the lecturer that in the last part of the session, an experiment was going to take place. They were briefly informed about the purpose of the experiment and were asked to stay and participate. After the end of the regular lecture part, the students were briefed by the researcher about the experimental procedure and the three tests were handed out. The participants were asked to leave the tests turned around so that they could not read Test 1. Furthermore, they were asked to not take notes or talk, but just listen to the presentation and read along on the power point slides. After each presentation round, they were instructed to fill out the respective test. For completing this task, they were allotted three minutes. After Test 3, the researcher thanked them for their participation and asked them to take part again the following week. In the second session, 48 students participated. Again at the end of the regular lecture session, the students who took part in session one were asked to stay and participate in session two. They were administered the three tests⁶ and it was seen that the number of students per test group was relatively similar. Then, the participants were asked to complete their test within five minutes. After they had done so, the tests were collected and the students were thanked for participating in the experiment.

Once the tests were collected, it was time for the third stage of the experiment, and that was the correction of the tests. However, because statistical methods should also be incorporated in the analysis of the results, the number of categories used in the pilot for grading or correcting the tests transpired to be unsuitable. With five categories and a maximum of twenty items overall, it was feared that the resulting numbers would be too small for applying proper statistical methods and therefore, the number of categories was reduced from five to four. The resulting four categories then were the following: right, slightly right, rather wrong and wrong or no answer given. The pilot categories 'nearly correct', which means that articles or prepositions are wrong, and 'slightly correct', which means that content words are replaced with another content word that is semantically similar or related, were merged into the category 'mostly right', and this merger does not only

⁶ For the tests used in the experiment, please cf. Appendix 2.

have practical reasons, but it also has theoretical foundations. Seidlhofer and Widdowson (2007), in connection with the territorial function of idiomatic usage, where idioms are used as markers of in-group behaviour or group membership within a particular group or community of speakers, suggest that it is not important how minute or slight the deviance from the original diction of an idiom is, it nevertheless indicates that the speaker is not a member of the group. In other words, already a different article, preposition or word order result in the idiom being perceived as different or unacceptable by a speech community, and therefore, has to be seen as incorrect (Seidlhofer and Widdowson 2007: 362-63). Accordingly, it should not make a big difference whether an article is mixed up or a content word is replaced by another one which has is semantically related, both are perceived as not correct or appropriate by speakers, and for that reason, the categories 'nearly correct' and 'slightly correct' were merged into the single category 'mostly right'. Furthermore, already such slight alternations as a different article or personal pronoun was counted as a mistake, because even though some of the idioms surely would allow permutations such as a change in the personal pronoun, a different tense or passivisation, it is the 'pure' form of the idiom that was asked for in the experimental task and other forms that could be correct if the idiom actually were used cannot be taken into consideration here. 'Nearly incorrect' corresponds to the new category 'mostly wrong'.

3. The results

In this chapter, the results of the experiment will be presented. At first, each group is going to be treated separately because the task differed slightly between the groups. After the separate presentation, attention will be called to possible similarities. As the goal of the experiment was to find out which of the factors transparency, metaphorical transparency, literalness, length (number of syllables), semantic area of the concept the idiom refers to and pleasantness, and which idioms consequently were remembered better than others, the statistical method employed was to calculate the percentages for the four categories of correctness, firstly for each idiom per group separately, and then for the idioms grouped into the different transparencies, metaphorical transparencies, literalness categories, semantic areas and lengths. As pleasantness is concerned, it was counted how often each idiom per group was ticked funny or boring, again in each degree of correctness. Then the percentages per group for funny and boring were calculated. For clarity's sake, here is a list of the idioms used in the experiment: idiom 1 = *to set the plastic on fire*, idiom 2 = *to eat the lily*, idiom 3 = *to spleeve it*, idiom 4 = *to carry one's head round*, idiom 5 = *to be an Ignorant Lindsay*, idiom 6 = *to stack books*, idiom 7 = *to upper-cut Ulysses*, idiom 8 = *to get an Ylang-Ylang rub*, idiom 9 = *to open the cardamom pot*, idiom 10 = *to ming the bing*, idiom 11 = *to be bitten by the snake*, idiom 12 = *to fondle the splinters*, idiom 13 = *to drown the orchid*, idiom 14 = *to hide from the kettledrum*, idiom 15 = *to have fire in one's soul*, idiom 16 = *as cozy as a kerchief*, idiom 17 = *to peel peaches with a butcher's knife*, idiom 18 = *to saddle somebody's zebra*, idiom 19 = *the yellow spot on the picture*, idiom 20 = *to stick the green ribbon onto the book*. Also, the numbers 0, 1, 2, and 3 in the diagrams indicate the degree of correctness of the respective reproduction. 0 stands for 'wrong' or 'no answer given', 1 signifies 'mostly wrong', 2 means 'mostly right' and 3 denotes 'right'.

3.1. Test Group 1

To briefly recapitulate, the participants of Test Group 1 were given a blank form and were asked to write down any idioms they remember from the previous week. Therefore, the results are the most unbiased of all three groups as the participants received no incentive which could influence the process of retrieving idioms from their memory. This also means that the results of this group have the greatest significance. For a blank version of the test please cf. Appendix 3, and for the individual participants' results please cf. Appendix 4.

3.1.1. Results for the individual idioms

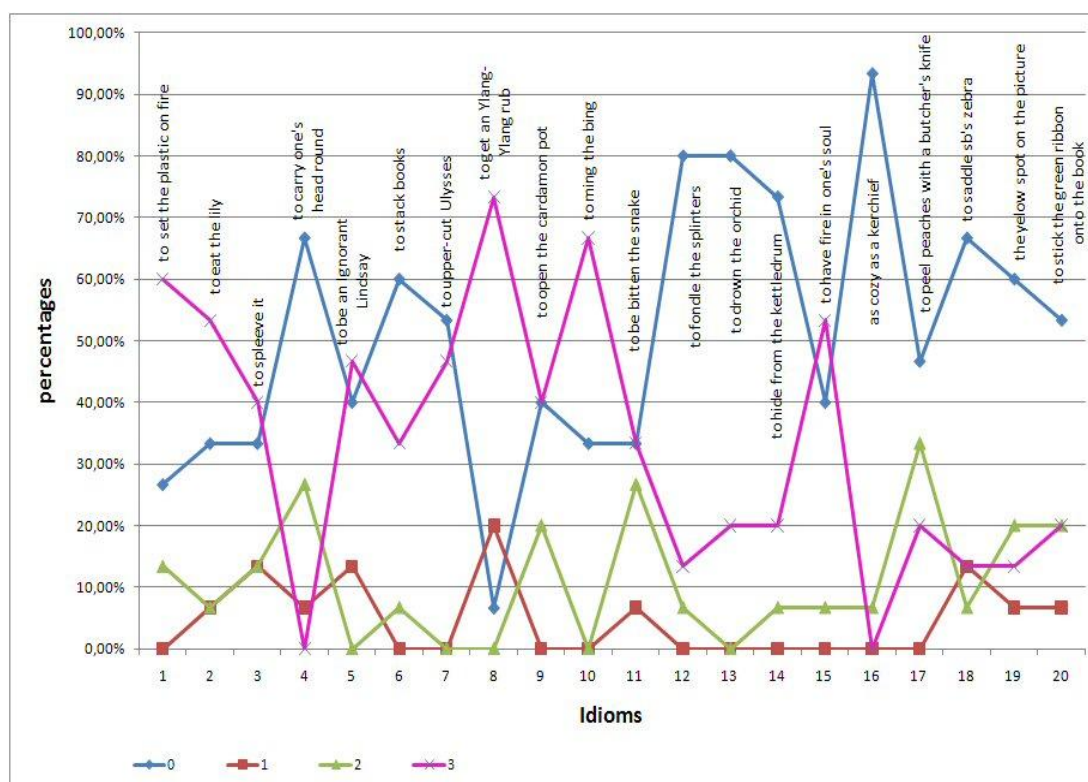


Table 3. Results for Test Group 1.

The idioms which were remembered correctly most often are idiom 1 (*to set the plastic on fire*) with 60%, idiom 10 (*to ming the bing*) with 66.67%, and idiom 8 (*to get an Ylang-Ylang rub*) with 73.33%. All other idioms received less than 60%. The idioms which received the lowest scores and were remembered correctly the least often are idioms 12 (*to fondle the splinters*),

18 (*to saddle somebody's zebra*) and 19 (*the yellow spot on the picture*) with 13.33% of correct reproductions each and idioms 4 (*to carry one's head round*) and 16 (*as cozy as a kerchief*) which never were remembered correctly. If we look at the dark blue line in the diagram, which indicates the percentages of no answer or wrong answer, then we can see that there is a slight tendency to higher percentages towards the end. This is interesting to note, because the order of idioms here represents the order which was used in the first round of presentations in session one of the experiment. And in spite of different orders in the following two rounds, the first order seems to have a slight effect on the retention of idioms as well and the idioms which were encountered more in the beginning were remembered somewhat better.

3.1.2. Transparency

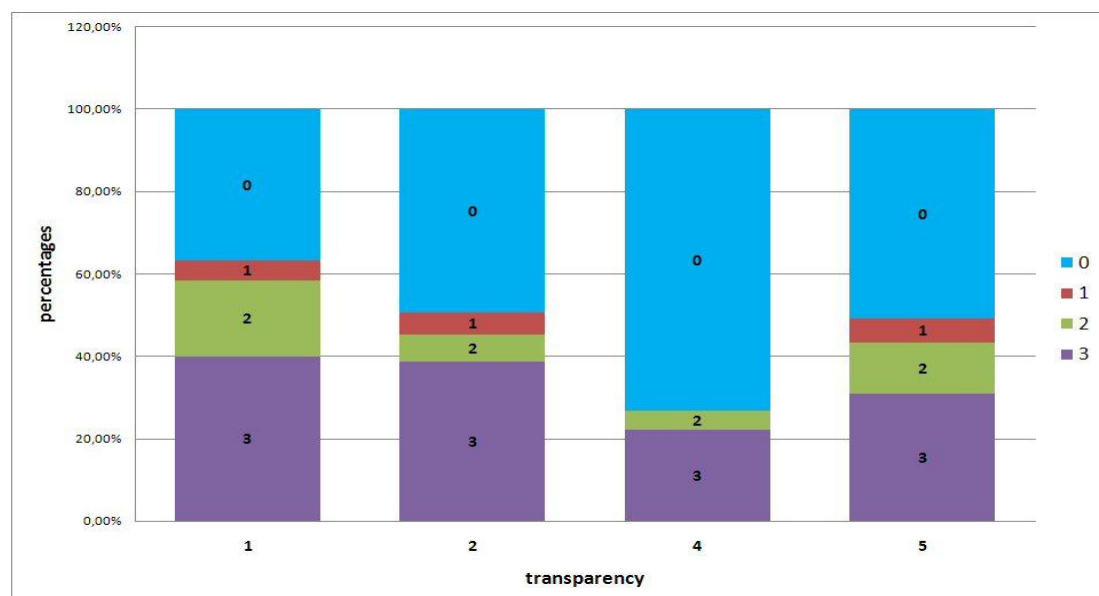


Table 4. Test Group 1 results for transparency.

As the general transparencies (1 means transparent, 5 means intransparent) are concerned, the participants of Test Group 1 best remembered the idioms with transparency 1, hence the most transparent idioms with 40% correct reproductions of these idioms. They also have the lowest 'wrong'-rate with only 36.67%. The second-best remembered idioms in Test Group 1 display

transparency 2. Therefore, the two transparent categories on the transparency cline proved to be most easily memorisable for Test Group 1. What is interesting is that idioms with transparency 5 (30.83% correct reproductions), so the most opaque idioms, were remembered better than idioms with transparency 4 which only were remembered correctly with 22.22%. A reason for this outcome and what its implications are will be enquired in chapter 4, but maybe other factors such as the semantic areas of the concepts the idiom refers to have to be taken into consideration when explaining this outcome as well. In fact, the idioms with transparency 4 belong to the semantic areas STUDYING, BAD CONSEQUENCES and IRONY, areas which received lower correctness percentages with Test Group 1 than some idioms with transparency 5 which belong to the semantic areas SHOPPING and SEXUALITY, which are the two strongest semantic areas with the highest percentages of correct retentions.

3.1.3. Metaphorical transparency

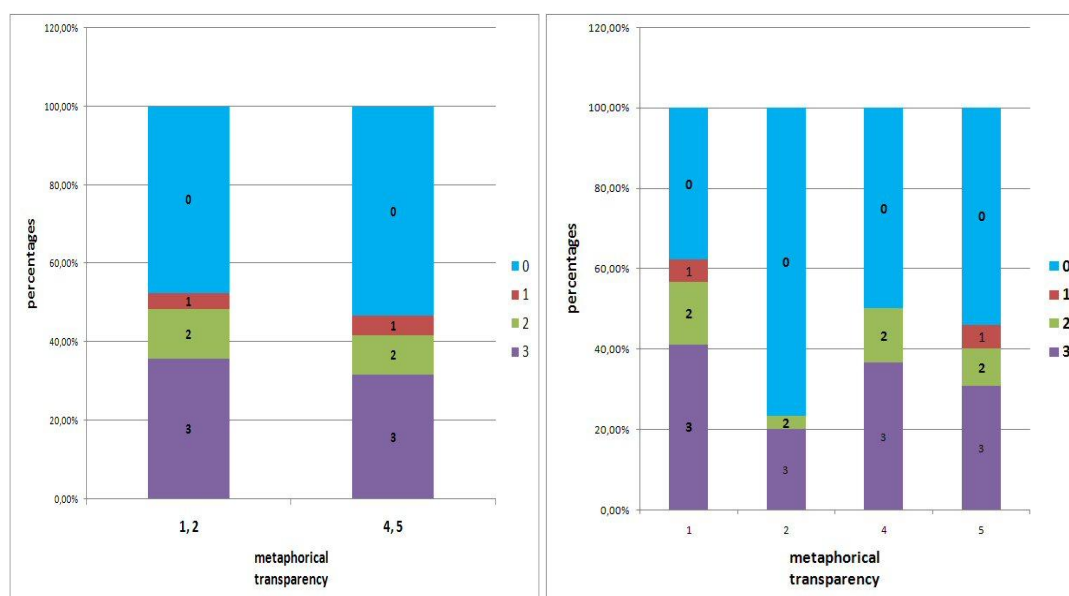


Table 5.a. Metaphorical transparency in 2 groups. 5.b. Metaphorical transparency TG 1.

If we sum up the metaphorical transparencies 1, 2, 4 and 5 into two groups – 1 and 2 into the transparent group, and 4 and 5 into the intransparent group,

the results are not vastly different: the idioms of the transparent group were remembered correctly with the percentage of 35.83%, while the idioms of the metaphorically intransparent group were remembered correctly with 31.67%. However, if we look at the four categories separately, the differences are more considerable. Idioms with metaphorical transparency 1 were remembered correctly with a percentage of 41.11%, and those with metaphorical transparency 2 only with 20%. Idioms with metaphorical transparency 4 were reproduced correctly with 36.67%, and again, those with transparency 5 received a lower score with 30.67%. With a difference of 10.44%, the metaphorically most transparent idioms were remembered better than the intransparent ones.

3.1.4. Literalness

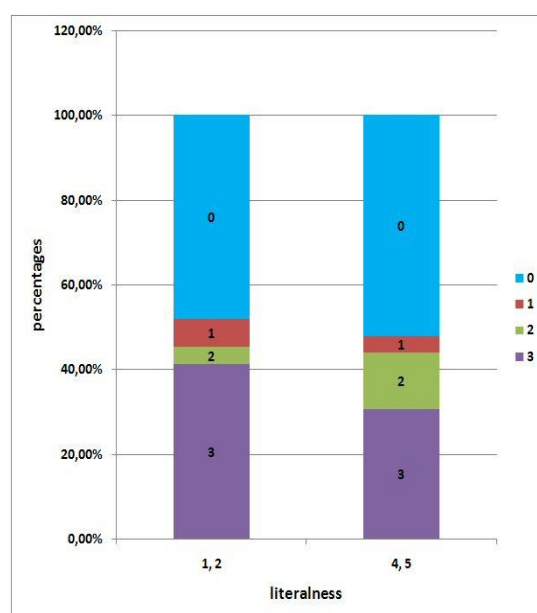
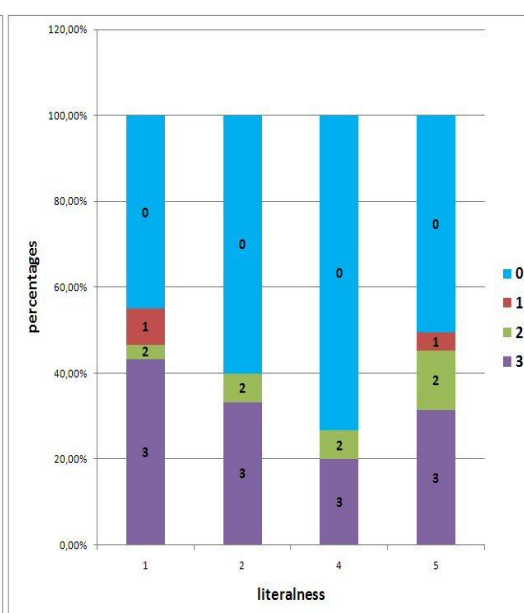


Table 6.a. Literalness in 2 groups.



6.b. Literalness results for Test Group 1.

If we divide literalness into two groups – again literalness 1 and 2 into the transparent group and literalness 4 and 5 into the intransparent group, the results are clearer than for metaphorical transparency. The idioms of the transparent group were remembered correctly with a percentage of 41.33% and the idioms of the intransparent group received a percentage of 30.67%.

The results of the several categories are again more distinctive: literalness 1 was remembered correctly with 43.33%, literalness 2 with 33.33%, literalness 4 with 20% and 5 with 31.43%. These results reverse the pattern of the prior ones since here, literalness 5 received a higher score than literalness 4, but otherwise, idioms which are transparent on the literal level were again remembered correctly more often than the intransparent ones.

3.1.5. Length

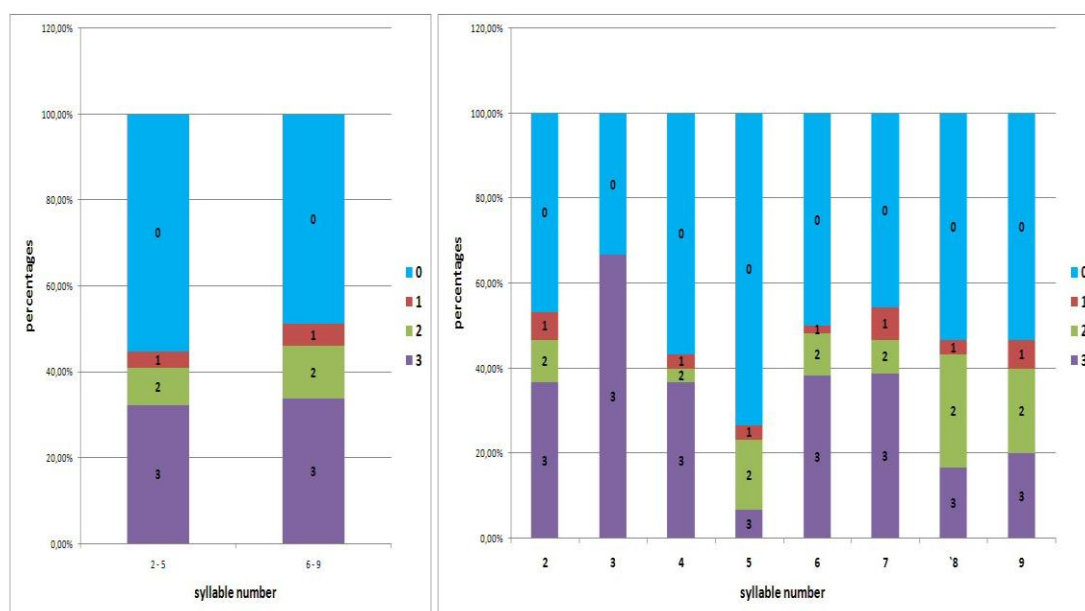


Table 7.a. TG 1 Length in 2 groups. 7.b. Length (all syllable numbers separately) for TG 1.

If idioms are subdivided into short (2-5 syllables) and long (6-9 syllables), the percentages of correct reproductions are fairly similar. Short idioms were remembered correctly with 32.38% while long syllables were reproduced correctly with 33.85%. If we look at the different idiom lengths, i.e. at each syllable number separately, the numbers differ to a wider extent, but the results do not indicate a clear preference for either shorter or longer idioms. Rather, they seem arbitrary: idioms with two syllables were remembered correctly with 36.67%, idioms with three syllables received the highest percentage with 66.67%, four-syllable idioms 36.67% and five-syllable idioms only 6.67%. Idioms with six and seven syllables were reproduced correctly

with 38.33% and 38.89% respectively and idioms with 8 syllables were remembered correctly with 16.67%. Nine-syllable idioms were remembered correctly with 20%.

3.1.6. Semantic areas

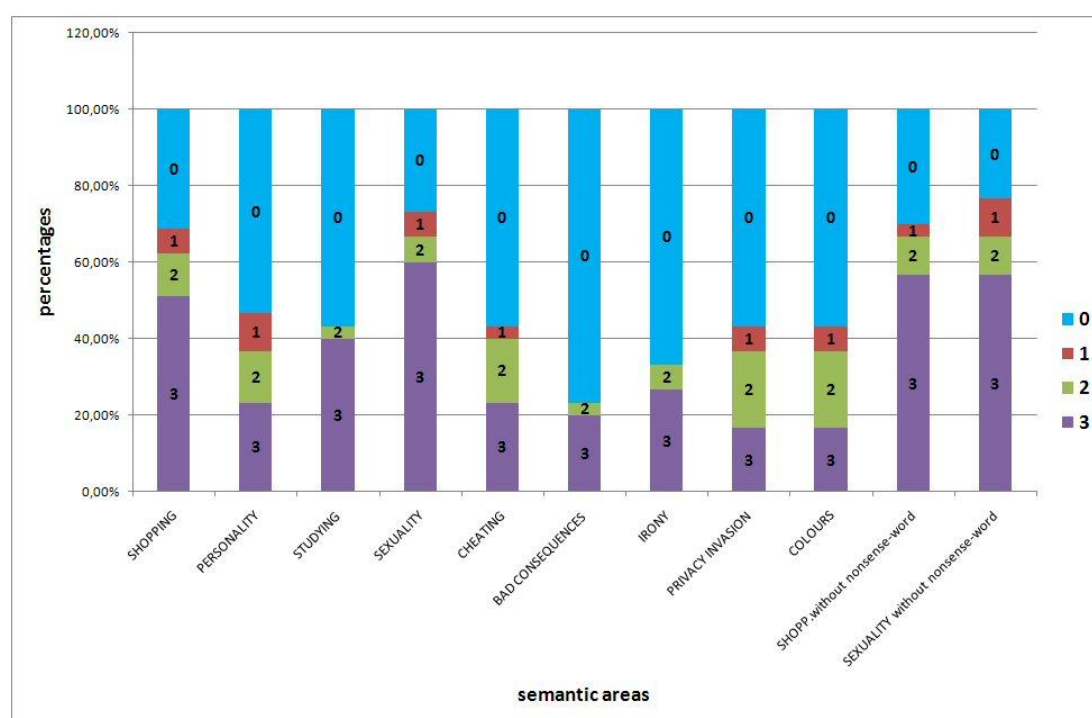


Table 8. Test Group 1 results for semantic areas, with and without nonsense-words.

The semantic areas of idioms do provide a clearer picture than the number of syllables: The idioms for SHOPPING were remembered correctly with 51.11% and without the idiom containing a nonsense-word (*to spleeve it*), the percentage is even higher with 56.67%. Idioms with the semantic area PERSONALITY were remembered correctly with 23.33%, while the STUDYING-idioms again received a higher vote with 40%. Idioms about the semantic area SEXUALITY were remembered correctly with 60% and thus received the highest percentage. Without the nonsense-word idiom, SEXUALITY-idioms received the same percentage as the SHOPPING-idioms without nonsense-word, namely 56.67%. The CHEATING-idioms were remembered correctly with 23.33%, and the idioms about BAD

CONSEQUENCES received 20%. The IRONY-idioms, the idiomatic meanings of which are the ironic contraries of the literal meanings were reproduced correctly with 26.67%, while both idioms referring to PRIVACY INVASION and idioms which have no specific semantic area but contain COLOURS were remembered correctly with 16.67%.

3.1.7. Funny/boring

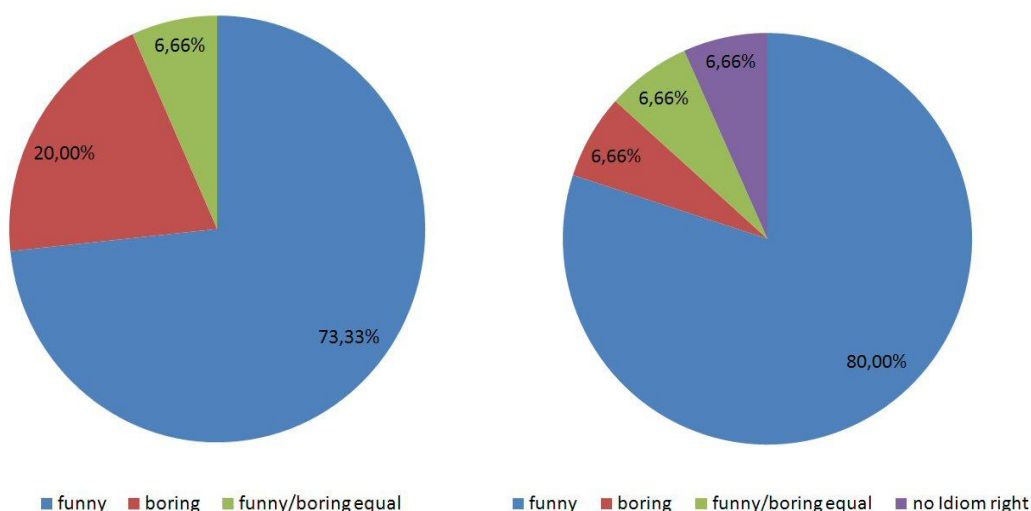


Table 9.a. Results for all correctness categories. 9.b. Results for category 'right'.

In Test Group 1, 73.33% of the participants found more idioms they remembered funny than boring. Further 20% of the participants thought that more of the remembered idioms were boring and 6.66% thought that of the remembered idioms, funny and boring idioms were equal in number. 80% of participants remembered more idioms they ticked as funny correctly than idioms which were marked as boring. 6.66% remembered more idioms which were marked boring correctly than funny idioms. Further 6.66% remembered an equal number of funny and boring idioms correctly and 6.66% did not remember any idiom correctly.

3.1.8. Summary

All three transparency categories, transparency, metaphorical transparency and literalness, show the overall-result that transparent idioms were remembered better than intransparent or opaque ones. However, the intricacies here lie in the results of transparencies 4 and 5 which will have to be analysed more closely. Idiom length shows very jumbled results which could question that length is a determining factor in idiom memorisation. The semantic areas of idioms, on the contrary, show especially clear results with idioms about the areas SHOPPING and SEXUALITY being remembered correctly most frequently. Idioms which were remembered best are *to set the plastic on fire*, *to get an Ylang-Ylang rub*, and *to ming the bing*, while idioms which were not remembered correctly at all are *to carry one's head round* and *as cozy as a kerchief*. The number of participants who remembered more funny idioms correctly exceeded the number of those who remembered more boring idioms correctly by 73.33%.

3.2. **Test Group 2**

The participants of Test Group 2 received the idiom meanings and were asked to fill in the respective idioms. Because of the nature of this task, it is likely that this group participates better with the transparent idioms than the participants of Test Group 1. The reason for this is simple: if an idiom is transparent, then the relationship between the meanings of the constituent words and the idiomatic meaning is clear, in other words, what can be found here is an iconic relationship between form (the constituent words) and meaning (the idiomatic meaning). The more transparent an idiom is, the more iconic this relationship is, and the easier it is to deduce the idiomatic meaning from the constituent words. Again, for the blank test please cf. Appendix 3, and for the results of the individual participants, please cf. Appendix 5.

3.2.1. Results for the individual idioms

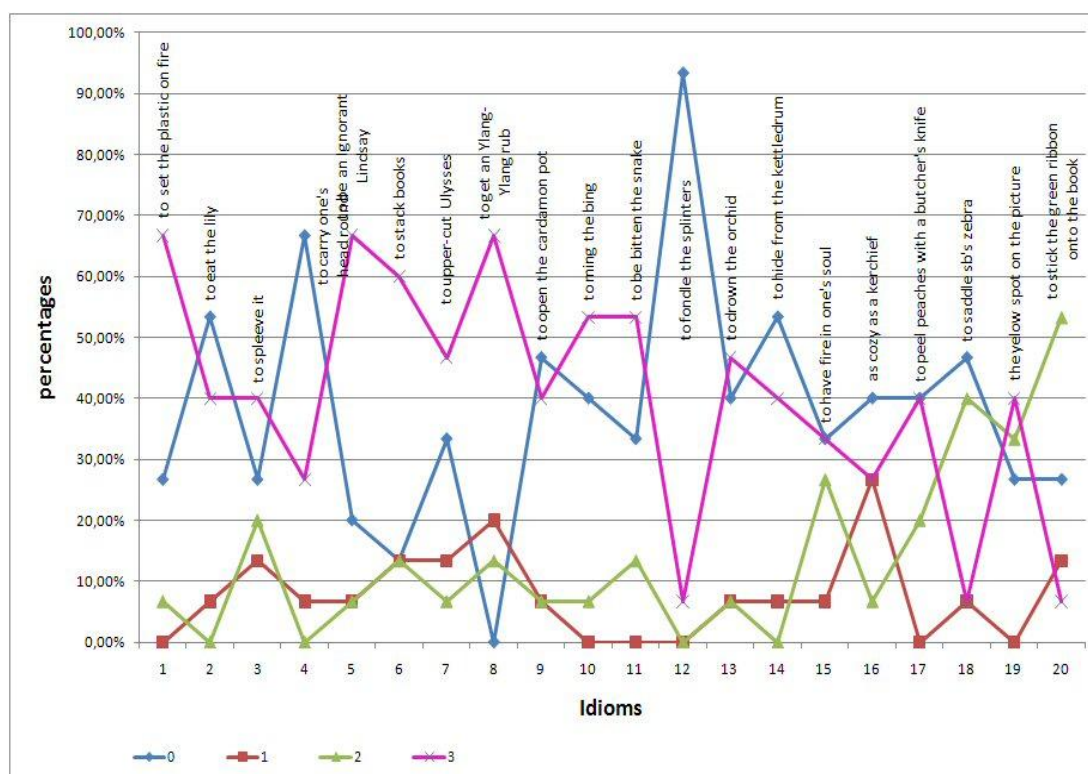


Table 10. Test Group 2 results for all idioms.

The idioms which were remembered correctly most frequently by the participants of Test Group 2 are idiom 1 (*to set the plastic on fire*) with 67%, idiom 5 (*to be an Ignorant Lindsay*) with 67% as well, idiom 6 (*to stack books*) with 60% and idiom 8 (*to get an Ylang-Ylang rub*) again with 67%. There were no idioms which were never remembered correctly, but the ones which received the lowest percentage are idiom 12 (*to fondle the splinters*) with 7%, and idiom 18 (*to saddle somebody's zebra*) as well as idiom 20 (*to stick the green ribbon onto the book*) also with 7%. As in Test Group 1, it is interesting to see that there again is a slight tendency that the idioms at the beginning have higher percentages of correct answers than those at the end, and the order of idioms here represents the order of idioms in the first round of presentations in session one of the experiment.

3.2.2. Transparency

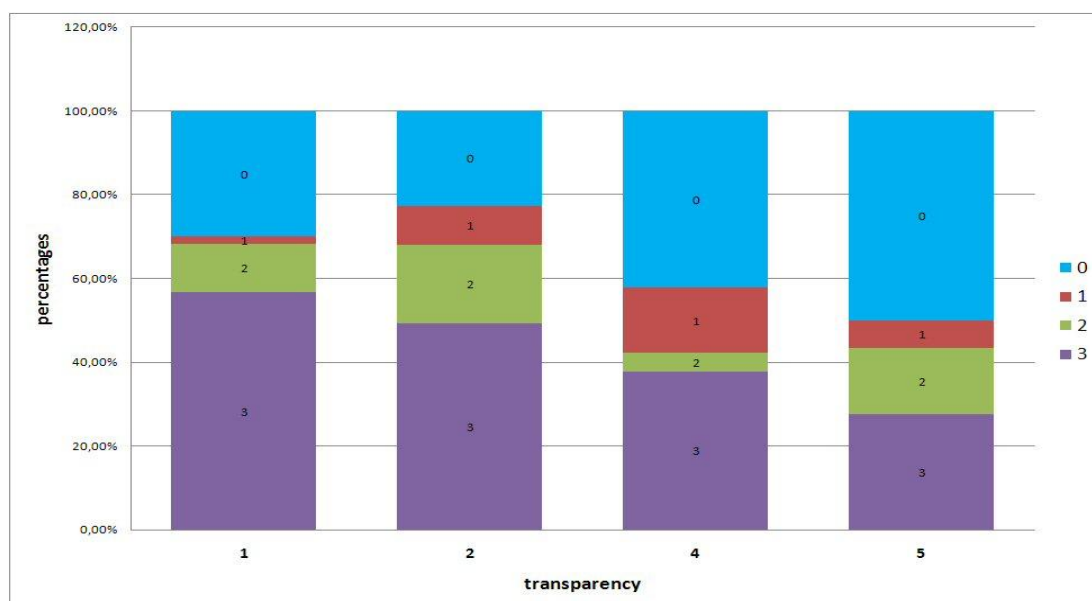


Table 11. Transparency results for Test Group 2.

The group of idioms with transparency 1 were remembered correctly with 56.67%. The idioms with transparency 2 were reproduced correctly with 49.33% and the transparency 4 idioms received a percentage of 37.78%. The intransparent idioms, those with transparency 5 were remembered correctly with only 27.50%, and therefore, the results of this group offer a steady decline from transparent idioms which were remembered correctly most frequently to intransparent idioms which received the smallest percentage of correct reproductions.

3.2.3. Metaphorical transparency

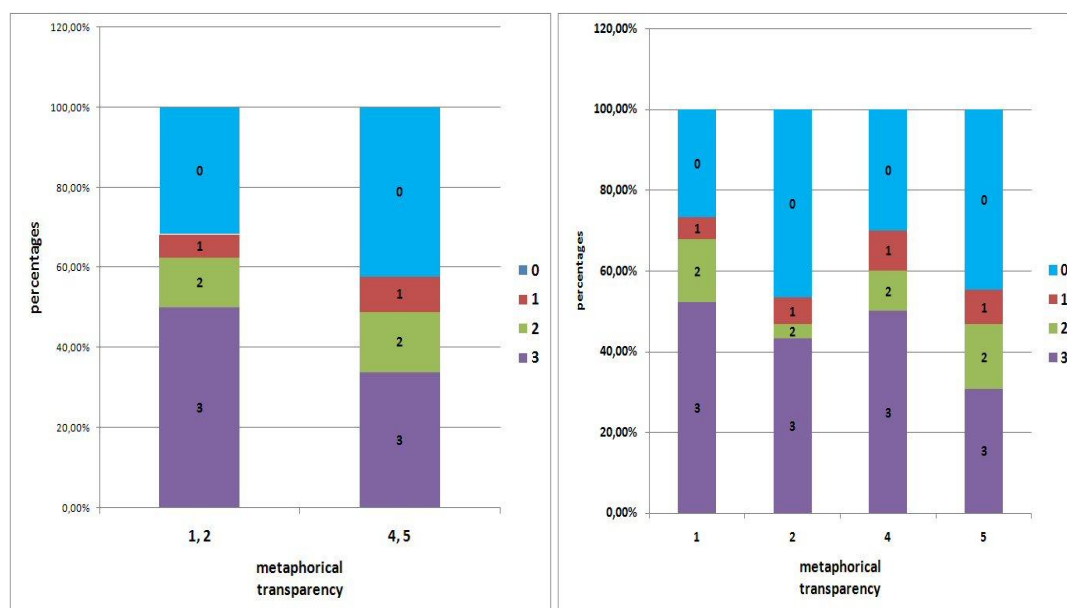


Table 12.a. Metaphorical transparency in 2 groups. 12.b. Metaphorical transparency TG 2.

If we again subdivide the metaphorical transparencies into two groups, namely transparent (metaphorical transparencies 1 and 2) and intransparent (metaphorical transparencies 4 and 5), we get the following results: the transparent group was remembered correctly with a percentage of 50% while the intransparent group was only reproduced correctly with 33.89%. Looking at the categories separately, the picture is not so clear anymore. Idioms with metaphorical transparency 1 were remembered correctly with 52.22%, and those with transparency 2 received 43.33%. However, idioms with transparency 4 again were reproduced correctly with 50%, i.e. more often than those with transparency 2. Then again idioms with metaphorical transparency 5 were reproduced correctly only with 30.67% which endorses the overall picture. As in Test Group 1, the intricacies again lie in the relationship between metaphorical transparencies 2, 4 and 5 and have to be further investigated.

3.2.4. Literalness

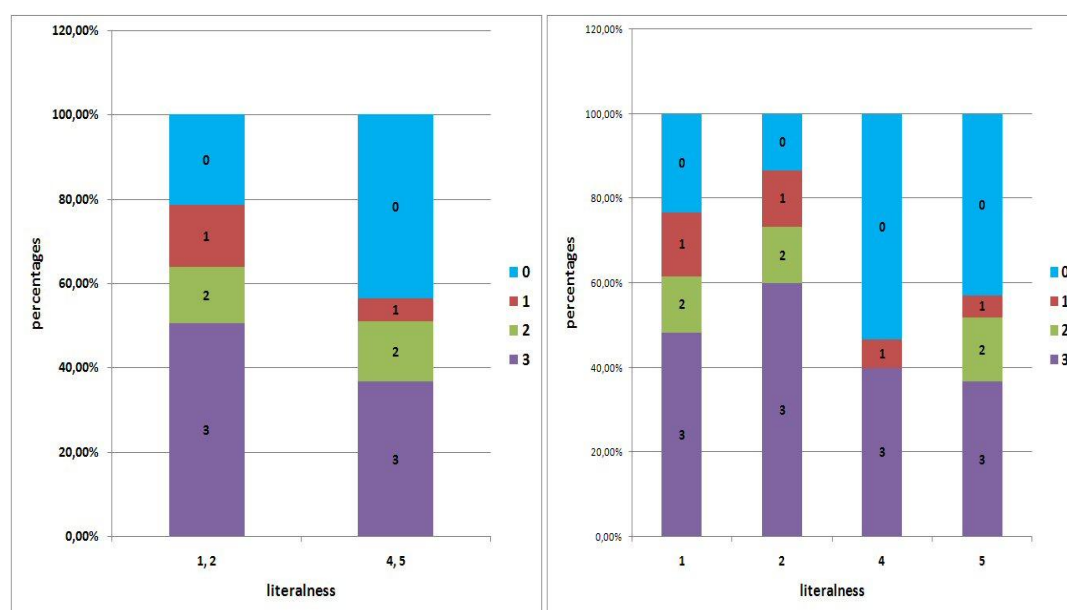


Table 13.a. Literalness in 2 groups for TG 2. 13.b. Literalness for Test Group 2.

If we again subdivide literalness into a transparent (literalness 1 and 2) and an intransparent (literalness 4 and 5) group, the idioms of the transparent group are remembered correctly with 50.67% while the idioms of the intransparent group are reproduced correctly with only 36.89%. Nonetheless, looking at the results for the separate literalness categories, a quite interesting picture emerges: while the idioms for literalness 1 receive 48.33%, the idioms for literalness 2 were remembered correctly with 60%. Then, the idioms with literalness 4 were reproduced correctly with 40% and the literalness 5 idioms with 36.67%. It would be interesting to find out why the literalness 2 idioms received a higher percentage than literalness 1 idioms. However, here, we also have to take other factors such as the semantic areas of the concepts the idioms refer to into consideration, because firstly, there were not as many idioms with literalness 1 and 2, and secondly, it is dubitable that the difference between literalness 1 and 2 is so great that it alone determines this difference in percentages. In fact, in Test Group 2, the idioms of the semantic area STUDYING, to which the idiom with literalness 2 belongs, were among the semantic areas which were remembered best.

3.2.5. Length

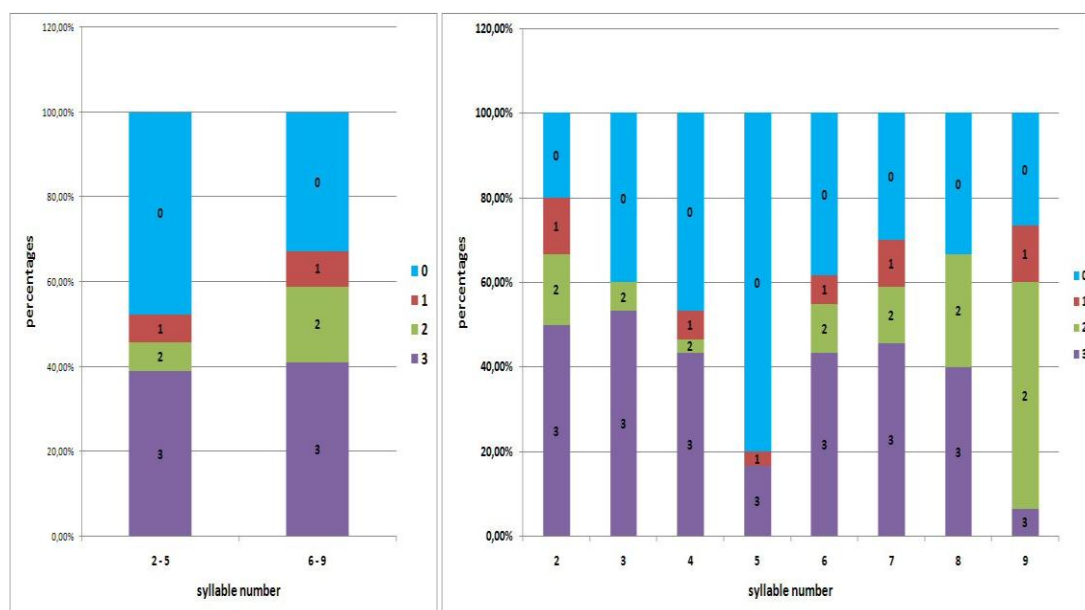


Table 14.a. Length in 2 groups TG 2. 14.b. Results for all syllable numbers for Test Group 2.

Firstly, the idioms were divided into short idioms (2-5 syllables) and long idioms (6-9 syllables). The results for these two groups showed very little difference: the short idioms were remembered correctly with 39.05% and the long idioms were reproduced correctly with 41.03%, so the difference lies in less than 2%. As in Test Group 1, the results for the individual syllable numbers offer a much jumbled picture. Two-syllable idioms were remembered correctly with 50%, three-syllable idioms received 53.33%, and idioms with four syllables were reproduced correctly with 43.33%. Five-syllable idioms received only 16.56%. Idioms with six syllables were remembered correctly with 43.33%, those with seven syllables received 45.56%, eight-syllable idioms received 40% and nine-syllable idioms only 7%. Therefore, it again seems dubitable that idiom length is a determining factor for idiom memorisation.

3.2.6. Semantic areas

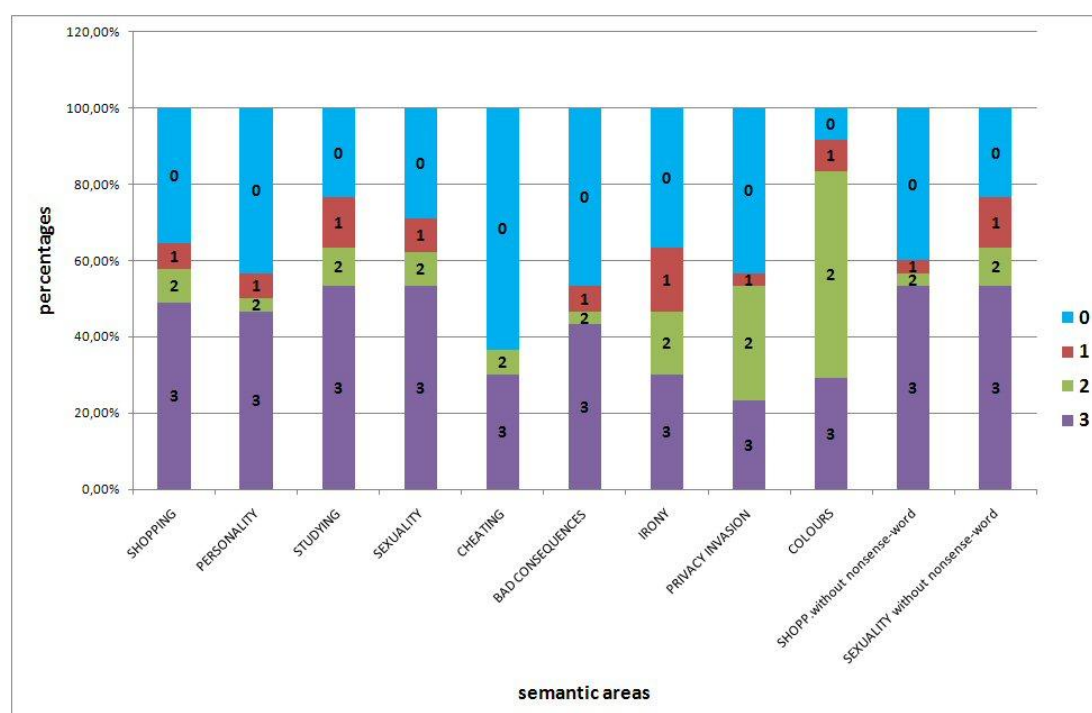


Table 15. Test Group 2 results for semantic areas with and without nonsense-words.

The results for the idioms' semantic areas in Test Group 2 are not as straightforward as in Test Group 1. In Test Group 2, the SHOPPING idioms were remembered correctly with 48.89% and without the nonsense-word idiom, this group received 53.33%. The idioms evolving around PERSONALITY were reproduced correctly with 46.67%, and those for STUDYING with 53.33%. The SEXUALITY idioms were remembered correctly with 53.33%, and the same result also was obtained for the SEXUALITY group without the idiom containing the nonsense-word. The idioms for the semantic are CHEATING received the percentage of 30% while the BAD CONSEQUENCES idioms received 43.44%. The IRONY idioms of which the meanings are the ironic contraries of the literal meanings were reproduced correctly with 30% whereas the PRIVACY INVASION idioms were only reproduced correctly with 23.33%. The idioms containing COLOURS received 29.12%. This means that the results for SHOPPING without the nonsense-word idiom, SEXUALITY and STUDYING are on par and received the highest percentages.

3.2.7. Funny/boring

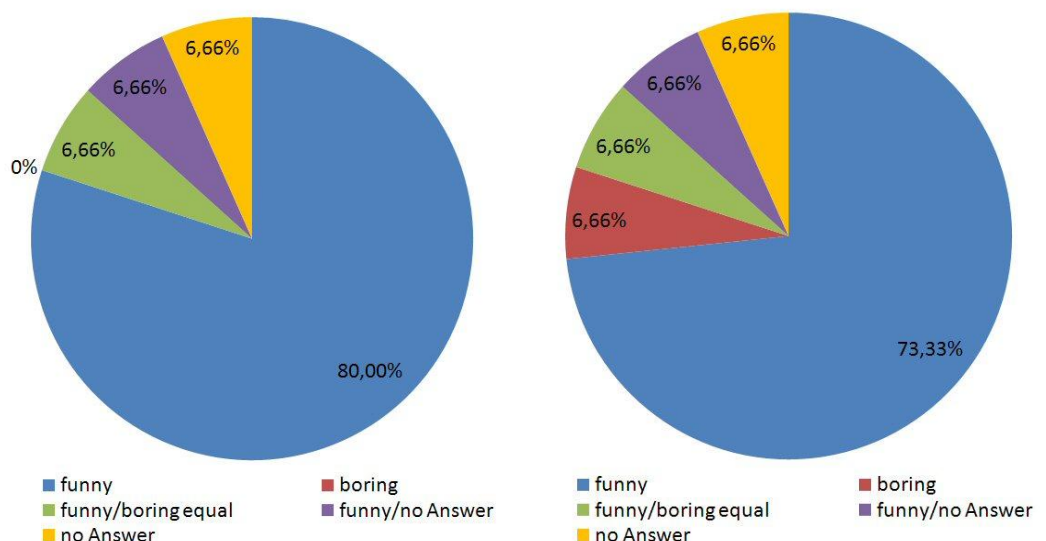


Table 16.a. Results for all correctness categories. 16.b. Results for category 'right'.

80% of Test Group 2 found that more idioms they remembered were funny than boring while no participants thought the contrary. 6.66% indicated that they found as many idioms they remembered funny as they found boring, and further 6.66% found half of the idioms funny while for the other half, they gave no indication. 6.66% did not give an indication as to whether they found an idiom funny or boring at all. 73.33% of participants remembered more idioms correctly which they found funny while 6.66% remembered more idiom correctly which they found boring. The number of correctly remembered idioms equalled funny and boring, or funny and no indication for 6.66% respectively. Further 6.66% remembered only idioms for which they gave no indication correctly.

3.2.8. Summary

The results for the three transparencies for Test Group 2 are not as straightforward as for Test Group 1. The general transparency results show a steady decline from transparent to intransparent with the transparent idioms receiving the highest percentage. With metaphorical transparency 1 was

remembered correctly with the highest percentage but is closely followed by transparency 4. With literalness, on the other hand, literalness 2 was remembered with the highest percentage. The length of idioms did not indicate any clear direction towards either long or short idioms, but the results were very mixed. The semantic area results show that the areas SHOPPING without the nonsense-word, STUDYING and SEXUALITY received the highest percentages with 53.33% each. However, their advantage is not as big as the advantages in Test Group 1. The idioms which received the highest percentages are *to set the plastic on fire*, *to be an Ignorant Lindsay*, as well as *to get an Ylang-Ylang rub* with 67%, and *to stack books* with 60%. *To fondle the splinters*, *to saddle somebody's zebra* and *to stick the green ribbon onto the book* received the lowest results with only 7%. The percentage of participants who remembered more funny than boring idioms correctly is 73.33%, while the percentage of participants who remembered more boring idioms correctly is only 6.66%.

3.3. Test Group 3

The participants of Test Group 3 were given the idioms and were asked to add the respective meanings. A blank version of the test can be found in Appendix 2, and the participants' results in Appendix 6. As with Test Group 3, it is assumed that the results will be biased towards the more transparent idioms, since an iconic relationship does not only imply that the form can easily be deduced from the meaning, but also that the meaning can easily be deduced from the form. Furthermore, in the pilot study, participants remembered between five to fifteen idioms and the tendency was more towards the five idioms which were the lower limit for the validity of the experiment. In the experimental run, however, most of the participants remembered more than 15 idiom meanings correctly, and only a small group of participants remembered less. 15 was thought to be the upper limit and results above this number would indicate that the task is too easy. The

percentages will be much higher than with the two other experimental groups, and we will see whether this experimental task will be invalidated by these results. However, at first, we shall take a look at the results.

3.3.1. Results for the individual idioms

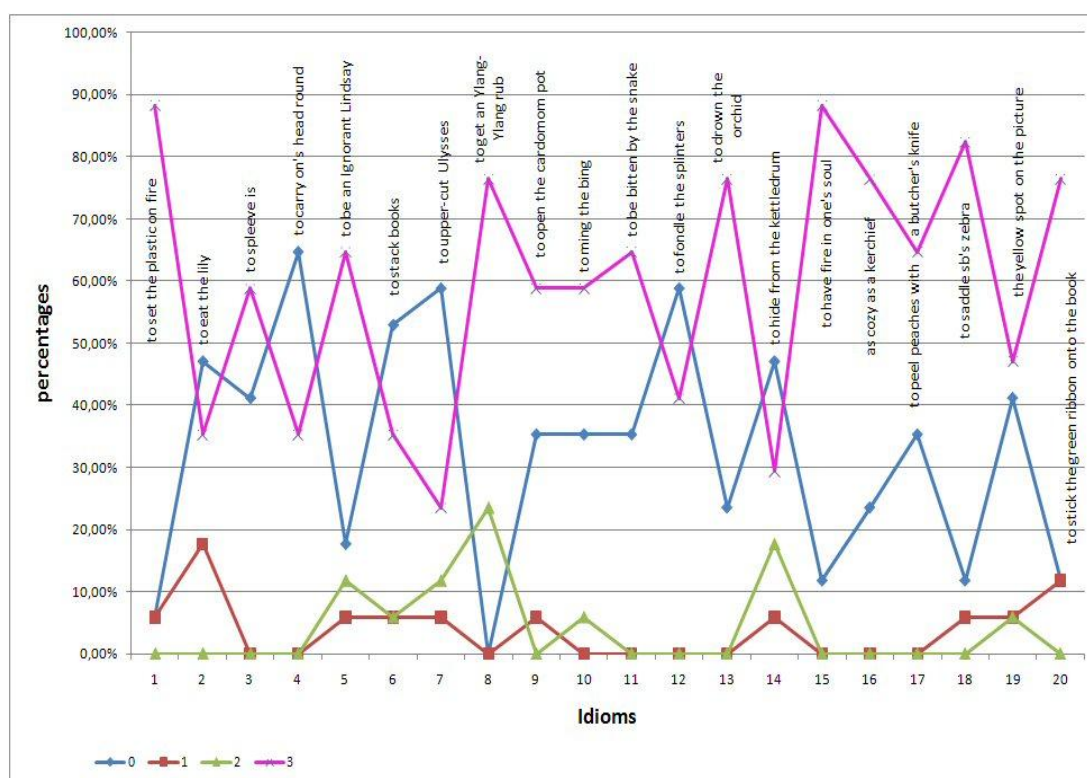


Table 17. Test Group 3 results for all idioms.

A considerable number of idioms in this Test Group received results of more than 60%. The idioms with the highest results are idiom 18 (*to saddle somebody's zebra*) with 82.35%, and idioms 1 (*to set the plastic on fire*) and 15 (*to have fire in one's soul*) with 88.24% each. Further idioms with high percentages are idiom 5 (*to be an Ignorant Lindsay*) with 64.71%, idiom 8 (*to get an Ylang-Ylang rub*) with 76.47%, idiom 11 (*to be bitten by the snake*) with 64.71%, idiom 13 (*to drown the orchid*) with 76.47%, idiom 16 (*as cozy as a kerchief*) with 76.47% as well, idiom 17 (*to peel peaches with a butcher's knife*) with 64.71% and idiom 20 (*to stick the green ribbon onto the book*) with 76.47%. Idioms which received the lowest results are idiom 7 (*to*

upper-cut Ulysses) with only 23.53% and idiom 14 (*to hide from the kettledrum*) with 29.41%.

3.3.2. Transparency

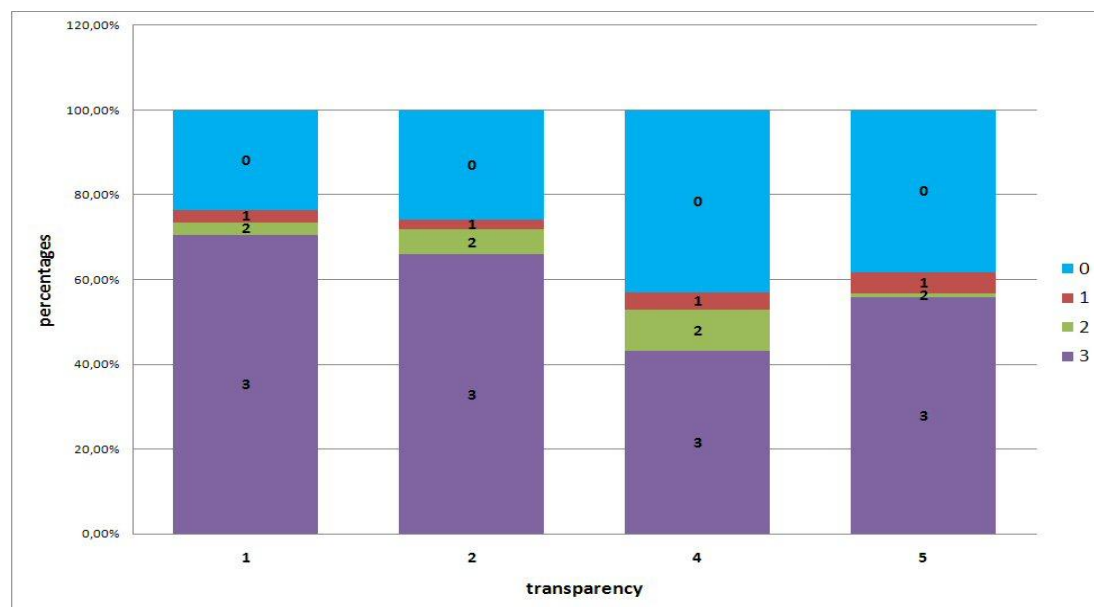


Table 18. Test Group 3 results for transparency.

The general transparency results of Test Group 3 can be compared to those of Test Group 1, i.e. transparency 5 received a higher percentage than transparency 4. Transparency 1 was remembered correctly with 70.59% and transparency 2 received a vote of 65.88%. Transparency 4 then was reproduced correctly with only 43.14% while transparency 5 got the result of 55.88%, which is more than 10% higher than the result of transparency 4. The possible reasons for this result shall be investigated later.

3.3.3. Metaphorical transparency

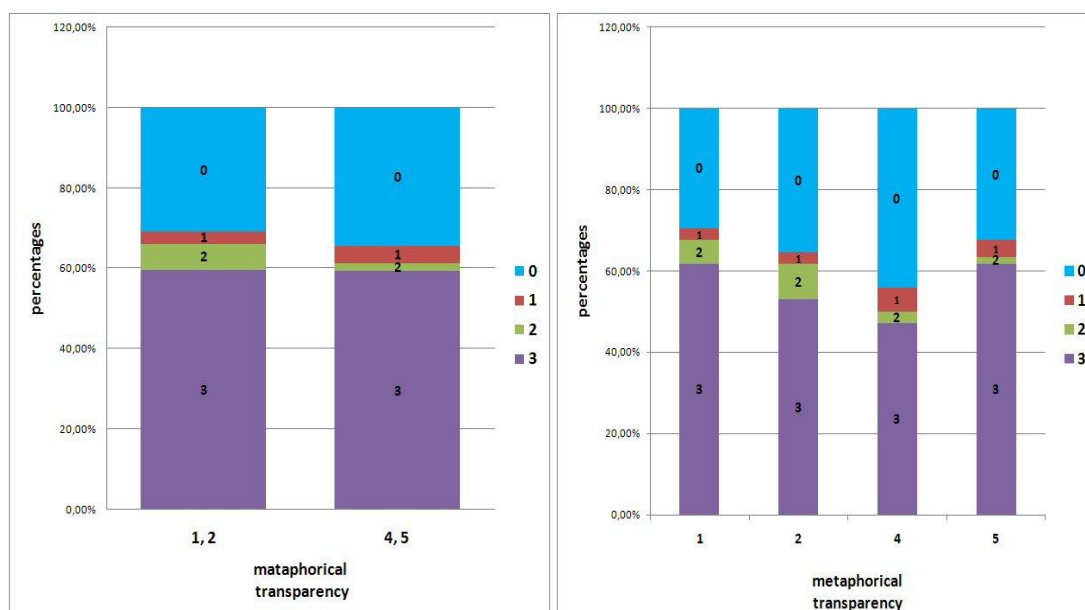


Table 19.a. Metaphorical transparency in 2. 19.b. Metaphorical transparency for TG 3.

If metaphorical transparency is seen as subdivided into two groups, transparent (metaphorical transparency 1 and 2) and intransparent (metaphorical transparency 4 and 5), the results only display minimal differences: the transparent meanings received a percentage of 59.56% and the intransparent group the result of 59.39%. Viewed separately, we get the following result: metaphorical transparency 2 was remembered correctly with 52.94% and transparency 4 received 47.06%. What is remarkable, however, it that metaphorical transparency 1 received 61.76% and this is the same result which also metaphorical transparency 5 received. This should indicate that metaphorical transparency and intransparency are not of importance for the memorisation of idiom meanings.

3.3.4. Literalness

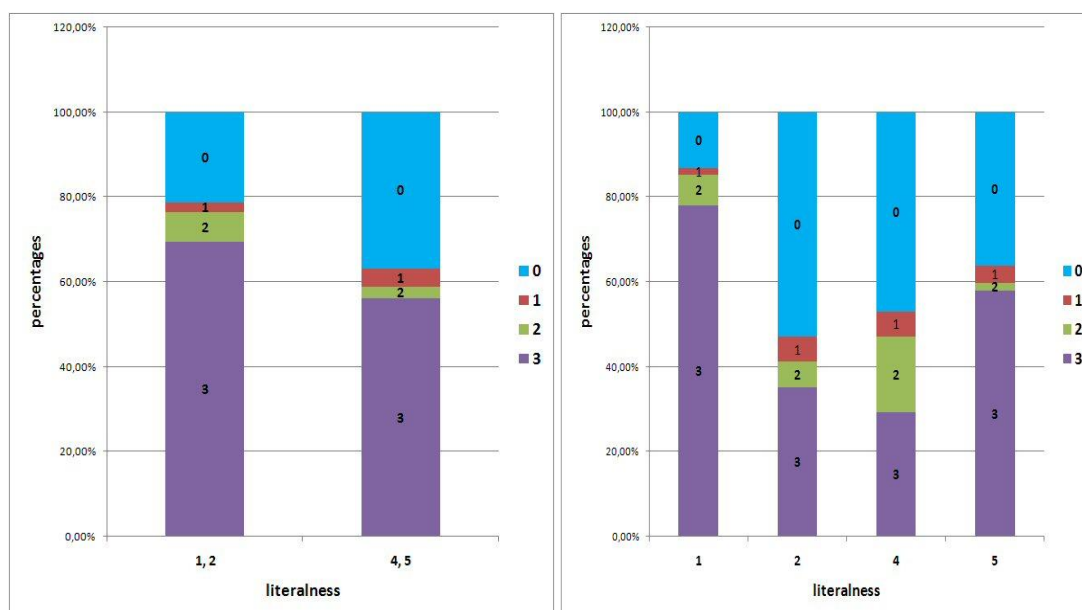


Table 20.a. Literalness in 2 groups for TG 3.

20.b. Literalness for Test Group 3.

If literalness is merged into two categories, transparent (literalness 1 and 2) and intransparent (literalness 4 and 5), the results are as follows: meanings of the transparent idioms were remembered correctly with 69.41% and meanings of the intransparent idioms with 56.08%. The four separate categories reveal that the tendencies go towards the very transparent and intransparent with literalness 1 meanings being remembered correctly with 77.94% and literalness 5 with still 57.98%. However, literalness 2 and 4 only were reproduced with 35.29% and 29.41% respectively. This means that literalness 1 is considerably favoured in memorisation of idiom meanings.

3.3.5. Length

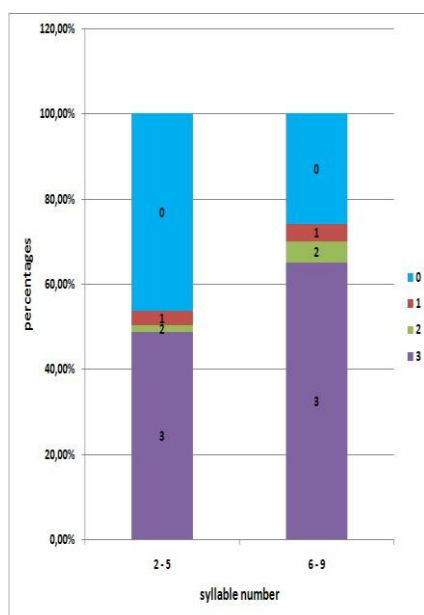
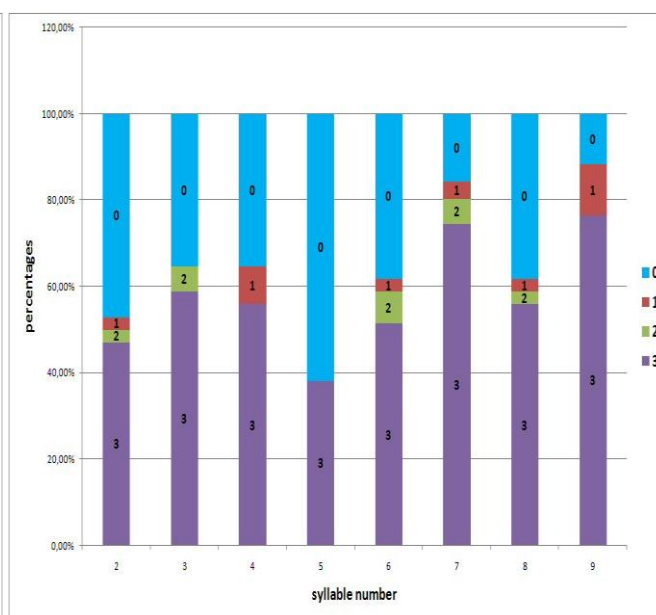


Table 21.a. Length in 2 groups.



21.b. Test Group 3 results for all syllable numbers.

With the summarisation of idioms into long (6 to 9 syllables) and short (2 to 5 syllables), the meanings for long idioms were reproduced correctly with 65.15% while the meanings for short idioms were only remembered correctly with 48.74%. The results for the individual lengths however again prove to be rather jumbled: the meanings for two-syllable idioms were remembered correctly with 47.06%, the meanings of idioms with three syllables with 58.82% and the meanings of four-syllable idioms with 55.88%. Meanings for idioms with five syllables received 38.24% and meanings for six-syllable idioms received 51.47%. The meanings of seven-syllable idioms were remembered correctly with 74.51% while the meanings of eight-syllable idioms again received 55.88%. Finally, meanings of idioms with 9 syllables were remembered correctly with 76.47%. Nevertheless, for the meanings there seems to be a slight tendency towards longer idioms.

3.3.6. Semantic areas

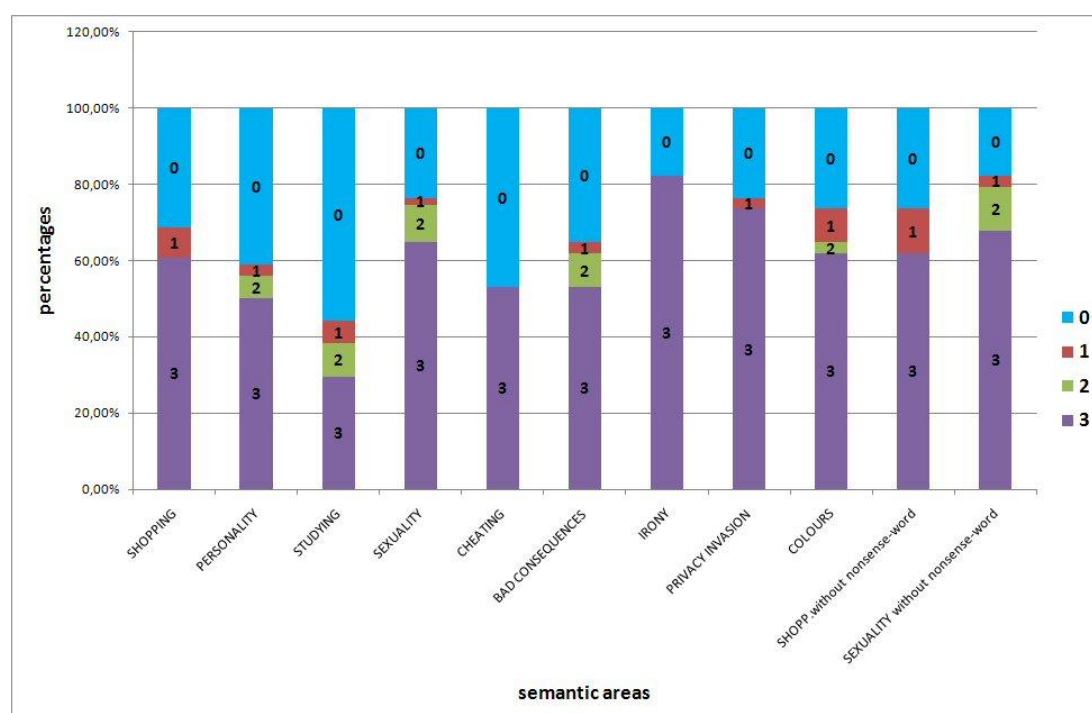


Table 22. Test Group 3 results for semantic areas with and without nonsense-words.

As the correctness of memorisation of meanings in connection with semantic areas is concerned, the predomination of the areas SHOPPING and SEXUALITY in Test Groups 1 and 2 is challenged. The meanings of the SHOPPING idioms were remembered correctly with 60.78% and without the nonsense-word idiom with 61.76%. The meaning of PERSONALITY idioms were reproduced correctly with 50% and those of the STUDYING idioms with only 29.41%. The meanings of SEXUALITY idioms were remembered correctly with 64.71% and without the nonsense-word idiom even with 67.65%. The CHEATING idiom meanings received 52.94% which is also the result for the BAD CONSEQUENCES idioms. Then the meanings of the IRONY idioms were remembered correctly with 82.35% and the PRIVACY INVASION idiom meanings with 73.53%. The meanings of idioms containing COLOURS received 61.76%. This means that the IRONY and the PRIVACY INVASION idioms meanings were remembered best.

3.3.7. Funny/boring

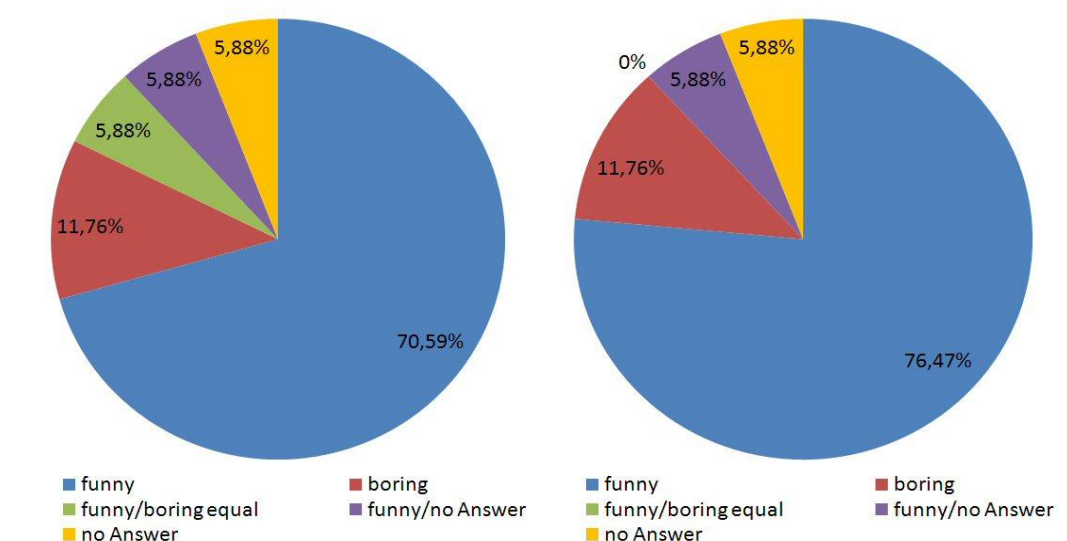


Table 23.a. Results for all correctness categories. 23.b. Results for category 'right'.

70.59% of participants indicated that more of the idioms for which they remembered the meanings were funny than boring while 11.76% thought that more idioms were boring. For 5.88% each, funny and boring idioms of funny idioms and idioms for which they gave no indication were on par, and further 5.88% did not indicate whether they found idioms funny or boring. 76.47% remembered more meanings for funny idioms correctly whereas 11.76 participants remembered more meanings for boring idioms correctly. For no participants there was a tie between funny and boring while for 5.88% a tie resulted between funny and no indication. 5.88% did not indicate any opinion on funny or boring at all.

3.3.8. Summary

In Test Group 3, all transparency categories follow the same pattern where there is a decline in the percentage of correctness from 1 to 4 and then a rise to transparencies 5. Idiom length does not seem to be a clear indicator for the ease of memorisation of idiom meanings as the results do not form a clear line but vary. However, there seems to be the slight tendency that there

are higher results for the meanings of longer idioms. The semantic areas of idioms show a different picture than in the other two test groups. While the percentages for SHOPPING and SEXUALITY idioms are still high, they are exceeded by the results for IRONY and PRIVACY INVASION. The meanings of many idioms were remembered correctly with a high percentage and the idiom meanings with the highest percentages are of the idioms *to set the plastic on fire*, *to have fire in one's soul* and *to saddle somebody's zebra*. The idioms with the lowest results are *to upper-cut Ulysses* and *to hide from the kettledrum*. Also for idiom meanings, the percentage of participants who remembered more meanings for funny idioms correctly than for boring idioms is much higher than for participants who remembered more meanings for boring idioms correctly: it is 76.47% and 11.76% respectively.

These were the results for the individual variables for all three groups. They display some very interesting findings which are worth of further scrutiny and investigation, and they also point towards the verification of some hypotheses. This will however be treated in the next chapter. Before that, let us take a look at what similarities there are between the results of the three groups and what the main differences are.

3.4. Similarities and differences between the three groups

As expected, the results of the individual groups were neither always similar nor utterly different. Let us firstly look at the commonalities: there were some tendencies that surfaced in more than one group and which seem remarkable. To begin with, in both Test Groups 1 and 3, transparency 5 had a higher percentage of correct answers than transparency 4, while there was a decline from transparencies 1 to 4. This means that the idioms or the meanings of the idioms with transparency 5 were remembered more correctly than those of transparency 4. In Test Group 2 however the results exhibit a fall from transparency 1 to transparency 5 with the highest percentage for 1 and the lowest for 5. Then, in all groups, when metaphorical transparencies

are subsumed into a transparent (metaphorical transparencies 1 and 2) and an intransparent group (metaphorical transparencies 4 and 5), the transparent group received a higher percentage of correct answers than the intransparent group. In Test Group 3, however, the difference amounts to only 0.25% which is negligible and the results should rather be seen as on par. In Test Groups 1 and 2, if metaphorical transparencies are viewed separately, idioms with metaphorical transparencies 1 and 4 received higher percentages than idioms with metaphorical transparencies 2 and 5. In contrast to this, in Test Group 3, metaphorical transparencies 1 and 5 showed the same results. In addition to metaphorical transparency, also literalness in all three groups shows that the idioms which belong to the transparent group (literalness 1 and 2) show a considerably higher percentage of correct reproductions (the differences are at least 10%) than the idioms of the intransparent group. Viewed separately, results for literalness 5 are higher than literalness 4 in both Test Group 1 and Test Group 3, and in Test Group 3 it is even higher than the result for literalness 2. In contrast to this, Test Group 2 shows the highest percentages for literalness 2 and a fall towards literalness 4 as well as 5. In all three groups, shorter idioms (idioms with 2 to 5 syllables) have lower percentages of correct reproductions than long idioms (6 to 9 syllables). In Test Groups 1 and 2, the difference however is marginal and lies below only 2%. If length is viewed individually, both Test Group 1 and 2 do not exhibit any tendency towards either longer or shorter idioms as results are much jumbled. Test Group 3 however exhibits a slight tendency towards the longer idioms. The semantic area-results of Test Group 1 and 2 indicate that the idioms for the areas SEXUALITY and SHOPPING are remembered best, with and without the nonsense-word idioms which were also added for these two areas. Furthermore, for these two Test Groups, the semantic areas PRIVACY INVASION and COLOURS received the lowest percentage of correct reproductions. The main difference in Test Group 3 concerning this factor is that while SHOPPING and SEXUALITY idioms also received high percentages, those of IRONY and PRIVACY INVASION are even higher. The idioms reaching the highest percentages of correct reproductions in all three

Test Groups are *to set the plastic on fire*, and *to get an Ylang-Ylang rub*. The idiom *to be an Ignorant Lindsay* reached a high percentage in both Test Groups 2 and 3. The most salient difference with regard to the individual idioms is that in Test Group 3, *to saddle somebody's zebra* reached the third-highest percentage while in the other two Test Groups, it received one of the lowest percentages of correct reproductions. Also the idiom *as cozy as a kerchief*, which was never remembered correctly in Test Group 1 and received a low percentage in Test Group 2, reached a high percentage in Test Group 3.

Based on the results, we can say that some factors actually do seem to influence the memorisation of idioms. But whether they influence memorisation in the directions which were proposed in the hypotheses or if the influence is different shall be investigated in the next chapter. There it will be discussed what the results indicate in connection to the hypotheses and consequently whether the hypotheses are supported by the results.

4. Implications of the results

In the beginning of this thesis, I have formulated hypotheses about the influence of the factors transparency, metaphorical transparency, literalness, length, semantic areas and pleasantness on the memorisation of idioms. However, the proposed hypotheses are only conjectures based on literature. I would now like to discuss them together with the results of the experiment.

4.1. Transparency

Firstly, I am going to examine the hypothesis concerning transparency. To recapitulate briefly, the hypothesis suggests that transparent idioms are remembered better than intransparent or opaque idioms and is based on Cieslicka's (2006) model of idiom processing. This model is called 'literal-salience resonant model of L2 idiom comprehension' and in it, Cieslicka claims that the literal meanings of constituent words in transparent as well as opaque idioms are salient, i.e. cognitively prominent in idiom comprehension. This also means that they are prominent in idiom processing. This implies that they are represented more strongly in the mental lexicon and moreover, also get activated more strongly when an idiom is processed. Cieslicka's theory is consistent with the general process of L2 learning because learners usually know the literal meaning of a word before encountering it in an idiom. Her model was supported by experiments with Polish L2 speakers of English (Cieslicka 2007). It can be assumed that if literal meanings of idiom constituents play such a pivotal role in idiom processing, they should also have considerable influence on the memorisation of idioms while the influence of figurative meanings should be secondary. Consequently, I have hypothesised that transparent idioms are remembered better than opaque idioms because the idiomatic meaning of opaque idioms is not directly linked to the literal meanings of the constituent words.

Let us take a look at the results of Test Group 1. This is the group of with the most significant results. In the test design, there is no bias towards either literal or opaque idioms because the participants of this Test Group did not receive any incentives for recalling idioms but only a blank sheet. In Test Group 1, the most transparent idioms, i.e. idioms with transparency 1 (*to set the plastic on fire, to be an Ignorant Lindsay, to be bitten by the snake, to peel peaches with a butcher's knife*) had the highest percentage of correct reproductions (40%), followed closely by the idioms with transparency 2 (*to stack books, to get an Ylang-Ylang rub, to drown the orchid, to have fire in one's soul, the yellow spot on the picture*) with 38.56% of correct reproductions. The opaque idioms were not remembered as correctly as the transparent idioms were: transparency 4 idioms (*to upper-cut Ulysses, to hide from the kettledrum, as cozy as a kerchief*) were remembered correctly with 22.22% and transparency 5 idioms (*to eat the lily, to spleeve it, to carry one's head round, to open the cardamom pot, to ming the bing, to fondle the splinters, to saddle somebody's zebra, to stick the green ribbon onto the book*) with 30.83%. As already mentioned, the better results for the transparency 5 idioms might be explained by looking at the semantic areas the idioms belong to. The transparency 4 idioms belong to the areas STUDYING, BAD CONSEQUENCES and IRONY which were not particularly strong in the semantic area test. The transparency 5 idioms, on the other hand also included idioms which belong to the areas SHOPPING and SEXUALITY. Both areas attained very high results.

The results of Test Group 2 are likely to display a bias towards transparent idioms because the task for this group was to fill in the idioms for the given idiomatic meanings. The iconic relationship between constituent words and idiomatic meanings in transparent idioms can explain this bias in idiom reproduction. The results of the second Test Group form a steady decline from transparency 1 to transparency 5: Idioms with transparency 1 were remembered correctly with 56.67%, those with transparency 2 with 49.33%, transparency 4 idioms with 37.78% and transparency 5 idioms with 27.50%. The results of Test Group 3, which were again biased towards transparent idioms because of the test design, are as follows: Transparency 1 and 2

idioms only displayed a slight difference with 70.59% and 65.88% respectively, transparency 4 idioms received 43.14% and transparency 5 idioms 55.88%.

This means that in all three Test Groups, the most transparent idioms, i.e. those displaying transparency 1, attained the highest percentages of correct reproductions. Furthermore, in all three groups, the transparency 2 idioms received the second highest percentage of correct reproductions. Also the percentages of the correctness category 'wrong/ no answer given' are the lowest for both of the two transparencies in comparison to transparencies 4 and 5 in all three groups. Therefore, it can be asserted that the results coincide with the hypothesis and thus, the hypothesis that participants remember transparent idioms better than semantically opaque idioms can be confirmed.

If idioms are looked at individually, however, the case is not completely straightforward. In all three groups, the idioms *to set the plastic on fire* and *to get an Ylang-Ylang rub* were among those with the highest percentages of correct reproductions, and the idiom *to be an Ignorant Lindsay* received one of the highest percentages in Test Group 2 as well as Test Group 3. All three idioms are transparent. In Test Group 1, however, the idiom *to ming the bing* attained the second highest percentage and since it contains nonsense-words, it is opaque. So how can this result be explained? The cause seems to lie in the semantic area to which the idiom refers. It belongs to the area SEXUALITY and means 'to have sexual intercourse'. In Test Group 1, SEXUALITY was the strongest semantic area. As low percentages are concerned, there are no idioms which received the lowest percentages in all groups, but the idioms *to fondle the splinters* and *to saddle somebody's zebra* attained one of the lowest percentages in Test Groups 1 and 2, and both idioms belong to transparency 5 and thus are opaque. Therefore, the results for the individual idioms also confirm the hypothesis that transparent idioms are retained better than opaque idioms.

What is more, the confirmed hypothesis does not only reflect findings in current literature, but the results are also consistent with Schmitt, Grandage

and Adolphs' (2004: 141-143) outcomes for formulaic sequences. In an experiment, they have shown that native, as well as non-native speakers of English performed better when sequences were transparent, and also remembered transparent sequences more constantly. Since idioms belong to the vast group of formulaic sequences but are situated at the intransparent end, it was assumed that the results would agree with Schmitt, Grandage and Adolph's results. This can now be confirmed.

4.2. Metaphorical transparency

The results have already shown that general transparency exerts a strong influence on the memorisation of idioms, which only in some instances seems to be secondary to the semantic area of the concept the idiom refers to, i.e. to the semantic area of the idiomatic meaning. The second hypothesis which is going to be looked at will investigate the role of metaphorical transparency in the memorisation of idioms. I have hypothesised that idioms which are metaphorically transparent are easier to remember than idioms which are intransparent on the metaphorical level. The basis for this hypothesis can be found in Lakoff's (1987) theory of motivation.

In his theory, Lakoff claims that complex word forms or idioms are learnt more easily and are easier to remember if they "use existing patterns" (Lakoff 1987: 438) because they are motivated by metaphorical senses of the words. This means that the idiom *to keep someone at arm's length* is motivated by the metaphors "INTIMACY IS PHYSICAL CLOSENESS" (Lakoff 1987: 448) and "SOCIAL (or PSYCHOLOGICAL) HARM IS PHYSICAL HARM" (Lakoff 1987: 448) and also by the common knowledge which is related to these metaphors. Motivation can therefore be understood as a link between the literal meanings of the constituent words and the idiomatic meaning of an idiom. It does not explain why an idiom means what it does, but rather makes sense of the idiomatic meaning (Lakoff 1987: 437-448). I have defined metaphorical transparency by saying that once a speaker realises that the

literal meanings of the constituent words form metaphors for the idiomatic meaning through the common knowledge of a speech community, the idiom becomes transparent. If a speaker does not notice the metaphor, the idiom may stay opaque. Along the lines of Lakoff's motivation, idioms which are metaphorically transparent are hypothesised to be remembered better than idioms which are metaphorically intransparent.

Let us once again take a look at the results of all three groups. In Test Group 1, metaphorical transparencies 1 and 2 summed up into one group were remembered correctly with 35.83% and metaphorical transparencies 4 and 5 with 31.67%. If the categories are treated separately, then they nearly form a steady decline from transparency 1 to 5, only transparency 2 stands out as this category got the smallest percentage of correct replications. However, both of the transparency 2 idioms belong to the semantic area BAD CONSEQUENCES, which was among the areas with the smallest percentages of correct replications. Therefore, it is quite likely that this number can be accounted for by the seemingly great influence of semantic areas on idiom retention.

The results from Test Group 2 are somewhat similar. The results for transparency 1 are slightly higher than for transparency 4 and metaphorical transparency 5 attained again a comparatively lower percentage. Incidentally, the percentage for the latter is the same as in Test Group 1. Metaphorical transparency 2 again falls out of the line once more with a lower percentage than transparency 4, albeit the difference is smaller. Generally, the results are higher than for Test Group 1, especially on the more transparent side, which is most likely an effect of the test design which creates a bias towards transparent idioms. The results of Test Group 3 differ. Metaphorical transparency 1 and 5 attained the same percentage (61.76%), which is also the highest percentage of this Test Group. Moreover, if the results are grouped into a transparent (metaphorical transparency 1 and 2) and an intransparent (metaphorical transparency 4 and 5) group, then they exhibit only a minimal difference of 0.17%. In this group, metaphorical transparency 4 received the lowest percentage, which may again be due to the influence of

semantic areas: the two idioms belonging to this group are *to stack books* and *to open the cardamom pot*. *To stack books* belongs to the semantic area STUDYING, which attained the lowest percentage of the areas in this group and while *to open the cardamom pot* belongs to the area SEXUALITY which attained a relatively high percentage in this group, the result still cannot compensate for the STUDYING area. But what do these slightly jumbled results indicate about the proposed hypothesis?

The hypothesis was that metaphorically transparent idioms are remembered better than metaphorically intransparent idioms. Therefore, the results of Test Groups 1 and 2 confirm the hypothesis, as in both groups there is a steady decline of percentages from metaphorical transparency 1 to metaphorical transparency 4 and also 5. This means that the variable metaphorical transparency actually influences the retention of idioms. To recapitulate, the task in Test Group 1 was to write down any idioms which were remembered from session one of the experiment without any stimulus. The task of Test Group 2 was to reproduce the idioms to the given meanings. Consequently in both Test Groups, the task was to recall the idioms. Despite the effect of metaphorical transparency on the retention of idioms, the variable semantic area of the concept to which an idiom refers seems, in some cases, to be primary over the variable metaphorical transparency: it can account for the low results for metaphorical transparency 2 (*to drown the orchid* 'to do too much of a good thing so that it turns out bad', *to hide from the kettledrum* 'to run away from bad consequences') in both Test Group 1 and Test Group 2. Where Test Group 3 is concerned, the case looks somewhat different. The task of this group was to reproduce the meanings for the given idioms; hence, the focus does not only lie on idioms, but also on idiom meanings. Still, it was reasonable to assume that the hypothesis also applies to idiom meanings, as the connection between the idiomatic meaning and the metaphor which the constituent words form for the idiomatic meaning does exist. Yet the results seem to dismiss the hypothesis because the meanings for the metaphorically most transparent idioms were remembered as well as the meanings for the metaphorically most intransparent idioms. A first idea for the cause was that the semantic areas which were particularly strong in

this group had such a considerable effect that even the metaphorically most intransparent meanings were remembered well, but it turned out that as meanings are concerned, semantic areas do not seem to have a very great or similar influence on memorisation as in the other Test Groups. The only influence which sticks out seems to be the area IRONY (*to have fire in one's soul* 'to be a rather boring person', *as cozy as a kerchief* 'uncomfortable'), which however is not truly a semantic area but rather a rhetorical device in which the intended meaning is the contrary of what is actually said. In the other two Test Groups, IRONY was among the areas with lower results but in Test Group 3, IRONY attained the highest percentages in comparison to the other areas. This rhetorical device seems to be easily detectable in idioms and therefore the meaning can be deduced more easily than if an idiom is based on a metaphor.

It seems that metaphorical transparency does not significantly influence the retention of idiomatic meanings. Thus, the hypothesis that the meaning of metaphorically transparent idioms are remembered better and more easily than the meanings of metaphorically intransparent idioms has to be rejected on evidence of the Test Group 3 results. However, it has to be highlighted that if not idiom meanings but idioms themselves are concerned, the results of Test Groups 1 and 2 support the hypothesis. Thus, the hypothesis that metaphorically transparent idioms are remembered better than metaphorically intransparent idioms has been confirmed.

4.3. Literalness

The hypothesis about the connection between literalness and the memorisation of idioms is based on Cieslicka's (2007) findings in an experiment about literal and figurative meanings in idiom processing. According to Cieslicka, the dimension of literality in an idiom specifies the plausibility of the literal meanings of the constituent words of an idiom to be the appropriate or intended meanings in a certain context. If this is the case,

the idiom has high literality. (Cieslicka 2007: 40) A good example for an idiom with high literality is *to spill the beans*. In certain contexts, the idiomatic meaning ('to reveal or make known a secret, piece of information, etc.' LDIE) is applicable, while in other contexts, the literal meanings of the constituent words are appropriate, and therefore, *to spill the beans* is literal or has high literality. Titone and Connine (1994 referred to in Cieslicka 2007: 40) have found out that for L1 speakers, literality predicts a stronger activation of literal meanings than of idiomatic meanings and the literal meanings also stay activated if they are plausible for the idiom's interpretation. In her experiment, Cieslicka (2007) has found out that literality also causes activation of literal meanings with L2 speakers as well. Literalness means that the literal meanings of the constituent words form the basis of the idiomatic meaning and therefore are vital for interpreting an idiom correctly. The hypothesis for literalness is that as with literality, it can be assumed that literal meanings are highly activated in idioms which are transparent on the level of literalness and therefore, those idioms should be remembered better than idioms which are intransparent on the level of literalness, i.e. idioms which do not have the literal meanings of their constituent words as the basis for their idiomatic meaning.

We shall briefly review the results for the three Test Groups. In Test Group 1, the difference between the idioms which are transparent (literalness 1 and 2) and the intransparent idioms (literalness 4 and 5) amounts to 10.66% with transparent idioms attaining the higher percentage. Literalness 1 idioms (*to be an Ignorant Lindsay*, *to have fire in one's soul*, *as cozy as a kerchief*) received the highest percentage of correct reproductions, followed by literalness 2. Literalness 5 idioms attained 1.9% percent less than literalness 2, so if only these three categories are taken into account, the results display merely a slight but yet steady decline. Just the literalness 4 idiom (*to hide from the kettledrum*) stands out, as it received the smallest percentage with only 20%. However, this low percentage can once again be explained by the semantic area: the literalness 4 idiom belongs to the semantic area BAD CONSEQUENCES, which attained nearly the lowest results in this Test Group.

The results for Test Group 2 and the two groups of transparent (literalness 1 and 2) and intransparent (literalness 4 and 5) idioms are comparable to the results of Test Group 1 as the transparent idioms attained 13.78% more correct reproductions than the idioms of the intransparent group. Treated separately, however, the results for the four categories are rather different: Literalness 1 attained a percentage of 48.33 while literalness 2 (*to stack books, to get an Ylang-Ylang rub*) received 60%. From there, the results fall again to 40% for literalness 4 and 36.67% for literalness 5 (*to set the plastic on fire, to eat the lily, to spleeve it, to carry one's head round, to upper-cut Ulysses, to open the cardamom pot, to ming the bing, to get bitten by the snake, to fondle the splinters, to drown the orchid, to peel peaches with a butcher's knife, to saddle somebody's zebra, the yellow spot on the picture, to stick the green ribbon onto the book*). The high results of literalness 2 idioms can be explained by looking at the semantic areas of the idioms because they belong to the areas STUDYING and SEXUALITY, which both were very strong in this Test Group. The difference between literalness 1 and 2 is still remarkable since the test design predicts a bias towards transparent idioms, but it should not be over-interpreted. After all, the difference between the idioms of literalness 1 and 2 is not so great.

The results for Test Group 3 differ significantly from the results of the first two Test Groups. The results of the transparent and intransparent groups are comparable to the other two test groups because the transparent group attained 13.33% more correct reproductions of the idioms' meanings than the intransparent group. If the four transparencies are treated separately, however, we can notice the difference: Literalness 1 attained the very high percentage of 77.94%, followed by literalness 5 with 57.98% and only then literalness 2 with 35.29% and literalness 4 with 29.41%. The especially high result for literalness 1 is due to the prominent results of the IRONY idiom meanings in this group to which two of the literalness 1 idioms belong, and the literalness 5 idioms also belong to rather strong semantic areas. Yet in spite of the semantic areas, the results seem to go along with the Test Group 3 results of metaphorical transparency where metaphorical transparency 1 and 5 idiom meanings even attained the same percentage. Another possible

reason for the Test Group 3 results might be that the idioms were chosen according to their semantic areas as well as their general transparency, i.e. one transparent and one intransparent idiom per semantic area and one idiom with nonsense-words for the presumably strong semantic areas to test whether the area actually is that prominent. Therefore, metaphorical transparency and literalness were secondary categories which were only appointed at a later point when the pilot showed that general transparency ratings sometimes differed widely between the participants. Therefore, they do not have an evenly distributed number across the individual metaphorical transparencies and literalness categories. The number of literalness 5 idioms is very great, hence, and since some of them belong to strong semantic areas, the factors of number and semantic area may enforce each other. Yet, the influence of semantic areas must not be underestimated.

After the treatment of the results, let us return to the hypothesis on literalness and see whether the results confirm or reject it. In all three Test Groups, the transparent literalness idioms, i.e. idioms with literalness 1 and 2, received a higher percentage than the intransparent idioms (literalness 4 and 5). Therefore, it can be assumed that literal meanings are actually activated in idiom processing. Furthermore, despite the high results for literalness 5 idioms in Test Group 3, the transparent idiom meanings were still remembered better than the meanings of intransparent idioms, so literalness also has the hypothesised effect on idiom meaning which was assumed for idioms themselves. The effect of the semantic areas which are sometimes prominent has already been seen in connection to the variables transparency and metaphorical transparency and can again be attested in connection with literalness, where it is likely to be the reason for some of the jumbled literalness results. This means that the hypothesis that idioms which are transparent on the level of literalness are remembered better than idioms which are intransparent on the level of literalness can be confirmed, but once again, attention has to be paid to the seemingly immense role of semantic areas as well.

4.4. Length

I have measured the length of idioms by the number of syllables an idiom displays instead of the number of words, because words are of various lengths (i.e. syllable numbers) and consequently, this measuring would not be comparable. For example, the idioms *to drown the orchid* and *to saddle somebody's zebra* both consist of three words, but the first has four syllables while the latter consists of seven syllables. This means that even though both idioms consist of three words, the learning burden is not comparable.

The hypothesis on idiom length is based on two principles of language, namely the principle of least effort and the principle of economy. The principle of least effort denotes that all behaviour, which of course also includes language behaviour, is guided by the motive for it to be accomplished with as little exertion as possible. For idioms this would mean that shorter idioms are favoured because they pose less effort in both storage and production. The principle of economy can be found in various theories. In the Chomskyan sense, it denotes that in generative phonology, the preferred analyses use “fewer FEATURES and RULES” (Chrystal 2003: 155). ‘Fewer features’ in connection to idioms would mean that shorter idioms are preferred because they are more economical to analyse. In structuralist theories, the principle of economy refers to “the systematic organisation of linguistic inventories” (Rizzi 2004: 336). Therefore, again shorter idioms would be more economical as less information has to be stored in the mental lexicon. Derived from these principles, in chapter 1.3 I have hypothesised that short idioms, i.e. idioms with a smaller number of syllables are remembered better than long idioms.

Before confirming or dismissing the hypothesis, we shall look at the results of the three Test Groups. In Test Group 1, the difference between short idioms (2-5 syllables) and long idioms (6-9 syllables) is only marginal and amounts to 1.47% in favour of the long idioms. If we inspect all syllable numbers separately, the picture which presents itself is not straightforward at all. There is neither a tendency towards shorter, nor towards longer idioms. The three-syllable idiom *to ming the bing* received the highest percentage but this is

most likely explained by the semantic area SEXUALITY as well as by the phonotactic criterion that the idiom rhymes. The idioms with five syllables, *to carry one's head round* and *to fondle the splinters* attained the lowest percentage.

The results for Test Group 2 are not vastly different. The long idioms are remembered better than the short idioms with a minimal difference of 1.98%. This difference again seems neglectable. As the individual idioms are concerned, the results again are quite jumbled, although idioms with two and three syllables received a slightly higher percentage than other idioms. However, this difference is so small that it may only be considered a negligible tendency and it should be kept in mind that the results for the trisyllabic idiom is influenced by its semantic area SEXUALITY and by the fact that the idiom rhymes.

The results for Test Group 3 are more clear cut, at least if the results are divided into the meanings for short and long idioms. In Test Group 3, the meanings for long idioms attained a percentage of 65.15 while the meanings for short idioms only attained 48.74%. This constitutes a difference of 16.41%. The results for the meanings of the individual idioms are as jumbled as in the other two Test Groups, but there indeed seems to be a conspicuous tendency towards the meanings of longer idioms. Even the meaning of the nine-syllable idiom attained a very high percentage in this Test Group, whereas this idiom attained only very low results in the other Test Groups. An explanation for this tendency towards longer idioms may be found in the test design of this group. In contrast to the other groups, what was aimed at here were the meanings of the idioms and not the idioms themselves. Participants were given the idioms and had to add their meanings. And the longer an idiom is, the more possibilities there are for it to trigger the correct idiomatic meaning, or the more help there is for the participants to deduce the correct idiomatic meaning. A short idiom offers much less help in finding its meaning.

Let us return to the hypothesis. On the basis of principles like the principle of least effort or the principle of economy, the hypothesis was that participants should have remembered short idioms better than long idioms. In Test

Groups 1 and 2 however, the difference in results between long and short idioms were that insignificant that they are negligible and the results for the individual idioms did not show any tendency in both of the two Test Groups. Therefore, this hypothesis has been rejected. The results of Test Group 3 paint a quite different picture which leads to the thought that maybe as far as idiom meanings are concerned, the principle of least effort has to be reversed: in memorising or producing idiom meanings, it might actually be less effort if the idioms are longer because longer idioms provide more help in remembering or deducing the correct idiomatic meaning than short idioms. They can simply provide more clues or hints towards meaning. Consequently, the hypothesis as it was constructed for idioms is as such not applicable to the memorisation or reproduction of idiom meanings.

Schmitt, Grandage and Adolphs (2004) found out that native as well as non-native speakers remember short formulaic sequences better than long formulaic sequences and also perform more consistently when short formulaic sequences are concerned (Schmitt, Grandage and Adolphs 2004: 143). Because idioms are a subgroup of formulaic sequences, it was assumed that the results for idioms would agree with the results for formulaic sequences. The analysis, however, shows that this is not the case. Hence, while length is a variable in the memorisation of formulaic sequences, it seemingly does not constitute a factor in the memorisation of idioms. So despite all their similarities, in this regard, idioms and formulaic sequences differ.

4.5. Semantic areas

The hypothesis on semantic areas, to be precise, deals with the semantic areas of the concepts idioms refer to, i.e. the signifieds of idioms. It does not refer to the semantic areas of the idioms' constituent words. For example, the semantic area of the idiom *to eat the lily* is SHOPPING, because the idiom's meaning is 'to make a bad deal when shopping, to pay too much'. The

hypothesis about semantic areas is based on the 'graded salience hypothesis' by Giora (2002 referred to in Cieslicka 2006: 118-19) and in my hypothesis, I have claimed that idioms belonging to certain semantic areas are remembered better than idioms belonging to other areas because certain areas are salient in a speech community. According to Giora and her hypothesis, salience means that meanings which "enjoy prominence due to their conventionality, frequency, familiarity, or prototypicality" (Giora 2002:490 referred to in Cieslicka 2006: 118) are stored more strongly in the mental lexicon. Therefore, salience refers to cognitive prominence (Cieslicka 2006: 118). This would indicate that concepts which are referred to frequently or which are prominent in the daily life of a speech community are better represented in the mental lexicon than concepts to which is hardly referred. Translating this to semantic areas, this would indicate that semantic areas which are prominent in daily life are salient and thus should be remembered better.

It is only sensible to assume that different concepts and thus semantic areas play different roles in the lives of individual speakers. Moreover, there are general trends in speech communities for the importance and prominence of certain semantic areas over others which do not enjoy such a high status. I have assumed that in our society or speech community, the areas SHOPPING and SEXUALITY are especially prominent and have invented one idiom containing nonsense-words for each of the two areas to examine this claim.

Once again we shall inspect the results of all three Test Groups for the variable semantic areas. In Test Group 1, the area SEXUALITY attained the highest percentage of correct reproduction with 60%. The area SHOPPING closely followed with 51.11%. The semantic area with the third-highest percentage was the area STUDYING with 40%. The other areas already have comparatively low percentages; the best among them is IRONY with 26.67%. The semantic areas SHOPPING and SEXUALITY without the nonsense-word idioms attained the same percentage, and that is 56.67%. Therefore, even without the nonsense-word idioms, they still attained the

highest results of all areas in this Test Group. However, for the area SEXUALITY, this means that the nonsense-word idiom *to ming the bing* raised the results, while for the area SHOPPING, the nonsense-word idiom *to spleeve it* lowered the results. This would either suggest that the area SEXUALITY is more salient than the area SHOPPING, or *to ming the bing* was much easier to remember than *to spleeve it*. In the second Test Group, the picture differs only slightly. The semantic areas with the highest results are the areas SEXUALITY as well as STUDYING, which both attained the same results of 53.33%. The second-highest percentage was attained by the idioms of the semantic area SHOPPING, which received 48.89%. The third-highest result was attained by the area PERSONALITY, which closely follows the area SHOPPING with a result of 46.67%. Another area which received a comparatively high result is the area BAD CONSEQUENCES with 43.33%. As in Test Group 1, without the nonsense-words, the semantic areas SHOPPING and SEXUALITY attained the same percentage, namely 53.33%. This means that the area SEXUALITY received the same percentage with and without the nonsense-word idiom *to ming the bing*. The SHOPPING area, on the other hand, received a slightly higher percentage without the nonsense-word idiom *to spleeve it* than with it. The difference is only small, but it might be said that either the concepts evolving around SEXUALITY are even more important than those evolving around SHOPPING, or the idiom *to ming the bing* was remembered more easily than the idiom *to spleeve it* because it rhymes. Even though the results for SEXUALITY without the nonsense-word idiom were not higher than with *to ming the bing* as in Test Group 1, the results for SHOPPING again were lowered by *to spleeve it*. In Test Group 2, these are not the only interesting results. The high percentages of STUDYING, PERSONALITY and BAD CONSEQUENCES idioms also qualify for a closer inspection. STUDYING already had a high percentage in Test Group 1, so it may not be surprising to find that it also attained high results in another Test Group. However, the results are the same as for SEXUALITY and this is worth examining more closely. To briefly draw back into attention, the task of Test Group 2 was to reproduce the idioms for the given meanings. Therefore, it was assumed that the results

may be biased towards the more transparent idioms because of the more iconic relationship in transparent idioms between the meaning of the constituent words and the overall idiomatic meaning than in intransparent or opaque idioms. It seems that this is exactly what has happened here. *To stack books* has attained a very high percentage in Test Group 2 and it is a fairly transparent idiom with transparency 2. Therefore, it should have been easy to deduce *to stack books* from the idiomatic meaning 'to get an amount of work that is unmanageable'. The PERSONALITY idiom *to be an Ignorant Lindsay* exemplifies the phenomenon of an iconic relationship between meaning of constituent words and idiomatic meaning especially well. Its idiomatic meaning is 'to focus only on one's own needs and wishes and ignore the consequences for other people' and therefore, the idiom does not only have transparency 1, but also the highest literalness, i.e. literalness 1. Consequently, the idiom is especially easy to deduce from its meaning and the high percentage of the area PERSONALITY can be accounted for by the test design. The area BAD CONSEQUENCES also had comparatively high results in this Test Group and once again this may be explained by the test design. The idiom *to drown the orchid* means 'to do too much of a good thing so that it turns out bad' and therefore has transparency as well as metaphorical transparency 2 and seems to be relatively easy to deduce from its meaning. The second BAD CONSEQUENCES idiom *to hide from the kettledrum*, despite being the intransparent idiom of this area seems to be even easier to deduce from its meaning because of one word and its literal meaning: the idiom's meaning is 'to run away from bad consequences' and 'hide' and 'run away' seem to be comparable. Thereby the high results of the area BAD CONSEQUENCES can be explained. For all three semantic areas, the results can be accounted for by the test design. Thus it can be confirmed that the test design indeed influenced the results in the way which was predicted.

If the shiftings that are due to the test design in Test Group 2 are left aside, the results of the two groups coincide and there are three semantic areas which are found to be salient: SEXUALITY, SHOPPING and STUDYING. The prominence or salience of SEXUALITY and SHOPPING was already

predicted and the salience of STUDYING can also be easily explained by the fact that all participants are students at Vienna University and thus they are very familiar with concepts evolving around STUDYING and deal with them on a fairly regular basis. This means that the hypothesis that idioms evolving around salient concepts are remembered better than those evolving around concepts which are not prominent is confirmed by the results of the first two Test Groups.

As has already been seen in connection with other variables, the results of Test Group 3 greatly differ from the other two test groups. In Test Group 3, the semantic areas with the highest results were not SHOPPING and SEXUALITY but rather areas which received low results in the other Test Groups, i.e. IRONY with the very high percentage of 82.35% and PRIVACY INVASION with 73.53% attained the highest percentages. The semantic area with the third-highest result is SEXUALITY with 64.71%, followed by idioms containing COLOURS with 61.76% and SHOPPING with 60.78%. The idioms for SEXUALITY without the nonsense-word idiom attained 67.65% and the SHOPPING idioms without the nonsense-word idiom received 61.76%. In contrast to the other two Test Groups, the idioms for the areas SHOPPING and SEXUALITY without the nonsense-word idioms did not attain the same percentage and moreover, in this Test Group, both nonsense-word idioms lowered the results for the respective semantic areas. In the other Test Groups, the nonsense-word idiom only lowered the percentage of the area SHOPPING while here, the difference which *to ming the bing* caused is even bigger than the difference in the results caused by *to spleeve it*. This indicates that where meanings are concerned, those of the nonsense-word idioms are more difficult to deduce than those of intransparent idioms. The prominence of the meanings' semantic areas and especially of the area SEXUALITY seems to slightly lose influence when it comes to idiomatic meanings. This also implies that even when such prominent areas are concerned, the meanings of more transparent idioms, and even of the intransparent idioms are favoured over the meanings of the nonsense-word idioms as they contain even fewer hints towards the idiomatic meanings than the intransparent idioms for SHOPPING and SEXUALITY. The STUDYING

idioms which were among the semantic areas which attained the highest percentages in the other Test Groups only received 29.41% in this Test Group. All this indicates that indeed, the results of Test Group 3 differ widely from the other groups. But how can the differences be accounted for?

We shall at first take into consideration the test design. The task of Test Group 3 did not consist of reproducing the idiom with or without an incentive, but rather, the participants were given the idioms and had to reproduce the correct meanings. Therefore, the focus was very different from the one of the other Test Groups. For this design, the assumption from Test Group 2 for a bias towards transparent idioms, or rather, meanings of transparent idioms also held, i.e. it was assumed that meanings of transparent idioms would be remembered better than those of the intransparent idioms because the iconic relationship between sign (idiom) and meaning was also believed to function from the inverted side. As a matter of fact, for the direction leading from idiom to meaning, the relationship seems to be even of greater importance than vice versa: The meanings of the IRONY idioms attained the highest percentage in this Test Group and they must have been especially easy to deduce. These idioms are *to have fire in one's soul* for 'to be a rather boring person' and *as cozy as a kerchief* for 'to be uncomfortable'. As this shows, their idiomatic meanings simply are the opposites of the meanings of their constituent words and therefore, even if the first is very transparent and the latter rather intransparent, the meanings of both are generally very transparent. And as the test design is biased towards transparent idioms, it poses a good explanation for the high results of the IRONY idiom meanings. The semantic area PERSONALITY is also a good candidate for this explanation: while in Test Group 1, PERSONALITY did not attain high results, already the Test Group 2 results showed a high percentage which was then explained by the test design. In Test Group 3 it attained 50% of correct meaning reproductions, which is even more than in Test Group 2. Responsible for this result is the very high percentage of the idiom *to be an Ignorant Lindsay*, which received 64.71%. *To be an Ignorant Lindsay* has the meaning 'to focus only on one's own needs and wishes and ignore the consequences for other people' and therefore has transparency 1 as well as

literalness 1, and because of this, is the most transparent idiom of the experimental sample. This means that the meaning is very easily deducible from the form, i.e. the constituent words, which in turn means that the test design, indeed, is again responsible for the result of the semantic area PERSONALITY. Moreover, the in this instance similar results of Test Groups 2 and 3 suggest that transparency indeed facilitates the deduction of form from meaning as well as meaning from form.

The three semantic areas COLOURS, PRIVACY INVASION and STUDYING display very surprising results. While COLOURS and PRIVACY INVASION display high results, STUDYING shows astonishingly low results. We shall start by looking at the semantic area STUDYING. This area was among the areas with the highest results in both of the other two Test Groups. In Test Group 3, results are generally higher than in the other groups, seemingly because the task to replicate the meanings for given idioms is easier than the two other tasks. Yet all of a sudden, STUDYING receives the lowest percentage. As a matter of fact, the STUDYING results are much lower than in the other two Test Groups. The transparent STUDYING idiom *to stack books* ('to get an amount of work that is unmanageable') received only 35.29%, which is much lower than in the other Test Groups, especially if we consider the transparency bias of the test design. The intransparent idiom *to upper-cut Ulysses* received an even lower 23.53%. While the latter results seem reasonable, the results for the meaning of the transparent idiom are indeed astonishing. From *to stack books*, it should not be that difficult to deduce the idiomatic meaning, in fact the meaning seems quite straightforward. Simply imagine a stack of books on your desk which always gets taller and taller, and suddenly you find that you cannot manage working through all of the books in the given time. If one has this image in mind, the meaning should be obvious and very easy to derive from the constituent words. Furthermore, the idiom has literalness 2, which should also add to the simplicity of deducing the meaning from this idiom. The reason for the low result can neither be found in the transparencies, nor in the test design. Hence we can only speculate. One possible reason that comes to mind is that studying is such a frequent and daily task for students as it is a

necessary means to obtain a degree that it is neither especially pleasant nor unpleasant, but just an accepted necessity. Therefore, while the idioms of this area themselves may have been funny or boring, and this aided in obtaining the high results, their meanings, on the contrary, are not particularly outstanding but something that has to be done, hence no thought is 'wasted' on it to have more resources for pleasant thoughts.

The next semantic area I would like to inspect more closely is the area COLOUR. COLOUR is not a specific semantic area, actually, but rather idioms which contain words denoting colours. In the two other Test Groups, the COLOUR idioms received relatively low percentages and the area was always among the ones with the lowest results. In Test Group 3, however, it was the area with the fourth-highest results. The transparent idiom *the yellow spot on the picture*, which means 'the bright side of something' and has metaphorical transparency 1 only attained 47.06%, while the utterly intransparent idiom *to stick the green ribbon onto the book* ('to be the first to congratulate') attained the very high result of 76.47%. This is greatly surprising as the idiom belongs to the most intransparent idioms of the experimental sample and has transparency 5, metaphorical transparency 5 and also literalness 5. The only possibility to even get a hint towards the idiomatic meaning is the word *ribbon* which could be the ribbon from a present and a present could be brought along with the congratulation. This, however, requires a great deal of fantasy and is far-fetched. Therefore, transparency cannot be used to explain the high results because the idiom is utterly intransparent, and the test design with its bias towards transparent idioms is also inapplicable since it would suggest results contrasting to those. The only other possibility which seems slightly probable is the length of this idiom. *To stick the green ribbon onto the book* is the longest idiom of the sample and therefore, there are more incentives which could trigger the idiomatic meaning although the words are not linked to it. As the variable length has shown, there is a very slight tendency for longer idioms to have better results for their meanings. However, this is only a tendency and it is highly questionable that it alone is responsible for this very astounding result.

Another semantic area which displays such surprising results is the area PRIVACY INVASION. PRIVACY INVASION achieved even lower results than COLOURS in the other Test Groups but in Test Group 3, it attained the second-highest result and that is 73.53%. Responsible for this high percentage is the result for the idiom *to saddle somebody's zebra* which means 'to dig into somebody's past'. It is the intransparent idiom for PRIVACY INVASION and just as the COLOUR idiom it has transparency 5, metaphorical transparency 5, and also literalness 5. Thus it is utterly intransparent and there is absolutely no connection between the meanings of the constituent words and the idiomatic meaning. Once again transparency cannot account for this result as there is no connection between form and meaning. Therefore, the reason can only be detected through speculation. One speculation which may point towards an explanation is the emotional component of the concept or idiomatic meaning: while some concepts are not particularly charged emotionally, others are very charged emotionally. An example would be the concept of SEXUALITY, which is already very charged emotionally on the level of stereotypicality. The concept for *to saddle somebody's zebra*, 'to dig into somebody's past' may also be such a concept which is very emotional. It may be embarrassing if, for example insensible deeds or pictures which show embarrassing outfits from the teenage years turn up, or it may also be hurtful if certain events are suddenly drawn up and used against oneself. If things turn up which nobody wants other people to know, strong feelings of shame, embarrassment and even hurt may be evoked. Therefore, it makes people vulnerable. Being vulnerable is of course very uncomfortable and emotional and therefore, the idiom itself may not be loaded with these emotions. This emotional void reminds us of the function of idioms to avoid taboo words. The concept is, nevertheless, loaded with these emotions, and maybe the fact that there is no connection between the idiom and its meaning facilitates dealing with the concept. Furthermore, if the concept is loaded emotionally, it is represented more strongly in the mental lexicon, as has been found out for pleasant as well as unpleasant meanings of words⁷, and this might explain the high percentage of the meaning 'to dig

⁷ Cf. Monnier and Syssau 2008: 36.

into somebody's past': Maybe if the idiomatic meaning is seen, the connection to the idiom is not established that easily because the concept may be more prominent than the idiom itself. Probably this is the reason why the results for this idiom in the two Test Groups where the task actually was to reproduce the idioms were not that high. On the other hand, if the idiom is seen, the connection to the concept is quickly established because the concept is that prominent and the high results for the idiomatic meaning would be accounted for. Once again, this is pure speculation and to confirm the conjecture about this very surprising and fascinating result, more investigation has to be conducted. The results of the COLOUR idiom *to stick the green ribbon onto the book* may also be explained with this supposition. Its meaning is 'to be the first to congratulate' and as before, there is no connection between form and meaning. However, the idiom may also be very charged emotionally, only think of how high-spirited we can be if a friend or family member achieved something or has to celebrate something, we are truly happy for them and want to congratulate them and then even manage 'to be the first to congratulate' them. Because of the emotionality of the concept, it again is stored very strongly in the mental lexicon. However, since there is no connection between meaning and idiom, when the meaning is seen, the idiom is not evoked that easily, but when the idiom is seen, the concept is quickly activated because of the strength of storage. Hence, the high result for the meaning of *to stick the green ribbon onto the book* might be explained.

It can be resumed that in contrast to the results for idioms, the results for idiom meanings (Test Group 3) only partly concur with the hypothesis: The results for the areas SEXUALITY and SHOPPING still attained a relatively high percentage and therefore can be ascribed salience status. However, as far as meanings are concerned, this status seems to be lowered in comparison to the idioms. The results for IRONY and PERSONALITY can be ascribed to the test design and therefore are not of interest for the hypothesis. However, the results for STUDYING, COLOURS, and PRIVACY INVASION pose a surprising challenge to the hypothesis because while the STUDYING idioms seemed salient in the other Test Groups, the STUDYING

meanings do not. Moreover, the COLOURS and PRIVACY INVASION idioms provide the most surprising and remarkable results as they completely differ from the other Test Groups and also cannot be explained with transparency. This indicates that salience may be different for idioms and idiomatic meanings and, speculatively, in especially emotive cases be contrastive. However, more research has to be done before explanations other than speculations can be given here.

4.6. Pleasantness

The last hypothesis deals with the variable pleasantness. Monnier and Syssau (2008) have pointed out that pleasantness affects the manner of storage of a linguistic item in the mental lexicon. It has been discovered that word emotionality, which describes whether a word is conceived as pleasant, unpleasant or neutral by a speaker, influences storage in such a way that pleasant or unpleasant words have an emotion node connected to their semantic nodes in the mental lexicon while neutral words lack this emotion node. This means that the representation of pleasant or unpleasant words is stronger than that of neutral words (Monnier and Syssau 2008: 35-36). It can be assumed that idioms already have a special pleasantness status because of their composite nature as the combination of literal meanings of their constituent words is often nonsensical or does not make sense in some contexts. Therefore, literal meanings can often be considered funny and pleasantness can be ascribed to the combination of literal meanings of the constituent words. And as Cieslicka (2007) has found out, literal meanings predominate in L2 idiom processing over figurative meanings. However, this alone does not explain the possible influence of pleasantness on idiom retention. It has to be noted that some combinations of literal meanings cause more amusement than others which might simply be boring. And because 'funny' can be considered to be a kind of 'pleasant', while 'boring' is rather neutral, funny idioms should be remembered better than boring idioms.

Moreover, it has to be noted that if pleasantness is seen in this light, it is not an idiom-internal, but a speaker-dependent factor.

We shall once again look at the results of the three Test Groups. In Test Group 1, 80% of the participants remembered more 'funny' idioms correctly than idioms they had rated 'boring'. 6.66% of the participants, rated more of the idioms they remembered correctly 'boring' than 'funny'. 6.6% remembered an equal number of 'funny' and 'boring' idioms correctly while further 6.66% did not remember any idiom correctly. In Test Group 2, 73.33% of participants remembered more idioms they found funny correctly than idioms they found boring, while 6.66% remembered more idioms which they rated 'boring' correctly. For further 6.66%, the number of idioms remembered correctly and rated 'funny' equalled the number of idioms remembered correctly and rated 'boring'. In Test Group 3, the results generally coincide with the other two Test Groups for the variable pleasantness: 76.47% of participants remembered more meanings for idioms they rated 'funny' correctly while 11.76% remembered more meanings for idioms which they rated 'boring' correctly. The percentage for the boring idioms is thus slightly higher for Test Group 3 than for the other Test Groups, but the difference is only small and therefore can be neglected.

From the results of all three Test Groups, it follows that the pleasantness hypothesis can be confirmed: indeed, pleasant or funny idioms are remembered better than neutral or boring idioms. What is more, the meanings of pleasant idioms are also remembered better than the meanings of neutral idioms.

4.7. Summary

Before continuing with what the results ultimately say about the semiotic quality and the lexicalisation status of idioms, we shall revise the results for the different hypotheses. The transparency hypothesis which suggests that

transparent idioms are remembered better than intransparent idioms was confirmed by the results. Moreover, these results were in line with the results for formulaic sequences, hence where transparency is concerned, idioms behave similarly to formulaic sequences. The results for Test Group 1 and 2 support the hypothesis that metaphorically transparent idioms are remembered better than idioms which are intransparent on the metaphorical level. The Test Group 3 results do not confirm the hypothesis because metaphorical transparency 1 idiom meanings were remembered as well as metaphorical transparency 5 idioms. The results of all three Test Groups support the hypothesis that idioms which are transparent on the level of literalness are remembered better than idioms which are intransparent on the level of literalness. Attention, however, has also to be paid to the semantic areas of idioms, especially if idiom meanings are concerned because they sometimes challenge the influence of literalness on idiom retention. The hypothesis that shorter idioms are remembered better than longer idioms was challenged by the results and therefore has to be rejected. However, with regard to idiom meanings, there is a slight tendency that the meanings of longer idioms were remembered better, probably because longer idioms provide more clues towards their idiomatic meanings. Therefore, the behaviour of idioms is not consistent with the behaviour of formulaic sequences, where length is a determining factor in performance. The results of Test Groups 1 and 2 confirm the hypothesis that idioms which refer to a salient concept are remembered better than idioms whose meaning is not salient. The salient concepts are SEXUALITY and SHOPPING, as predicted, and also STUDYING. The results for the idiom meanings partly agree with the results for the other test groups, but are otherwise very astonishing and interesting. When it comes to meanings, the concepts PRIVACY INVASION and COLOURS also seem salient, while STUDYING does not. The hypothesis about pleasantness which assumed that more pleasant or funny idioms are remembered correctly than neutral or boring idioms can also be confirmed.

5. Implications of the results on semiotic quality and lexicalisation

The incentive for conducting an experiment on idiom memorisation was the idea to find out more about the unexpected longevity of idioms in language. Since experiments on historical developments cannot really be conducted, I had to focus on memorisation because it is the key to historical stability: Only if an idiom is memorised correctly, it has the chance to stick in a language. Therefore, different variables which may influence the retention of idioms had to be included in the experiment. They were transparency, metaphorical transparency, literalness, length, semantic areas and pleasantness. The results for these variables have often confirmed the respective hypotheses about their influence, but some have also revealed very surprising and unexpected effects. The variables alone, however, are not the only factors which play a role in the longevity of idioms. There are two other key-factors: semiotic quality and lexicalisation. Good semiotic quality and the status of being lexicalised greatly determine if an item stays in a language and therefore, it is extremely interesting to see what the test results reveal about the semiotic quality and lexicalisation status of idioms. Lexicalisation and semiotic quality cannot clearly be separated, because they are interdependent. For the sake of clarity, however, they will be treated individually.

5.1. Idioms and lexicalisation

Before going into detail about what the results indicate in connection to lexicalisation, we shall revise what lexicalisation actually is. According to Brinton and Traugott, lexicalisation is seen as

the change whereby in certain linguistic contexts speakers use a syntactic construction or word formation as a new contentful form with

formal and semantic properties that are not completely derivable from the constituents of the construction or the word formation pattern. Over time there may be further loss of internal constituency and the item may become more lexical. (2005: 96)

To their definition, Brinton and Traugott also add a number of implications and we shall examine whether idioms do or do not fulfil them. The first implication is that lexicalisation is viewed as “a historical change” (Brinton and Traugott 2005: 96) which evolves slowly over time and as such is contrasted with instantaneous changes like “simple borrowing without formal or semantic change [... or] word formation processes” (Brinton and Traugott 2005: 96). An example for a historical change would be phonogenesis and Brinton and Traugott list “*handiwork* < OE *handgeweorc*” (2005: 98) as an example. It can be said that idioms fulfil this implication: when idioms are ‘built’, the processes which take place usually are formal changes such as “univerbation [... and] obliteration of boundaries” (Brinton and Traugott 2005: 54) between their constituent words, as well as semantic changes. According to Brinton and Traugott, the semantic changes in idiomaticisation lead to complete semantic opacity and non-compositionality. Therefore, idioms also feature semantic changes which lead to the adoption of the highly idiosyncratic figurative meanings (Brinton and Traugott 2005: 54-55). From their point of view, the semantic changes which idioms undergo are very drastic and lead to the constituent words being devoid of their original figurative meanings. Many experiments, especially those of Cieslicka (2007) have shown that the semantic changes however are not as dramatic and the literal meanings of the idioms’ constituent words are not lost. Yet, if Brinton and Traugott’s definition of idioms is applied, idioms fulfil the first implication.

Brinton and Traugott’s second implication is that the possible input to the process of lexicalisation is any item which is stored in the mental inventory, even “syntactic constructions” (Brinton and Traugott 2005: 96). As idioms can also be viewed as syntactic constructions and therefore stand between the lexicon and grammar, also this implication is fulfilled. The third implication is especially interesting and can be well exemplified with idioms. It states that lexicals, i.e. the output of lexicalisation, which were “once formed often

undergo further change towards the lexical pole” (Brinton and Traugott 2005: 96). This implication can also be called implication of ‘unidirectionality’ because Brinton and Traugott assume that once an item has been lexicalised, or grammaticalised for that matter, it can only undergo further lexicalisation or grammaticalisation and not vice versa. For idioms, this would indicate that their meanings become more opaque and forms may be reduced. There are actually idioms which support this implication and they have already been mentioned earlier in this paper: for example, *to dangle a carrot before the donkey* can be shortened to *to dangle a carrot* or simply *carrot*. This idiom is accepted in the language community in its original as well as in its shortened forms, and it can be said that the shortened forms have become further lexicalised. However, the fact that all three forms are accepted may indicate that this idiom, or the two shortened forms, are in an intermediate stage of further lexicalisation in which the new forms are already accepted but the old forms have not yet been lost.

The fourth implication is that the result of lexicalisation is a “lexical” (Brinton and Traugott 2005: 96) which is stored in the mental lexicon and, more importantly, speakers have to learn it. This implies that lexicals per definition are semantically opaque and thus goes along with another implication which suggests that lexicalisation also involves the loss of semantic compositionality. To put it differently, items in lexicalisation often undergo “semantic and pragmatic idiomaticization” (Brinton and Traugott 2005: 97). Applied to idioms, this means that constituent words would lose their literal meanings and the relationship between literal meanings and overall figurative meanings will have vanished. Brinton and Traugott’s point of view contrasts Lakoff’s (1987) theory in which he claims that a great part of idioms are actually motivated and that there is a link between the literal meanings of the constituent words and the overall idiomatic meaning. However, in idioms which are not metaphorically transparent or transparent on the level of literalness, there is, indeed, no (apparent) relationship between literal and idiomatic meanings. Yet, Brinton and Traugott’s claim is fairly strong and has been contrasted by Cieslicka (2007) or Cacciari and Tabossi (1988 referred to in Cieslicka 2007), who have shown that the literal meanings still play a

great role in the processing of idioms and therefore have not disappeared. Nevertheless, idioms are generally considered as semantically non-compositional items which have to be stored in the mental lexicon and also have to be learned by speakers and thus, the two implications are fulfilled by idioms.

In a different implication, Brinton and Traugott (2005) propose that lexicalisation is a gradual and non-instantaneous change with many intermediate stages and therefore is contrasted with instantaneous changes (Brinton and Traugott 2005: 97). Idioms also fulfil this criterion because usually, their formation does indeed progress over time and has many intermediate steps, among them institutionalisation, which is surely non-instantaneous. However, there is a group of other idioms which does not confirm to this implication, and that is the group of idioms which were formed through instantaneous idiomaticisation. Instantaneous idiomaticisations are relatively frequent and refer to phenomena where, for example, in a conversation, a phrase takes on a new, idiomatic meaning which is adopted by all speakers engaged in this conversation. Seidlhofer and Widdowson (2007) also term instantaneous idiomaticisations “local idiomatic coinage[s]” (Seidlhofer and Widdowson 2007: 362) and give as an example a radio discussion where *Greek pins* came to refer to irrelevant scholarship (Seidlhofer and Widdowson 2007: 362).

In another implication which is especially significant for idioms, Brinton and Traugott advocate that the result of the process of lexicalisation “can be a form of any complexity” (Brinton and Traugott 2005: 97) with idioms at the first and thus most unstable stage of lexicalisation, i.e. L1 (Brinton and Traugott 2005: 97). Therefore, Brinton and Traugott themselves state that idioms are lexicalised. However, they propose that idioms are rather unstable because they are at the lowest lexicalisation stage. Table 24. illustrates this very well:

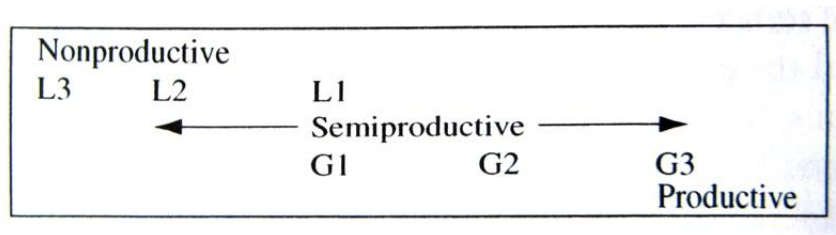


Table 24. Stages of lexicalisation (L1, L2, L3) in relation to the three stages of grammaticalisation (G1, G2, G3). Taken from Brinton and Traugott (2005: 102).

Furthermore, the diagram indicates that idioms share the same stage with the first stage of grammaticalisation, which additionally contributes to their 'instability'.⁸

We have now inspected how Brinton and Traugott view lexicalisation and how idioms relate to the implications of lexicalisation they give. Thereby, we can conclude that according to their theory, idioms are lexicalised. However, they are lexicalised only to the least possible degree. Moreover, Brinton and Traugott imply that lexicalisation status can be ascribed to intransparent or opaque idioms where there is no relationship between the literal meanings of the constituent words and the overall idiomatic meaning.

Fernando (1996) also suggests that idioms are lexicalised. In fact, she puts forward that lexicalisation is what distinguishes idioms from other kinds of multiword expressions. She further claims that idioms have to be investigated from the point of view of grammar as well as vocabulary and thereby, Fernando implicitly agrees with Brinton and Traugott's theory that idioms share the stages L1 and G1 (Fernando 1996: 74-75). Fernando includes all types of idioms in her remark, but looking at Brinton and Traugott's definition and implications, intransparent idioms give the impression of being most lexicalised. But what about transparent idioms or idioms which are

⁸ Brinton and Traugott define grammaticalisation as "the change whereby in certain linguistic contexts speakers use part of a construction with a grammatical function. Over time the resulting grammatical item may become more grammatical by acquiring more grammatical functions and expanding its host-classes" (2005:99). The most important parallels between lexicalisation and grammaticalisation are "[g]radualness" (2005: 105), "[u]nidirectionality" (2005: 105), "[d]emotivation" (2005: 105) and "[m]etaphorisation and metonymisation" (2005: 105) (Brinton and Traugott 2005: 99-105). We can see that the last parallel is of great significance for idioms and also the other parallels take part in the process of idiom formation. The parallels also support Fernando's (1996: 74-75) suggestion that idioms should be investigated from the point of view of grammar as well as vocabulary.

transparent on the level of literalness, or idioms which are metaphorically transparent and according to Lakoff's (1987) theory 'motivated'? Do they all share the same status of lexicalisation? We shall now take a look at what the results of the experiment suggest in the light of this question.

The high results of the transparent idioms of all three kinds of transparencies would suggest that transparent idioms are less lexicalised than intransparent idioms. This is already hinted in Brinton and Traugott's definition of lexicalisation to which they add that further lexicalisation results in "further loss of internal constituency" (Brinton and Traugott 2005: 96), which for idioms implies a move from transparent to more intransparent, in other words, a decrease in or loss of transparency. Moreover, they state that speakers have to learn an item once it has become lexicalised, and from this claim, it should follow that further lexicalisation demands even greater learning effort from speakers (Brinton and Traugott 2005: 96). The high results of the transparent idioms, the metaphorically transparent idioms, and the idioms which are transparent on the level of literalness indeed support this assumption and show that items which belong to the lower stages of lexicalisation have less learning burden than further lexicalised items. Even though this outcome supports Brinton and Traugott's implications, it however has very interesting consequences for language acquisition. The results actually indicate that idioms with earlier or lower stages of lexicalisation are favoured over further lexicalised idioms in language acquisition. This is in itself not very surprising, but Brinton and Traugott's cline of lexicalisation together with their principle of unidirectionality, which denotes that an item can only become more lexical but not more grammatical, indicate that more lexical items are favoured over less lexical items in a language and the goal of language change is to attain items for the L3 or G3 stage respectively. And since more lexical items seem to be favoured in language, they should in effect be easier to learn. Astonishingly, however, the results suggest the contrary: they suggest that transparent idioms are favoured by speakers and

easier to learn. Consequently, they suggest that indeed transparent idioms are more stable and stick in a language longer than intransparent idioms.

The idiom meanings, however, paint a different picture: not only transparent idiom meanings attained high results, but also the meanings for the most intransparent and opaque idioms exhibited very high results. As already mentioned, intransparent idioms certainly do not exhibit a connection between the literal meanings of the constituent words and the overall idiomatic meaning. And because further lexicalisation involves further loss of semantic compositionality, intransparent idioms should be more lexicalised than transparent idioms. Because of the high results of the idiomatic meanings, it might be assumed that also further lexicalised idioms (or idiom meanings) have a low learning burden, and this assumption has a rather contrasting impact on language acquisition in comparison to the one caused by the high results of transparent idioms. It follows that besides the very transparent idioms, also the very intransparent and opaque idiom meanings are learnt easily and therefore should be stable and thus be able to stick in a language. We thus find two aspects, namely transparent idioms and meanings of intransparent idioms, which both favour different kinds of idioms and imply that very transparent as well as very intransparent idioms are prone to be stable. Hence, it can be assumed that idioms which are neither very transparent nor very intransparent are those which are unstable and prone to language change. Consequently, it can be said that in contrast to Brinton and Traugott's assumptions, very transparent idioms which only have lexicalisation status L1, as well as very intransparent idioms which have a higher lexicalisation status are favoured and therefore should be long-lasting. The results have challenged Brinton and Traugott's assumption that all idioms are unstable and likely to change, and have shown that distinctions have to be made between very transparent and intransparent idioms, and idioms which are in the middle of the transparency cline.

5.2. Idioms and semiotic quality

As has already been described above, besides the status of lexicalisation, the quality of signs can also play a vital role in the stability of linguistic items. Differing semiotic quality may drastically influence the longevity of idioms and therefore it is of paramount importance to explore what the results of the experiment indicate about the quality of idioms as linguistic signs. I have chosen the framework of natural morphology and the closely related semiotic theory of C.S. Peirce (1965 referred to in Crocco Galèas 1998) as basis for this investigation. Before going into detail about the experimental results in this context, let me briefly illustrate the two theories and explain how they are connected.

According to Crocco Galèas, semiotics serves as “a meta-theory of Natural Morphology, Natural Phonology, etc.” (1998: 8) and also provides the basis for the “functionalist approach of naturalism” (Crocco Galèas 1998: 8). In natural morphology or phonology, a linguistic item is considered ‘natural’ if it is “easier for the potential language user” (Crocco Galèas 1998: 6). Therefore, the preferred signs are the signs which provide the greatest ease for speakers and listeners. In Peirce’s theory, four dimensions of a linguistic sign are distinguished:

a sign consists of something (= *signans*) which stands to somebody (= interpreter) for something (= *signatum*) in some respect or capacity (= interpretant). (Crocco Galèas 1998: 8)

This means that the *signatum* is the extra-linguistic – or even linguistic – item the sign refers to, and the *signans* is the linguistic item which “expresses the *signatum*” (Crocco Galèas 1998: 8), and these two aspects are what is important in the discussion about idioms. The idiom itself is the *signans* and its meaning, or the concept to which it refers, is the *signatum*. In Peircean semiotics, we can find three general types of signs, i.e. symbol, index, and icon. The classification of signs into the three categories is based on the relationship between signans and signatum. A symbol is defined by “a conventional or habitual link” (Crocco Galèas 1998: 25) between signans and

signatum which has to be learned in order for the sign to be understood. Peirce claims that “[a]ll linguistic signs are symbols” (Crocco Galèas 1998: 25). The next category of signs is the index. A sign can be defined as index if it “directly points to its object without describing it” (Crocco Galèas 1998: 26) and the object to which the index points can be deduced by the interpreter. Examples for an index are *this*, *that*, *she*, *they*, etc., so demonstratives or personal pronouns. The last and most important category of signs is the icon. An icon is a sign which in some way resembles the object it refers to. A linguistic icon is a sign “whose signans shows a relation of similarity or analogy with its signatum” (Crocco Galèas 1998: 26) and this relationship is “intrinsic” (Crocco Galèas 1998: 26). Therefore, they are considered to be the kind of sign which is “most natural” (Crocco Galèas 1998: 26) (Crocco Galèas 1998: 6-26).

In Peircean semiotics, a distinction is made between three kinds of icons, i.e. images, diagrams, and metaphors, and the division is again governed by the kind of relation between signans and signatum. An image is an iconic sign where the features of its signatum are directly represented by the signans. They are seen as “the most natural icons” (Crocco Galèas 1998: 27) and good examples for linguistic images are onomatopoeic words. The second category of icons, namely the diagram, is a sign which exhibits “analogy of structure between signans and signatum” (Crocco Galèas 1998: 27), and the third category of icons, i.e. the metaphor, is defined by the “similarity to its object” (Crocco Galèas 1998: 27) (Crocco Galèas 1998: 27).

From the Peircean triad of signs, the principle of iconicity has evolved. The principle of iconicity, which plays a great role in the evaluation of the experimental data, signifies that linguistic signs are partially motivated. Furthermore, there are different extents of motivation which are assigned through the degree of analogy between the signans and the signatum. (Crocco Galèas 1998: 27-28) Iconicity is manifested in natural linguistics in a variety of ways, and the way which is of particular importance to the interpretation of the experimental results is morphosemantic transparency. Morphosemantic transparency is a parameter in natural morphology which

describes “the relation between the global meaning of a complex word and the meaning of its morphemes” (Crocco Galèas 1998: 57). This means that the focus of this principle is the degree of semantic compositionality and consequently, the principle presupposes that meanings of complex words are the sum of the meanings of their constituents (Crocco Galèas 1998: 57). We have already encountered the principle of semantic compositionality in the discussion of idiomatic features, where in traditional idiom studies, the central idiomatic feature is that idioms are semantically non-compositional. This means that the idiomatic meaning is not derivable from the meanings of an idiom’s constituent words. In the cognitive phase of idiom studies, however, this factor has been partly refuted since Lakoff (1987) has claimed that the meaning of a great number of idioms is motivated.

Yet, in natural morphology, the principle of semantic compositionality does not stand alone, because when it comes to morphosemantic transparency, the principle of ‘constructional iconicity’ has to be followed. This principle decrees that an item which is morphosemantically transparent should also be morphotactically transparent⁹. If words are both morphotactically as well as morphosemantically transparent, then a diagrammatic relationship is achieved. I will at this point not go into detail about diagrammatic relationships, because this concept is not significant for the analysis of idioms.

What, on the other hand, is important for the analysis of idioms, is that there is a clash between morphosemantic transparency and lexicalisation. Crocco Galèas (1998) has pointed out that this conflict is caused by storage preferences in the mental lexicon. To be more specific, the conflict arises because the mental lexicon prefers to store lexicalised words rather than complex words. And exactly at this point, a very good connection to Brinton and Traugott’s theory of lexicalisation can be discovered: to draw back into attention, Brinton and Traugott (1995) propose a cline of lexicalisation with

⁹ Morphotactic transparency signifies that morphologically complex words exhibit a “morphemic sequence of base and affix(es)” (Crocco Galèas 1998: 37) and neither base nor affixes are changed due to allomorphic rules. For example, the word *cat-s* is morphotactically transparent because the base *cat* is followed by the plural suffix *-s* (Crocco Galèas 1998: 37-38).

only slightly lexicalised items at the L1 stage (here, they also add idioms) and fully lexicalised items at the L3 stage. L3 items are preferred by the lexicon, but at the same time, these items are the least transparent items. Hence, the higher the degree of lexicalisation is, the greater is the opacity of a lexical item. Instances of word-formation are not seen as instances of lexicalisation by Brinton and Traugott and exactly such instances are morphotactically and morphosemantically transparent. Therefore, Crocco Galèas proposes a cline of morphosemantic transparency with “compositionality (motivation)” (Crocco Galèas 1998: 58) on the one end, and lexicalisation on the other end. Therefore, the cline ranges from transparency on the one, and opacity on the other end. Items from the morphosemantically transparent end are the more natural signs and therefore are preferred, but items from the opaque and lexicalised end are preferred by the lexicon. Hence the conflict arises (Crocco Galèas 1998: 58).

Crocco Galèas has developed a cline or scale of morphosemantic transparency which ranges from morphosemantically transparent to morphosemantically opaque. It consists of seven levels of morphosemantic transparency, which are the following:

I Total Compositionality [... items on this level are compounds which are both morphosemantically as well as morphotactically transparent and therefore exhibit the highest possible transparency, e.g.] Eng. *teacup* [...]

II Semi-transparent compositionality [... items on this level are] morphotactically transparent derivatives and inflected words, Eng. *beauty* → *beauty-ful* [...]

III Opaque compositionality [... items which belong to this level are] semantically opaque compounds and derivatives [... which are] characterized by polysemy and allosemy, e.g. Eng. *telephone box* [...]

IV Crystallized compositionality [... items which belong to this level are] lexicalised compounds and derivatives [which exhibit] morphotactic transparency, e.g. Eng. *to eat* → *edible* [...]

V Disturbed compositionality [... is the degree of morphosemantic transparency which is possessed by] most inflected words [... because they mostly consist of] semantically empty morphs [...]

VI Lack of compositionality [... items which belong to this level are] all converted words or, generally, all words derived via the

morphometaphoric technique [...], e.g. Sp. *bueno*_A 'good' → (*lo*) *bueno*_N 'the good'

VII Total suppletion [... items which are assigned to this level are] suppletive unanalyzable forms, which show no morphemic boundary [...], e.g. It. *essere* 'to be' → *fu* 'was' (3rd Sg.). (Crocco Galèas 1998: 59-60)

Looking at this subdivision of morphosemantic transparencies, we can recognise that idioms are a special case which does not allow all seven kinds of morphosemantic transparencies. In contrast to non-idiomatic words, or more generally speaking, in contrast to lexical items other than multiword units which can exhibit all different degrees of morphosemantic transparency, idioms are generally considered to be non-compositional and thus belong to the sixth degree of morphosemantic transparency which is called "lack of compositionality" (Crocco Galèas 1998: 59). This at least seems to be the default degree to which idioms would stereotypically be assigned. However, idioms are far from being a homogeneous group and we have already seen that they differ according to a number of factors such as transparency, metaphorical transparency or literalness. Therefore, it is only sensible to assume that while generally being non-compositional, idioms still vary according to their morphosemantic transparencies and consequently display different semiotic qualities. We shall once again take a look at the different morphosemantic transparency categories and see where idioms may also be placed. The first degree, 'total compositionality' can be refuted as category housing idioms because idioms are not morphotactically transparent and neither 'totally compositional' as the name of the category suggests. Even idioms which are transparent on the level of literalness are not totally compositional. The second degree is 'semi-transparent compositionality' and one might actually be tempted to assign idioms which are transparent on the level of literalness to this category: in the experiment, the idiom which is most transparent on the level of literalness is *to be an Ignorant Lindsay*. *To be an Ignorant Lindsay* means 'to focus only on one's own needs and wishes and ignore the consequences for other people' and therefore, the literal meaning of the constituent word *Ignorant* greatly contributes to the idiomatic meaning.

Lindsay, on the other hand, is a metaphor for ‘person’ or ‘the person who behaves in an ignorant manner’. Consequently, it might be said that the idiom *to be an Ignorant Lindsay* actually exhibits semi-transparent compositionality. It does not exhibit compositionality, yet it also does not really lack it, especially because the literal meaning of *Ignorant* is the main feature of the figurative meaning as well. The third degree is ‘opaque compositionality’. Items which belong to this category are characterised by “polysemy and allosemy” (Crocco Galèas 1998: 59) and are “semantically opaque” (Crocco Galèas 1998: 59). Moreover, polysemy indicates that items in this category exhibit “lack of motivation” (Crocco Galèas 1998: 60). The word ‘motivation’, or lack thereof, brings into mind the concept of metaphorical transparency, where the literal meanings of the constituent words of an idiom are metaphors for the idiomatic meaning, and also Lakoff’s (1987) theory of motivation. In this theory, Lakoff proposes that a great number of idioms are not completely non-compositional, but in fact they are ‘motivated’ by a metaphor and the corresponding general knowledge which links idioms and metaphors (Lakoff 1987: 437-448). Therefore, while for some idioms it surely can be corroborated that they lack motivation and that consequently there is no connection between literal meanings of the constituent words and idiomatic meanings, for other idioms this lack of motivation has to be refuted. Both metaphorical transparency and Lakoff’s theory of motivation embrace the thought that there is a connection between literal and figurative meaning. An example from the experimental sample for an idiom which is metaphorically transparent is *to peel peaches with a butcher’s knife* which means ‘to ask very unfitting, direct and indiscrete questions’. With this example, we can see that *to peel peaches* is a metaphor for ‘to ask questions’ because when asking questions, we usually want to find out something which is hidden or unknown to us; we could say that this something is hidden underneath the skin. *With a butcher’s knife* is metaphorical for ‘unfitting, direct and indiscrete’. This example very well demonstrates the link between literal and idiomatic meaning and therefore shows that the idiomatic meaning can be considered motivated. Subsequently, idioms which are metaphorically transparent should also be

assigned to the category 'semi-transparent compositionality'. The lack of motivation of items in the third category rather suggests that this category of morphosemantic transparency features idioms which are neither transparent on the level of literalness, nor metaphorically transparent. The next degree of morphosemantic transparency is called 'crystallised compositionality'. Crystallised compositionality includes "lexicalised compounds and derivatives [... which] share morphotactic opacity" (Crocco Galèas 1998: 59), which, to be exact, would feature all idioms: idioms are lexicalised and moreover, all idioms are morphotactically opaque. At this point, it is also important to note that lexicalisation only starts at this degree of the morphosemantic transparency cline, i.e. items of the earlier stages or degrees are strictly speaking not lexicalised.

For idioms, it seems that the categories have to be slightly altered, as all idioms exhibit crystallised compositionality, while some are still semantically motivated, which is only a feature until the second morphosemantic transparency category, and some idioms also display aspects of opaque compositionality because they exhibit polysemy in the form of lack of motivation. This also means that the divisions between the categories are not clear-cut. Rather, they are fuzzy and overlap in some instances. Furthermore, it can be seen that not a single idiom can actually be assigned to one category only, but most idioms have features of more than one category, for example the idiom *to be an Ignorant Lindsay* has features of both crystallised compositionality and semi-transparent compositionality because it is lexicalised and morphotactically opaque (as is indeed every idiom) as well as motivated because the literal meaning of *Ignorant* plays a salient role in the idiomatic meaning and *Lindsay* is a metaphor for 'person'. The idiom *to saddle somebody's zebra*, on the other hand, is not motivated because in this case, there is indeed no connection between the literal meanings of the constituent words and the idiomatic meaning 'to dig into somebody's past'. Consequently, it can be assigned to the category of crystallised compositionality as it is lexicalised and morphotactically opaque, but it does not have features of semi-transparent compositionality. However, the category of 'opaque compositionality' may also be too compositional for

this kind of idioms, because a given example is “*telephone box*” (Crocco Galèas 1998: 59), which still seems to be at least partially motivated by metaphors. Some idioms which exhibit metaphorical transparency also have features of this group if the proposed lack of motivation is deduced from the *telephone box* example. Therefore, idioms which are utterly intransparent have to belong to one of the later morphosemantic transparency degrees. The next categories are ‘disturbed compositionality’, ‘lack of compositionality’ and ‘total suppletion’. Disturbed compositionality refers to “inflected words” (Crocco Galèas 1998: 59), lack of compositionality refers to conversions, for example *copy_N* → *to copy_V*, which change their meaning but not their form, and total suppletion refers to forms which are not related and have “no morphemic boundary” (Crocco Galèas 1998: 60), such as *go* → *went* (Crocco Galèas 1998: 59-60). If we look at what falls into the last three categories, we can notice that none of the examples are comparable to idioms. What is more, the category of crystallised compositionality also refers to items which are “synchronically illegible from the point of view of semantic motivation” (Crocco Galèas 1998: 61) and this synchronic illegibility or intransparency very well fits into what is generally acknowledged about the assignation of transparency to idioms: Fernando and Flavell (1981: 27) state that the basis for the decision about an idiom’s transparency has to be the synchronic meaning and not the diachronic knowledge which brings to light the semantic changes which caused the synchronic idiomatic meaning. Therefore, utterly intransparent or opaque idioms may actually be assigned to the crystallised compositionality-category.

On the basis of these observations, it can be suggested that the semiotic quality of idioms has to be graded according to the following scheme: all idioms have as their general semiotic quality the morphosemantic category ‘crystallised compositionality’. Besides this category, idioms are further graded according to the features of other morphosemantic transparency categories they display, e.g. semi-transparent compositionality or opaque compositionality. Hence follows that idioms which are transparent on the level of literalness belong to the categories crystallised compositionality and semi-transparent compositionality. Idioms which are metaphorically

transparent belong to the levels crystallised compositionality, semi-transparent compositionality and opaque compositionality. Intransparent or opaque idioms belong solely to the category crystallised compositionality. Consequently, it is understood that the idioms belonging to crystallised and semi-transparent compositionality are the 'best' and most iconic signs. They are closely followed by idioms which belong to crystallised, semi-transparent and opaque compositionality and thus are only slightly less iconic than the aforementioned idioms, and the least iconic idioms are those which only belong to the category opaque compositionality.

We shall now see whether the results of the experiment reinforce this order of semiotic quality or whether in fact the results indicate a differing order. In Test Group 1, idioms which are transparent on the level of literalness attained the result of 41.33% correct reproductions. In Test Group 2, metaphorically transparent idioms attained a percentage of 50.67 for their correct reproductions. In both Test Groups, the results for the idioms which are transparent on the level of literalness exceed the results for idioms which are intransparent on this level. In Test Group 3, where the idiomatic meanings were demanded, also the meanings for idioms which are transparent on the level of literalness achieved a higher percentage (69.41%) than the meanings of intransparent idioms. In Test Group 1, idioms which are metaphorically transparent achieved a slightly higher result (35.83%) than idioms which are metaphorically intransparent. In Test Group 2, metaphorically transparent idioms attained 50%, which is again higher than the result for metaphorically intransparent idioms. In Test Group 3, the results for the meanings of metaphorically transparent and intransparent idioms only differ by 0.15%. The transparent idiom meanings attained 59.56%. In Test Group 1, the utterly intransparent or opaque idioms attained a result of 30.83% (here the results for transparency 4 are lower). In Test Group 2, the intransparent idiom attained the lowest result of all transparencies (27.50%). In Test Group 3, however, transparency 5 idioms again attained a higher result than transparency 4, namely 55.88%.

Consequently, it can be seen that indeed, the idioms which are transparent on the level of literalness attained the highest results in all three Test Groups. The metaphorically transparent idioms attained a higher percentage than metaphorically intransparent idioms (the meaning results were nearly on par, thus for meaning metaphoricity does not seem to play such a great factor), and as suggested by the order of iconicity, the metaphorical transparency results are lower than the literalness results. The results of the utterly opaque idioms are lower than the literalness and metaphorical transparency results in all three Test Groups. However, in Test Group 1 and 3, they are higher than those of transparency 4. This means that as predicted by the order of iconicity in idioms, the opaque idioms are the least iconic and therefore less good signs. Nevertheless, they are not the worst signs, either, and indeed, total opacity seems to be more appealing to language users than near intransparency. Despite the seeming clarity of results, we must not forget that transparencies or semiotic quality are not the only factors which influence idiom retention. Other factors, such as semantic area of the concept an idiom refers to have also been shown to be of great influence.

It can be concluded that generally, the results confirm the proposed order of iconicity or semiotic quality. The signs with the best semiotic quality appear to be the most iconic signs and the signs with the least semiotic quality are also the least iconic signs. Yet, it must not be forgotten that the least iconic signs seem to be preferred over signs which are slightly more iconic and this outcome is truly astonishing and fascinating. The results indicate that when it comes to the longevity of idioms, two contrasting factors play a role: great iconicity and motivation as well as not the slightest motivation. Idioms which are the most iconic and motivated as well as idioms which do not display an iconic relationship between form and meaning at all have the greatest probability to stick in a language, survive language change and not get lost over time.

5.3. Summary

At the beginning of this chapter, I have tried to demonstrate that idioms fulfil Brinton and Traugott's (2005) definition of lexicalisation as well as the implications the authors add to their definition. We have seen that idioms indeed are lexicalised, as is also claimed by Fernando (1996: 74-75), who even goes further and suggests that lexicalisation is what distinguishes idioms from other kinds of multiword units. Fernando implicitly agrees with Brinton and Traugott that idioms are on the L1 stage of lexicalisation which is shared by the G1 stage of grammaticalisation. The results of the experiment have shown that while transparent idioms indeed are less lexicalised than opaque or intransparent idioms, they nevertheless are favoured by speakers and thus may be more stable. A reason for the greater stability may be the smaller learning burden (learning burden is increased by further lexicalisation). Idiomatic meanings, on the other hand, show a different picture: where meanings are concerned, very intransparent idioms also attained exceptionally high results and therefore are also presumed to have a smaller learning burden. Consequently, they are also stable and prone to stick in language. The results indicate that Brinton and Traugott's theory that all idioms are unstable and prone to change or further lexicalisation has to be challenged as, according to them, the most unstable idioms are clearly favoured in memorisation and this preference indicates that transparent idioms are stable.

In the second part of this chapter, the focus lay on the semiotic quality of idioms. For the examination, the theory of natural morphology which incorporates Peirce's semiotic theory as a framework¹⁰ has been taken as a basis. At first, the theory of morphosemantic transparency had to be examined in the light of how far it could comprise idioms and the following cline of iconicity/ semiotic quality was the result: Idioms generally belong to the category 'crystallised compositionality' because they are both lexicalised and morphotactically opaque. The degree of iconicity was then established by determining which features of other categories certain kinds of idioms also

¹⁰ Cf. Crocco Galéas 1998:8.

exhibited. Idioms which are transparent on the level of literalness also exhibited motivation and therefore belong to the aforementioned category as well as to the second category which is 'semi-transparent compositionality'. Idioms which are metaphorically transparent belong to the general category as well as to 'semi-transparent compositionality' and opaque or intransparent idioms only belong to the general category 'crystallised compositionality'. From this, it follows that idioms which are transparent on the level of literalness are the most iconic signs. They are closely followed by idioms which are metaphorically transparent; opaque idioms are the least iconic signs. The order of semiotic quality which is proposed here can be confirmed by the results of the experiment where literalness idioms received the highest percentages, closely followed by metaphorically transparent idioms and intransparent idioms attained the smallest percentages. However, utterly opaque idioms received better results than slightly opaque idioms, which means that they have a better semiotic quality than idioms which are neither transparent nor totally opaque. This outcome was unexpected and is truly astonishing. The results indicate that idioms which are most iconic and idioms which are least iconic are the most stable idioms and hence are prone to stick in language.

6. Conclusion

The aim of this thesis was to find out more about the surprising longevity of idioms. I use the word 'surprising' because idioms display many qualities which ensure that they are difficult for the language user. Firstly, they consist of more than one word and the sequence of words has to be mastered before being able to use an idiom. Secondly, their meaning does not even consist of the combined meanings of their constituent words, i.e. idioms are non-compositional. Thirdly, idioms are highly restricted in the adaptations they allow and many even do not allow any alternations at all. All three points which I have listed here illustrate the difficulty idioms pose to language users. And leaving aside strictly idiom-intrinsic qualities, there are much more on the way to idiomatic proficiency. Yet despite all the exertions idioms cause, various studies have brought to light that these peculiarities of language are actually very frequent in everyday discourse. Glucksberg, for example, has found out that "4.08 figurative expressions [are used] per minute of discourse" (Cieslicka 2007:39). The longevity of idioms as overall-issue would imply that one had to do an experiment on the history of such items. Diachronic experiments would be very interesting but sadly cannot really be done. Therefore, the idea came into being that an experiment about the memorisation of idioms should be conducted. In order for an idiom to be persistent, it has to be stable and the key to linguistic stability is memorisation. For the experiment on the memorisation of idioms, a great number of idioms were invented because it had to be ensured that none of the participants knew any of the idioms. Following, the experimental setting was developed which comprised two sessions: the first session was to be the presentation-session, and the second session was to be the test-session. Of course, a number of variables had to be chosen for investigations, and the ones in this experiment were transparency, metaphorical transparency, literalness, length (number of syllables) of the idioms, semantic area of the concepts the idioms refer to and pleasantness (which is whether the participants found an idiom they remembered funny or boring).

In chapter 1 of this thesis, an overview of the history of the concept 'idioms' and its definition was given and subsequently, the definition which is used in this paper was clarified. After the definition-section, the research questions were presented and following, the hypotheses were portrayed. In the second chapter, the experiment and the pilot study were described in great detail. In the third chapter, the results of the experiment were presented and evaluated according to each Test Group and each variable. Chapter 4 includes the implications of the results on the hypotheses. Here, I would like to present a short summary: The first hypothesis concerned the transparency of idioms and it was assumed that transparent idioms would be remembered better than intransparent idioms. This hypothesis could be confirmed on grounds of the results as participants indeed remembered transparent idioms better than opaque idioms. The only idiom which fell out of this pattern is *to ming the bing* and exhibits transparency 5, but this result was explained by its semantic area (SEXUALITY). The results for the variable transparency also showed that in this connection, idioms behave like formulaic sequences. The next hypothesis assumed that metaphorically transparent idioms are remembered better than metaphorically intransparent idioms. The results of Test Groups 1 and 2 confirm this hypothesis. For idiom meanings, however, the results refute the hypothesis as meanings for metaphorically transparent idioms were remembered as well as meanings of metaphorically opaque idioms.

The third hypothesis dealt with the variable of literalness and suggested that literal meanings are highly activated in L2 idiom processing and therefore idioms which are transparent on the level of literalness are remembered better than idioms which are opaque on this level. Based on the test results, this hypothesis could be confirmed although attention has to be paid to the semantic areas of idioms which sometimes were prominent over literalness, metaphorical transparency and transparency.

The next hypothesis dealt with the factor of idiom length which was expressed by the number of syllables the idioms consist of and put forward that short idioms would be remembered better than longer idioms. This

hypothesis had to be rejected on the basis of the Test Group 1 and 2 results and it has been found out that length does not seem to play a role in idiom memorisation, a fact which is rather surprising when we think of the persistence of the principle of least effort in various areas of human society and also in different aspects of language. The results of Test Group 3, however displayed the slight tendency that the meanings of longer idioms were remembered better than the meanings of shorter idioms. This nevertheless could simply be explained by the fact that the longer an idiom is, the more clues it gives for the deduction of its idiomatic meaning. Therefore, the results were probably triggered by the test design. In this respect, idioms also differ from formulaic sequences, because in various tests, it has been found out that speakers show better memorisation and performance when short formulaic sequences are concerned.

A further hypothesis dealt with the variable semantic areas and this variable brought about the most surprising and fascinating results: the hypothesis suggested that idioms which belong to certain semantic areas are remembered better than other idioms because their areas are salient or prominent in the speech community. It was further assumed that the salient semantic areas would be SEXUALITY and SHOPPING. The Test Groups 1 and 2 results confirmed the hypothesis as the areas SHOPPING and SEXUALITY attained the highest results, even without the nonsense-word idioms. A further semantic area which also received high percentages in both Test Groups is STUDYING and its salience can be explained quite easily by the fact that all participants were students at Vienna University and studying belongs to their daily tasks. Test Group 3 however presented some very surprising results: while SHOPPING and SEXUALITY again attained very high results and hence the hypothesis could also be confirmed for idiom meanings, the areas PRIVACY INVASION and COLOURS attained especially high results. In the other Test Groups, their results were among the lowest. In contrast to this, the area STUDYING received the lowest percentage of all areas. What is even more fascinating, their results could not be explained by looking at the test design, i.e. by transparency, which was responsible for all other diverging results. The PRIVACY INVASION idiom

which is responsible for the high result is *to saddle somebody's zebra* ('to dig into somebody's past'), and the COLOUR idiom is *to stick the green ribbon onto the book* ('to be the first to congratulate'). Both idioms display transparency 5, literalness 5 and metaphorical transparency 5. Therefore both are utterly opaque. No obvious explanation led to a speculation which includes word emotionality or the emotional chargedness of a concept. 'To dig into somebody's past', for example, may be a concept which is very charged emotionally. It may trigger embarrassment, or hurt may be evoked and speakers might be reminded of their vulnerability which of course is very unpleasant. Therefore, the idiom itself is not loaded with this emotion and is dissociated from its concept. The meaning nevertheless carries the emotion and because of its strong emotionality, it is represented in the mental lexicon more strongly than concepts which are not emotional and this, in turn, would explain the high results. The meaning 'to be the first to congratulate' is also a good candidate for the explanation based on word emotionality, only in the positive direction. The explanation for STUDYING might yet be a different one: the meanings of the STUDYING idioms are so frequent for students that they therefore are probably neither very pleasant nor unpleasant, but rather an accepted and hence a neutral necessity. Consequently, the concepts are not something that energy and thought 'is wasted on', but rather, it is saved to think about something more pleasant. Therefore, the results may be that low.

The last hypothesis dealt with pleasantness, to be more specific, it dealt with whether the participants found idioms they remembered funny (pleasant) or boring. The results confirmed that funny/pleasant idioms as well as idiom meanings were remembered better than boring/neutral idioms or idiom meanings.

After all but one of the hypotheses could be confirmed and very interesting results were discovered, the next chapter was dedicated to the lexicalisation status and the semiotic quality of idioms. It was found that idioms do fulfil the implications of Brinton and Traugott's (2005) lexicalisation theory. Their lexicalisation theory implies that the further a linguistic item is lexicalised, the

greater is the learning burden. Therefore, the high results indicated that transparent idioms, metaphorically transparent idioms and idioms which are transparent on the level of literalness are less lexicalised than opaque idioms. Their high results however also indicated that it is actually transparent idioms which are better memorised and which thus are more stable and prone to stick in a language. This, in fact, contradicts Brinton and Traugott's implication that fully lexicalised items are preferred in language and are the goal of language change. Furthermore, this result adds implications on the semiotic quality. Transparent idioms are more iconic and therefore more the natural and preferred signs, which in turn means that they are good candidates for longevity. In natural morphology, however, a conflict exists between iconic signs (morphosemantic transparency) and lexicalised signs, and this conflict is caused by the preference of lexicalised items in the mental lexicon.¹¹ Here, the link to Brinton and Traugott's theory is established. The conflict also has some impact on the results, or can be illustrated by the results: in Test Groups 1 and 3, the most opaque idioms attained higher results than the idioms which are only slightly opaque. This means that they have to be better signs despite their complete opacity, and that in turn would agree with Brinton and Traugott's theory.

After all the different investigations which were conducted in the course of this thesis, I can come to the conclusion that transparent idioms, metaphorically transparent idioms and idioms which are transparent on the level of literalness are memorised best and therefore can be considered historically stable. Consequently, they are prone to stick in language and be long-lasting. Nevertheless, utterly opaque idioms, which can be considered to be more lexicalised than transparent idioms, although they did not attain as high results as the transparent idioms, are also good signs and also likely to be historically stable. To put it differently, historical stability can be acclaimed to transparent idioms and to a lesser degree also to utterly intransparent idioms. Furthermore, the results of the experiment have shown that not only transparency influences the longevity of idioms, but the semantic areas of the concepts idioms refer to also play a considerable role which at times is

¹¹ For more information please cf. Crocco Galèas (1998: 58).

greater than the role transparency plays. Seemingly, word emotionality also contributes as a factor in idiom longevity. To find out more about this very fascinating factor, however, more investigation has to be conducted. To analyse more closely the impact of pleasantness (funny/boring), also further investigation is necessary.

7. Bibliography

Brinton, Laurel J.; Closs Traugott, Elizabeth. 2005. *Lexicalization and Language Change*. New York: Cambridge University Press.

Cacciari, Cynthia; Tabossi, Patrizia. 1988. "The comprehension of idioms". *Journal of Memory and Language* 27, 668-683.

Chrystal, David. 2003. *A Dictionary of Linguistics and Phonetics*. Malden, Mass.: Blackwell.

Cieslicka, Anna. 2006. "Literal salience in on-line processing of idiomatic expressions by second language learners". *Second Language Research* 22, 2, 115-144.

Cieslicka, Anna. 2007. "Effects of literal plausibility and predictability on the suppression of irrelevant literal meanings in idiom processing". In Fabiszak, Malgorzata (ed. and introd.). *Language and Meaning: Cognitive and Functional perspectives*. Polish Studies in English Language and Literature. Frankfurt am Main: Lang, 39-61.

Cooper, W.E.; Ross, J.R. 1975. "World Order". In Grossmann, R.E. et al. (eds). *Papers from the Parasession on Functionalism*. Chicago. 63-111.

Cowie, A.P.; Mackin R. (eds.). 1975. *Oxford Dictionary of Current Idiomatic English 1*. London: Oxford University Press.

Cowie, A.P.; Mackin, R.; McCraig I.R. (eds.). 1983. *Oxford dictionary of current idiomatic English 2 Phrase, clause and sentence idioms*. Oxford: Oxford University Press.

Crocco Galèas, Grazia. 1998. *The parameters of natural morphology*. Padova: Unipress.

Cronk, Brian C.; Schweigert, Wendy. 1992. "The comprehension of idioms: The effects of familiarity, literalness, and usage". *Applied Psycholinguistics* 13, 131-146.

Fernando, Chitra; Flavell, Roger. 1981. *On Idiom. Critical views and perspectives*. Exeter: University of Exeter.

Fernando, Chitra. 1996. *Idioms and idiomaticity*. Oxford: Oxford University Press.

Ferré, P. 2003. "Effects of level of processing on memory for affectively valenced words". *Cognition & Emotion* 17, 859-880.

Fraser, Bruce. 1970. "Idioms within a transformational grammar". *Foundations of Language* 6, 22-42.

Giora, R. 1997. "Understanding figurative and literal usage: the graded salience hypothesis". *Cognitive Linguistics* 8, 183-206.

Giora, R. 2002. "Literal vs. figurative language: different or equal?". *Journal of Pragmatics* 31, 919-929.

Glucksberg, Sam. 1989. "Metaphors in conversation: How are they understood? Why are they used?" *Metaphor and Symbolic Activity* 4, 3, 125-143.

Glucksberg, Sam. 2001. *Understanding figurative language: from metaphors to idioms*. Oxford: Oxford University Press.

Grose, Francis. 2004. (1985 first ed.). *The Vulgar Tongue: Buckish Slang and Pickpocket Eloquence*. Chichester: Summersdale Publishers Ltd. (in the text referred to as VT)

Hockett, Charles F. 1985. *A course in modern linguistics*. New York: MacMillan.

Katz, Jerrold J.; Postal, Paul M. 1963. "Semantic interpretation of idioms and sentences containing them". M.I.T. Research Laboratory of Electronics, *Quarterly Progress Report* No. 70, 275-282.

Lakoff, George. 1987. *Women, Fire, and Dangerous Things. What Categories Reveal about the Mind*. Chicago: Univ. of Chicago Press.

Lakoff, G.; Johnson, M. 1980. *Metaphors we live by*. Chicago: Univ. of Chicago Press.

Laufer, Batia; Goldstein, Zahava. 2004. "Testing Vocabulary Knowledge: Size, Strength, and Computer Adaptiveness". *Language Learning* 54, 3, 399-436.

Long, Thomas Hill. (ed.).1980. *Longman dictionary of English idioms*. Harlow: Longman. (in the text referred to as LDEI)

Makkai, Adam. 1972. *Idiom structure in English*. The Hague: Mouton.

Monnier, Catherine; Syssau, Arielle. 2008. "Semantic contribution to verbal short-term memory: Are pleasant words easier to remember than neutral words in serial recall and serial recognition?". *Memory & Cognition* 36, 1, 35-42.

Peirce, C.S. 1965. *Collected Papers*. C. Hartshorne; P. Weiss. (eds.). Cambridge: Harvard University Press.

Pollio H. et al. 1977. *Psychology and the poetics of growth: Figurative language in psychology, psychotherapy, and education*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Read, J.; Chapelle, C.A.. 2001. "A framework for second language vocabulary assessment". *Language Testing* 18, 1-32.

Roach, Peter. 2000. *English Phonetics and Phonology. A practical course*. Cambridge: Cambridge University Press.

Rizzi, Luigi. 2004. "On the study of the language faculty: Results, developments and perspectives". *The Linguistic Review* 21, 323-344.

Ross, J.R. 1980. "Ikonismus in der Phraseologie. Der Ton macht die Bedeutung". *Zeitschrift für Semiotik* 2, 39-56.

Schmitt, Norbert. (ed.). 2004. *Formulaic Sequences. Language Learning & Language Teaching* 9. Amsterdam: John Benjamins Publishing Co.

Schmitt, Norbert; Carter, Ronald. 2004. "Formulaic sequences in action: an introduction". In Schmitt, Norbert. (ed.). *Formulaic Sequences. Language Learning & Language Teaching* 9. Amsterdam: John Benjamins Publishing Co., 1-22.

Schmitt, Norbert; Grandage, Sarah; Adolphs, Svenja. "Are corpus-derived recurrent clusters psycholinguistically valid?". In Schmitt, Norbert. (ed.). *Formulaic Sequences. Language Learning & Language Teaching* 9. Amsterdam: John Benjamins Publishing Co., 127-151.

Seidlhofer, Barbara; Widdowson, Henry G. 2007. "Idiomatic variation and change in English. The idiom principle and its realizations". In Smit, U.; Dollinger, S.; Hüttner, J.; Kaltenböck, G.; Lutzky, U. (eds.). *Tracing English through Time. Explorations in language variation*. Vienna: Braumüller, 359-374.

Sinclair, John McHardy. 1991. *Corpus, concordance, collocation*. Oxford: Oxford University Press.

Titone, Debra A.; Connine, Cynthia M. 1994. "Comprehension of idiomatic expressions: effects of predictability and literality". *Journal of Experimental Psychology: Learning, Memory and Cognition*. 20, 5, 1126-1138.

Weinreich, Uriel. 1969. "Problems in the analysis of idioms". In Puhvel, Jaan. (ed.). *Substance and structure of language*. Berkley: California University Press, 23-81.

Welte, Werner. 1990. *Englische Phraseologie und Idiomatik: ein Arbeitsbuch mit umfassender Bibliographie*. Frankfurt am Main: Lang.

Wray, Alison. 2002. *Formulaic language and the lexicon*. Cambridge: Cambridge University Press.

Zipf, George Kingsley. 1972. *Human behaviour and the principle of least effort: an introduction of human ecology*. New York: Hafner.

8. Appendix

8.1. Appendix 1

These are the tests which were used in the pilot study. The first three (Test 1, Test 2 and Test 3) were distributed in session 1 of the pilot, the second three (Test GROUP 1, Test GROUP 2, and Test GROUP 3) in the session 2.

Test 1

Please fill in the idiom's meanings you remember!

to balance words	
to open the cardamom pot	
to put the blinds to use	
to carry one's head round	
to muck over the ruck	
to be bitten by the snake	
to make a sandwich	
to hide from the kettledrum	
to be an Ignorant Lindsay	
to get an Ylang-Ylang rub	
to have the knowledge up one's sleeve	
to drown the orchid	
the yellow spot on the picture	
as cozy as a kerchief	
to blow up the first balloon	

as handsome as Ken	
to stack books	
guppy disguises nausea	
to turn on the heating	
to peel peaches with a butcher's knife	

Test 2

Please fill in the idioms for the meanings given!

	to be very cautious of what you are saying in order to not spill a secret
	to start sexual relations, make sexual advances
	to hide or turn away from the world
	to be very prudish
	to hush up something
	to be caught cheating
	to have a threesome
	to run away from bad consequences
	to focus only on one's own needs and wishes and ignore the consequences for other people
	to get an erotic massage
	to cheat
	to do too much of a good thing so that it turns out bad
	the bright side of something

	uncomfortable
	to be the first to congratulate
	to have a slippery appearance
	to get an amount of work that is unmanageable
	a situation seems better than it really is
	to raise the level of competition
	to ask very unfitting, direct and indiscrete questions

Test 3

Please fill in the missing idioms or meanings respectively!

to balance words	
to open the cardamom pot	
to put the blinds to use	
to carry one's head round	
to muck over the ruck	
to be bitten by the snake	
to make a sandwich	
to hide from the kettledrum	
to be an Ignorant Lindsay	
to get an Ylang-Ylang rub	
	to cheat

	to do too much of a good thing so that it turns out bad
	the bright side of something
	uncomfortable
	to be the first to congratulate
	to have a slippery appearance
	to get an amount of work that is unmanageable
	a situation seems better than it really is
	to raise the level of competition
	to ask very unfitting, direct and indiscrete questions

TEST

Group 1

Please list as many idioms as you remember from last week!

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

Test

Group 2

Please fill in the idiom's meanings you remember!

to balance words	
to open the cardamom pot	
to put the blinds to use	
to carry one's head round	
to muck over the ruck	
to be bitten by the snake	
to make a sandwich	

to hide from the kettledrum	
to be an Ignorant Lindsay	
to get an Ylang-Ylang rub	
to have the knowledge up one's sleeve	
to drown the orchid	
the yellow spot on the picture	
as cozy as a kerchief	
to blow up the first balloon	
as handsome as Ken	
to stack books	
guppy disguises nausea	
to turn on the heating	
to peel peaches with a butcher's knife	

Test – Group 3

Please fill in the idioms for the meanings given!

	to be very cautious of what you are saying in order to not spill a secret
	to start sexual relations, make sexual advances
	to hide or turn away from the world
	to be very prudish
	to hush up something

	to be caught cheating
	to have a threesome
	to run away from bad consequences
	to focus only on one's own needs and wishes and ignore the consequences for other people
	to get an erotic massage
	to cheat
	to do too much of a good thing so that it turns out bad
	the bright side of something
	uncomfortable
	to be the first to congratulate
	to have a slippery appearance
	to get an amount of work that is unmanageable
	a situation seems better than it really is
	to raise the level of competition
	to ask very unfitting, direct and indiscrete questions

8.2. Appendix 2

These are the tests which were distributed in session 1 of the experiment. The participants were asked to complete Test 1, 2, and 3 after rounds 1, 2, and 3 respectively.

Test 1

Please fill in the idiom's meanings you remember!

to set the plastic on fire	
to open the cardamom pot	
to carry one's head round	
to upper-cut Ulysses	
the yellow spot on the picture	
to fondle the splinters	
to hide from the kettledrum	
to have fire in one's soul	
to peel peaches with a butcher's knife	
to spleeve it	
to drown the orchid	
to be bitten by the snake	
to stack books	
as cozy as a kerchief	
to ming the bing	
to stick the green ribbon onto the book	
to be an Ignorant Lindsay	

to saddle somebody's zebra	
to get an Ylang-Ylang rub	
to eat the lily	

Test 2

Please fill in the idioms for the meanings given!

	to dig into somebody's past
	to be the first to congratulate
	to get an amount of work that is unmanageable
	to get an erotic massage
	to focus only on one's own needs and wishes and ignore the consequences for other people
	to make a bad deal when shopping, pay too much
	to be caught cheating
	to have sexual intercourse
	to ask very direct, unfitting and indiscrete questions
	uncomfortable
	to do too much of a good thing so that it turns out bad
	to cheat
	to be a rather boring person
	to buy something on credit
	to be very prudish

	the bright side of something
	to shop excessively
	to run away from bad consequences
	to start sexual relations, make sexual advances
	to start studying a difficult subject in a very determinate way

Test 3

Please fill in the missing idioms or meanings respectively!

to be bitten by the snake	
to drown the orchid	
to be an Ignorant Lindsay	
to fondle the splinters	
to saddle somebody's zebra	
as cozy as a kerchief	
to have fire in one's soul	
to eat the lily	
to ming the bing	
to hide from the kettledrum	
	the bright side of something
	to start studying a difficult subject in a very determinate way
	to get an erotic massage

	to shop excessively
	to be the first to congratulate
	to get an amount of work that is unmanageable
	to buy something on credit
	to be very prudish
	to start sexual relations, make sexual advances
	to ask very unfitting, direct and indiscrete questions

8.3. Appendix 3

These are the tests distributed to the participants in session 2 of the experiment.

Is English your second language? ☐ Yes. ☐ No. It is my ☐ L1, ☐ L3, ☐ L4.

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. _____	☐	☐
2. _____	☐	☐
3. _____	☐	☐
4. _____	☐	☐
5. _____	☐	☐
6. _____	☐	☐
7. _____	☐	☐
8. _____	☐	☐
9. _____	☐	☐
10. _____	☐	☐
11. _____	☐	☐
12. _____	☐	☐
13. _____	☐	☐
14. _____	☐	☐

15. _____ ☐ ☐
16. _____ ☐ ☐
17. _____ ☐ ☐
18. _____ ☐ ☐
19. _____ ☐ ☐
20. _____ ☐ ☐

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
	to dig into somebody's past	☐	☐
	to be the first to congratulate	☐	☐
	to get an amount of work that is unmanageable	☐	☐
	to get an erotic massage	☐	☐
	to focus only on one's own needs and wishes and ignore the consequences for other people	☐	☐
	to make a bad deal when shopping, pay too much	☐	☐
	to be caught cheating	☐	☐
	to have sexual intercourse	☐	☐
	to ask very direct, unfitting and indiscrete questions	☐	☐
	uncomfortable	☐	☐
	to do too much of a good thing so that it turns out bad	☐	☐
	to cheat	☐	☐

	to be a rather boring person	☐	☐
	to buy something on credit	☐	☐
	to be very prudish	☐	☐
	the bright side of something	☐	☐
	to shop excessively	☐	☐
	to run away from bad consequences	☐	☐
	to start sexual relations, make sexual advances	☐	☐
	to start studying a difficult subject in a very determinate way	☐	☐

Test Group 3

Please fill in the the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire		☐	☐
to open the cardamom pot		☐	☐
to carry one's head round		☐	☐
to upper-cut Ulysses		☐	☐
the yellow spot on the picture		☐	☐
to fondle the splinters		☐	☐
to hide from the kettledrum		☐	☐
to have fire in one's soul		☐	☐
to peel peaches with a butcher's knife		☐	☐
to spleeve it		☐	☐

to drown the orchid		O	O
to be bitten by the snake		O	O
to stack books		O	O
as cozy as a kerchief		O	O
to ming the bing		O	O
to stick the green ribbon onto the book		O	O
to be an Ignorant Lindsay		O	O
to saddle somebody's zebra		O	O
to get an Ylang-Ylang rub		O	O
to eat the lily		O	O

8.4. Appendix 4

The words in the tests which are printed in the font Arial represent the participants' answers.

Test Group 1

N1

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to set the plastic on fire	✓	☐
2. to peel peaches with a butcher's knife	✓	☐
3. to have fire in one's soul	☐	✓
4. to eat the lily	☐	✓
5. to be an ignorant Lindsay	☐	✓
6. to get an ylang ylang rub	✓	☐
7. to put the green ribbon on the book	☐	✓
8. to be the yellow spot on the picture	☐	✓
9. to bing the bang	✓	☐
10. to drown the orchid	☐	✓
11.	☐	☐
12.	☐	☐
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to sleeve it	☐	☒
2. to give sb. an Ylang-Ylang rub	☒	☐
3. to put a green ribbon on a book	☐	☒
4. the yellow spot on a picture	☐	☒
5. to	☐	☐
6.	☐	☐
7.	☐	☐
8.	☐	☐
9.	☐	☐
10.	☐	☐
11.	☐	☐
12.	☐	☐
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

N3

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. Ming the bing	✓	☐
2. stacking books	✓	☐
3. to bite the lily	☐	✓
4. to spleeve	☐	✓
5. Ylang-Ylang rub	✓	☐
6. _____	☐	☐
7. _____	☐	☐
8. _____	☐	☐
9. _____	☐	☐
10. _____	☐	☐
11. _____	☐	☐
12. _____	☐	☐
13. _____	☐	☐
14. _____	☐	☐
15. _____	☐	☐
16. _____	☐	☐
17. _____	☐	☐
18. _____	☐	☐
19. _____	☐	☐
20. _____	☐	☐

S1

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to eat the lily	✓	☐
2. he has fire in his soul	☐	✓
3. to open the Cardamom pot	✓	☐
4. to get an Ylang-Ylang rub	✓	☐
5. to set the plastic on fire	☐	✓
6. to ming the bing	✓	☐
7. to be an ignorant Lindsay	✓	☐
8. cozy as a kerchief	☐	✓
9. to upper-cut Ulysses	✓	☐
10. to stack books	☐	✓
11. to spleeve it	☐	✓
12. to get bitten by the snake	✓	☐
13. to fondle the splinters	✓	☐
14. to hide from the kettle drum	✓	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

S2

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. To upper-cut Ulysses	✓	☐
2. to ming the bing	✓	☐
3. to get an Ylang-Ylang rub	✓	☐
4. to be the first to stick the green ribbon onto the book	✓	☐
5. to set the plastic on fire	✓	☐
6. to spleeve it	☐	✓
7. to open the Cardamom pot box	✓	☐
8. to settle somebody's zebra	☐	✓
9. to peel peaches with a butcher's knife	✓	☐
10. to hide away from the kettledrum	✓	☐
11. to stack books	☐	✓
12. to eat the lily	☐	✓
13. to have fire in one's soul	☐	✓
14. to be a (adj.) Lindsay	✓	☐
15. to carry your head round	✓	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to ming – the bing	✓	☐
2. to open the cardamom pot	✓	☐
3. to have/give an Ylang-Ylang rub	✓	☐
4. to act like a Lind to be an ignorant Lindsay	✓	☐
5. to have fire in one's soul	✓	☐
6. to peel sth w a peach with a butcher's knife	✓	☐
7. to set plastic on fire	✓	☐
8. to put a green ribbon on a book	☐	✓
9. to be bitten by a the snake	✓	☐
10.	☐	☐
11.	☐	☐
12.	☐	☐
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

S4

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to ming the bing	✓	☐
2. to eat the lily	✓	☐
3. to drown the orchid	✓	☐
4. to get an Ylang-Ylang massage rub	✓	☐
5. to see the yellow point in the picture	☐	✓
6. to spleeve it	✓	☐
7. to open the Cardamom pot	✓	☐
8. to have wear one's head round	☐	✓
9. to be bitten by the snake	✓	☐
10. to set plastic on fire	✓	☐
11. to be a Lindsay	✓	☐
12.	☐	☐
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to drown the orchid	✓	☐
2. to spleeve it	☐	✓
3. to be bitten by a snake	☐	✓
4. to have fire in one's soul	✓	☐
5. to ming the bing	✓	☐
6. to open the cardamom box	✓	☐
7. to get an Ylang-Ylang rub	✓	☐
8. to set the plastic on fire	✓	☐
9. to upper-cut Ulysses	☐	✓
10. to stack books	☐	✓
11. to peel a peach with a butcher's knife	✓	☐
12. to carry one's head around	☐	✓
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to ming the bing	✓	☐
2. to set the plastic on fire	✓	☐
3. to get an Ylang-Ylang rub	✓	☐
4. to peel peatches with the butcher's knife	☐	✓
5. to saddle somebody's zebra	✓	☐
6. the yellow spot on the picture	✓	☐
7. to open the cardamom pot	✓	☐
8. to eat the lily	✓	☐
9. to be bitten by the snake	✓	☐
10. to have fire in one's soul	☐	☐
11. to stick the green ribbon onto the book	☐	✓
12. to fondle the splinters	☐	✓
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. To set the plastic on fire	☒	☐
2. To get an ylang-ylang rub	☐	☒
3. to hide from the cettledrum	☐	☒
4. to snatch it	☐	☒
5. to carry your head around	☐	☒
6. to peel peaches with a butcher's knife	☒	☐
7. to saddle the zebra	☐	☒
8. to get caught by the snake	☐	☒
9.	☐	☐
10.	☐	☐
11.	☐	☐
12.	☐	☐
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to set the plastic on fire	☐	☒
2. to settle s.o.'s zebra	☐	☒
3. to ming the bing	☒	☐
4. to open the cardamom pot	☐	☒
5. the yellow spot on the picture	☒	☐
6. to get an Ylang Ylang rub	☒	☐
7. to eat the lilies lily	☒	☐
8. to be an Ignorant Lindsay	☐	☒
9. to carrys s.o.'s head round	☐	☒
10. to have fire in one's soul	☐	☒
11. to spleeve it	☐	☒
12. to get bitten by the snake	☒	☐
13. to upper-cut Ulysses	☒	☐
14. to peel the peaches with a butcher's knife	☒	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to upper-cut Ulysses	✓	☐
2. to spleeve it	☐	✓
3. to be an ignorant Lindsay	✓	☐
4. to get an Ylang Ylang rub	✓	☐
5. to stick the green ribbon onto the book	☐	✓
6. to be bitten by the snake	✓	☐
7. to open the cardamom pot	✓	☐
8. to eat the lily	✓	☐
9.	☐	☐
10.	☐	☐
11.	☐	☐
12.	☐	☐
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

S10

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to minge the binge	✓	☐
2. to open up the cardamom pot	✓	☐
3. to set the plactic on fire	✓	☐
4. to upper-cut Ulysses	✓	☐
5. to stack books	☐	✓
6. to fondle the splinters	✓	☐
7. to get bitten by the snake	☐	✓
8. to have fire in one's soul	☐	✓
9. to hide from the kettle drum	☐	✓
10. to eat the lily	✓	☐
11. to get an Ylang-Ylang rub	✓	☐
12. to spleeve	☐	✓
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

TEST**Group 1**

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

	Funny	Boring
1. to ming the bing	✓	☐
2. to set the plastic on fire	✓	☐
3. to saddle sb.'s zebra	✓	☐
4. to stick the green rubbon onto the book	☐	✓
5. to stack books	☐	✓
6. to have fire in one's soul	☐	✓
7. to peel a peach with a butcher's knife	✓	☐
8. to get an Ylang Ylang rub	✓	☐
9. to eat the lilly	✓	☐
10. to be an ignorant Lindsay	✓	☐
11.	☐	☐
12.	☐	☐
13.	☐	☐
14.	☐	☐
15.	☐	☐
16.	☐	☐
17.	☐	☐
18.	☐	☐
19.	☐	☐
20.	☐	☐

S12

TEST

Group 1

Please list as many idioms as you remember from last week! Please also tick whether you found each idiom you remember funny or boring.

		Funny	Boring
1.	to be beaten by a snake	✓	☐
2.	to ming the bing	✓	☐
3.	to be an Ignorant Lindsay	✓	☐
4.	the yellow spot on tha paper	☐	✓
5.	to upper-cut Ulyssis	☐	✓
6.		☐	☐
7.		☐	☐
8.		☐	☐
9.		☐	☐
10.		☐	☐
11.		☐	☐
12.		☐	☐
13.		☐	☐
14.		☐	☐
15.		☐	☐
16.		☐	☐
17.		☐	☐
18.		☐	☐
19.		☐	☐
20.		☐	☐

8.5. Appendix 5

Test Group 2

The following pages show the tests as filled out by the participants of Test Group 2. Again the font Arial is used to indicate what the participants have written.

Test Group 2

Please fill in the idioms you remember from last week for the meanings given!

Please also tick whether you found the idioms you remember funny or boring.

		Funny	Boring
	to dig into somebody's past	☐	☐
	to be the first to congratulate	☐	☐
to stack the books	to get an amount of work that is unmanageable	☐	☐
to get an Ylang	to get an erotic massage	☐	☐
	to focus only on one's own needs and wishes and ignore the consequences for other people	☐	☐
to eat the orchid	to make a bad deal when shopping, pay too much	☐	☐
get bitten by the snake	to be caught cheating	☐	☐
to ming the bing	to have sexual intercourse	☐	☐
	to ask very direct, unfitting and indiscrete questions	☐	☐
as cozy as a kerchief	uncomfortable	☐	☐
	to do too much of a good thing so that it turns out bad	☐	☐
	to cheat	☐	☐
	to be a rather boring person	☐	☐
	to buy something on credit	☐	☐
	to be very prudish	☐	☐
	the bright side of something	☐	☐
set fire to the plastic	to shop excessively	☐	☐
	to run away from bad consequences	☐	☐
	to start sexual relations, make sexual advances	☐	☐
to upper-cut Ulysses	to start studying a difficult subject in a very determinate way	☐	☐

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny Boring	
	to dig into somebody's past	☐	☐
to give a green ribbon ...	to be the first to congratulate	☒	☐
to stack books	to get an amount of work that is unmanageable	☐	☐
to get an Ylang-Ylang	to get an erotic massage	☐	☐
to be an ignorant Lizzy	to focus only on one's own needs and wishes and ignore the consequences for other people	☒	☐
	to make a bad deal when shopping, pay too much	☐	☐
to be bitten by the snake	to be caught cheating	☒	☐
	to have sexual intercourse	☐	☐
	to ask very direct, unfitting and indiscrete questions	☐	☐
	uncomfortable	☐	☐
	to do too much of a good thing so that it turns out bad	☐	☐
	to cheat	☐	☐
	to be a rather boring person	☐	☐
	to buy something on credit	☐	☐
	to be very prudish	☐	☐
	the bright side of something	☐	☐
to have many plastic bags	to shop excessively	☐	☐
	to run away from bad consequences	☐	☐
	to start sexual relations, make sexual advances	☐	☐
	to start studying a difficult subject in a very determinate way	☐	☐

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
to saddle sb. zebra	to dig into somebody's past	✓	0
to stick the green ribbon on the book	to be the first to congratulate	0	✓
to stack books	to get an amount of work that is unmanageable	0	✓
to get an Ylang Ylang rub	to get an erotic massage	✓	0
to be an ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	✓	0
	to make a bad deal when shopping, pay too much	0	0
	to be caught cheating	0	0
to ming the bing	to have sexual intercourse	✓	0
to peel peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	✓	0
cozy as a kerchief	uncomfortable	✓	0
to drown the orchid	to do too much of a good thing so that it turns out bad	✓	0
	to cheat	0	0
to have fire in one's soul	to be a rather boring person	✓	0
to spleeve it	to buy something on credit	0	✓
	to be very prudish	0	0
the yellow spot on the picture	the bright side of something	0	✓
to set the plastic on fire	to shop excessively	0	0
to hide from the kettledrum	to run away from bad consequences	0	✓
to open the cardamom pot	to start sexual relations, make sexual advances	✓	0
to upper-cut Ulysses	to start studying a difficult subject in a very determinate way	✓	0

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
to saddle s.o.'s zebra	to dig into somebody's past	✓	0
to stick a green ribbon onto s.b.'s the book	to be the first to congratulate	✓	0
to stack the books	to get an amount of work that is unmanageable	0	✓
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to be an ignorant lindsey	to focus only on one's own needs and wishes and ignore the consequences for other people	0	✓
to eat the lilly	to make a bad deal when shopping, pay too much	✓	0
to be bitten by the snake	to be caught cheating	✓	0
to ming the bing	to have sexual intercourse	✓	0
to peel the peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	✓	0
to be as cozy as a kerchief	uncomfortable	0	✓
to drown the orchid	to do too much of a good thing so that it turns out bad	✓	0
to finde the	to cheat	0	0
to have fire in one's soul	to be a rather boring person	0	✓
to spleeve it	to buy something on credit	0	✓
to carry one's head round	to be very prudish	0	✓
to be the yellow spot in the picture	the bright side of something	0	✓
to set the plastic on fire	to shop excessively	✓	0
to hide from the kettle drum	to run away from bad consequences	0	✓
to open the cinnamon pot	to start sexual relations, make sexual advances	✓	0
to upper-cut Ulysses	to start studying a difficult subject in a very determinate way	0	✓

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
saddle someone's zebra	to dig into somebody's past	✓	0
put the green ribbon on the book	to be the first to congratulate	0	✓
be stacking books	to get an amount of work that is unmanageable	✓	0
get an Ylang-Ylang rub	to get an erotic massage	✓	0
be an Ignorant Lynsay	to focus only on one's own needs and wishes and ignore the consequences for other people	✓	0
to eat the Lily	to make a bad deal when shopping, pay too much	✓	0
be bitten by the snake	to be caught cheating	✓	0
to ming the bing	to have sexual intercourse	✓	0
to peel peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	✓	0
as cozy as a kerchief	uncomfortable	✓	0
to drown the orchid	to do too much of a good thing so that it turns out bad	✓	0
to fondle the splinters	to cheat	✓	0
to have fire in one's soul	to be a rather boring person	✓	0
to spleeve it	to buy something on credit	✓	0
to carry one's head round	to be very prudish	✓	0
the yellow spot on the pic.	the bright side of something	✓	0
set the plastic on fire	to shop excessively	✓	0
to hide from the kettledrum	to run away from bad consequences	✓	0
to open the cardamon pot	to start sexual relations, make sexual advances	✓	0
to uppercut Ulysses	to start studying a difficult subject in a very determinate way	✓	0

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny Boring	
	to dig into somebody's past	☐	☐
put the green ribbon onto the book	to be the first to congratulate	☒	☐
to stack books	to get an amount of work that is unmanageable	☐	☒
Ylang Ylang rub	to get an erotic massage	☒	☐
to be an ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	☒	☐
	to make a bad deal when shopping, pay too much	☐	☐
	to be caught cheating	☐	☐
ming bing	to have sexual intercourse	☒	☐
cut peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	☒	☐
	uncomfortable	☐	☐
	to do too much of a good thing so that it turns out bad	☐	☐
	to cheat	☐	☐
have fire in sb. Soul	to be a rather boring person	☐	☒
to spleeve sth.	to buy something on credit	☒	☐
	to be very prudish	☐	☐
the yellow spot in the pict.	the bright side of something	☒	☐
to set the plastic on fire	to shop excessively	☒	☐
	to run away from bad consequences	☐	☐
	to start sexual relations, make sexual advances	☐	☐
to undercut Ulysses	to start studying a difficult subject in a very determinate way	☒	☐

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
to saddle someone's zebra	to dig into somebody's past	✓	0
to stick the green ribbon onto the book	to be the first to congratulate	✓	0
	to get an amount of work that is unmanageable	0	0
to get an Ylang Ylang rub	to get an erotic massage	✓	0
to be an ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	✓	0
to eat the lilly	to make a bad deal when shopping, pay too much	✓	0
to be bitten by the snake	to be caught cheating	✓	0
	to have sexual intercourse	0	0
to peel peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	✓	0
	uncomfortable	0	0
to drown the orchid	to do too much of a good thing so that it turns out bad	0	✓
	to cheat	0	0
to have fire in one's soul	to be a rather boring person	0	✓
to spleeve	to buy something on credit	0	✓
	to be very prudish	0	0
the yellow spot on the picture	the bright side of something	✓	0
to set the plastic on fire	to shop excessively	✓	0
to ru hide from the cattledrum	to run away from bad consequences	✓	0
	to start sexual relations, make sexual advances	0	0
to ... the Ulysses	to start studying a difficult subject in a very determinate way	✓	0

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny Boring	
	to dig into somebody's past	0	0
To put the green ribbon on the book	to be the first to congratulate	0	✓
To stack books	to get an amount of work that is unmanageable	0	✓
To get an Ylang Ylang rub	to get an erotic massage	✓	0
To be a Ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	✓	0
To eat the lilly	to make a bad deal when shopping, pay too much	✓	0
	to be caught cheating	0	0
To bring the ming	to have sexual intercourse	✓	0
	to ask very direct, unfitting and indiscrete questions	0	0
as cozy as a kerchief	uncomfortable	0	✓
to drown the orchid	to do too much of a good thing so that it turns out bad	✓	0
	to cheat	0	0
to have fire in the soul	to be a rather boring person	0	✓
to spleeve it	to buy something on credit	✓	0
	to be very prudish	0	0
the yellow .. [rest of words is illegible]	the bright side of something	0	✓
to set the plastic on fire	to shop excessively	✓	0
	to run away from bad consequences	0	0
to open up the cardamom pot	to start sexual relations, make sexual advances	✓	0
To uppercut Ulysses	to start studying a difficult subject in a very determinate way	✓	0

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
... sb's zebra	to dig into somebody's past	✓	0
to put the green ribbon on sb's books	to be the first to congratulate	✓	0
	to get an amount of work that is unmanageable	0	✓
to get a Ylang-Ylang rub	to get an erotic massage	✓	0
	to focus only on one's own needs and wishes and ignore the consequences for other people	0	✓
	to make a bad deal when shopping, pay too much	0	✓
get bitten by the snake	to be caught cheating	✓	0
To open the	to have sexual intercourse	0	0
to peel peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	✓	0
	uncomfortable	0	0
	to do too much of a good thing so that it turns out bad	0	0
	to cheat	0	0
	to be a rather boring person	0	0
	to buy something on credit	0	✓
	to be very prudish	✓	0
the sun spot	the bright side of something	0	✓
to burn the plastic bags	to shop excessively	✓	0
	to run away from bad consequences	✓	0
to open the cardamom pot	to start sexual relations, make sexual advances	✓	0
	to start studying a difficult subject in a very determinate way	0	✓

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
to saddle sb.'s zebra	to dig into somebody's past	✓	0
to put the green ribbon onto the book	to be the first to congratulate	0	✓
to stackle books	to get an amount of work that is unmanageable	0	✓
to get an Ylang Ylang rub	to get an erotic massage	✓	0
to be an Ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	✓	0
	to make a bad deal when shopping, pay too much	0	0
to be bitten by the snake	to be caught cheating	✓	0
to ming the bing	to have sexual intercourse	✓	0
to peel peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	✓	0
as cozy as a kerchief	uncomfortable	0	✓
to drown the orchid	to do too much of a good thing so that it turns out bad	✓	0
	to cheat	0	0
to have fire on one's soul	to be a rather boring person	0	✓
to sleeve it	to buy something on credit	0	✓
to turn one's head round	to be very prudish	0	✓
the yellow spot on the picture	the bright side of something	✓	0
to set the plastic on fire	to shop excessively	✓	0
to hide from the kettledrum	to run away from bad consequences	✓	0
to open the cardamom pot	to start sexual relations, make sexual advances	✓	0
to up-cut Ulysses	to start studying a difficult subject in a very determinate way	0	✓

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
	to dig into somebody's past	☐	☒
to put the green ribbon onto the book	to be the first to congratulate	☐	☒
to stack books	to get an amount of work that is unmanageable	☐	☒
to get an Ylang Ylang-rub	to get an erotic massage	☒	☐
to be an ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	☒	☐
	to make a bad deal when shopping, pay too much	☐	☒
to be bitten by the snake	to be caught cheating	☐	☒
to ming the bing	to have sexual intercourse	☒	☐
	to ask very direct, unfitting and indiscrete questions	☐	☐
cozy as a kerfue	uncomfortable	☐	☒
to drown the lyly	to do too much of a good thing so that it turns out bad	☒	☐
	to cheat	☐	☒
to have fire in one's soul	to be a rather boring person	☒	☐
to spleeve sth.	to buy something on credit	☐	☒
to carry one's head round	to be very prudish	☒	☐
the yellow spot in the picture	the bright side of something	☒	☐
to set the plastic on fire	to shop excessively	☒	☐
to hide from the kettledrum	to run away from bad consequences	☒	☐
to open the kardamom pot	to start sexual relations, make sexual advances	☒	☐
to cut down Ulysses	to start studying a difficult subject in a very determinate way	☐	☒

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny Boring	
	to dig into somebody's past	☐	☐
	to be the first to congratulate	☐	☐
to stack books	to get an amount of work that is unmanageable	☐	☒
to get an Ylang-Ylang rub	to get an erotic massage	☒	☐
	to focus only on one's own needs and wishes and ignore the consequences for other people	☐	☐
	to make a bad deal when shopping, pay too much	☐	☐
	to be caught cheating	☐	☐
	to have sexual intercourse	☐	☐
to peel the peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	☒	☐
	uncomfortable	☐	☐
	to do too much of a good thing so that it turns out bad	☐	☐
spleeve	to cheat	☐	☒
	to be a rather boring person	☐	☐
	to buy something on credit	☐	☐
	to be very prudish	☐	☐
the yellow spot on the picture	the bright side of something	☐	☒
	to shop excessively	☐	☐
	to run away from bad consequences	☐	☐
to ming the bing	to start sexual relations, make sexual advances	☒	☐
	to start studying a difficult subject in a very determinate way	☐	☐

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
to saddle someone's zebra	to dig into somebody's past	✓	0
	to be the first to congratulate	0	0
to stack books	to get an amount of work that is unmanageable	0	0
to get an Ylang Ylang rub	to get an erotic massage	✓	0
to be an Ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	0	0
to eat the Lily	to make a bad deal when shopping, pay too much	✓	0
	to be caught cheating	0	0
to ming the bing	to have sexual intercourse	✓	0
	to ask very direct, unfitting and indiscrete questions	0	0
	uncomfortable	0	0
	to do too much of a good thing so that it turns out bad	0	0
	to cheat	0	0
	to be a rather boring person	0	0
to spleeve it	to buy something on credit	0	0
	to be very prudish	0	0
the yellow spot on the picture	the bright side of something	✓	0
to set the plastic on fire	to shop excessively	✓	0
	to run away from bad consequences	0	0
	to start sexual relations, make sexual advances	0	0
to upper-cut Ulysses	to start studying a difficult subject in a very determinate way	0	0

Test Group 2

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny Boring	
saddle the zebra	to dig into somebody's past	☐	☐
stick a green card onto one's book	to be the first to congratulate	☐	☒
to stack books	to get an amount of work that is unmanageable	☐	☐
to get an Ylang Ylang rub	to get an erotic massage	☒	☐
to be an ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	☒	☐
to eat the lily	to make a bad deal when shopping, pay too much	☒	☐
to be bitten by the snake	to be caught cheating	☐	☒
to ming the bing	to have sexual intercourse	☒	☐
to peel peaches w. a butcher's knife	to ask very direct, unfitting and indiscrete questions	☐	☐
as cozy as cardboard	uncomfortable	☒	☐
to drown the orchid	to do too much of a good thing so that it turns out bad	☒	☐
	to cheat	☐	☐
to have fire in your soul	to be a rather boring person	☐	☐
to spleeve it	to buy something on credit	☐	☐
to carry one's head 'round	to be very prudish	☐	☐
the yellow spot on the picture	the bright side of something	☒	☐
to set the plastic on fire	to shop excessively	☒	☐
to hide from the kettledrum	to run away from bad consequences	☒	☐
to open the cardamom pot	to start sexual relations, make sexual advances	☒	☐
To upper-cut Ulysses	to start studying a difficult subject in a very determinate way	☒	☐

*Please fill in the idioms you remember from last week for the meanings given!
Please also tick whether you found the idioms you remember funny or boring.*

		Funny	Boring
zebra	to dig into somebody's past	☐	☐
to put a green ribbon onto the book	to be the first to congratulate	☒	☐
to stack books	to get an amount of work that is unmanageable	☒	☐
to get an Ylang-Ylang massage	to get an erotic massage	☒	☐
to be an ignorant Lindsay	to focus only on one's own needs and wishes and ignore the consequences for other people	☒	☐
	to make a bad deal when shopping, pay too much	☐	☐
to be bitten by the snake	to be caught cheating	☒	☐
	to have sexual intercourse	☐	☐
	to ask very direct, unfitting and indiscrete questions	☐	☐
as cozy as a	uncomfortable	☐	☐
to drown the orchidee	to do too much of a good thing so that it turns out bad	☒	☐
	to cheat	☐	☐
to have a fire soul	to be a rather boring person	☐	☒
to pinch it	to buy something on credit	☐	☐
to go around with the head on the body	to be very prudish	☐	☒
the yellow point on the picture	the bright side of something	☒	☐
to put the plastic on fire	to shop excessively	☒	☐
	to run away from bad consequences	☐	☐
to ming the bing	to start sexual relations, make sexual advances	☒	☐
Odysseus	to start studying a difficult subject in a very determinate way	☐	☐

8.6. Appendix 6

Test Group 3

The following pages exhibit what the participants from Test Group 3 have written. Their answers are printed in Arial.

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	purchase a lot	✓	0
to open the cardamom pot	open sexual advances	0	✓
to carry one's head round	To be prudish	0	✓
to upper-cut Ulysses	to study extraordinarily hard	0	✓
the yellow spot on the picture	the bright side of something	0	✓
to fondle the splinters	to cheat	0	✓
to hide from the kettledrum	to ignore negative consequences	✓	0
to have fire in one's soul	to be boring	✓	0
to peel peaches with a butcher's knife	to ask blunt questions	✓	0
to spleeve it	to buy on credit	0	✓
to drown the orchid	to do too much of a good thing	✓	0
to be bitten by the snake	to be caught cheating	✓	0
to stack books	to take on too much work	0	✓
as cozy as a kerchief	uncomfortable	✓	0
to ming the bing	to have sex	✓	0
to stick the green ribbon onto the book	to congratulate	0	✓
to be an Ignorant Lindsay	to focus on oneself	✓	0
to saddle somebody's zebra	to search their past for something negative	0	✓
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to eat the lily	to spend too much	✓	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to go shopping	✓	0
to open the cardamom pot	to start sexual relations	✓	0
to carry one's head round		0	0
to upper-cut Ulysses		0	0
the yellow spot on the picture		0	0
to fondle the splinters	to cheat	0	✓
to hide from the kettledrum		0	0
to have fire in one's soul		0	0
to peel peaches with a butcher's knife		0	0
to spleeve it	to get caught cheating	0	✓
to drown the orchid	to do too much of a good thing	✓	0
to be bitten by the snake		0	0
to stack books	to get a pile of work you can't finish	✓	0
as cozy as a kerchief	something that is not comfortable	✓	0
to ming the bing	to have sex	✓	0
to stick the green ribbon onto the book	to be the first to do something	✓	0
to be an Ignorant Lindsay	not to pay attention to other people's feelings	✓	0
to saddle somebody's zebra	to give someone a bad reputation	0	✓
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to eat the lily	to pay too much for something	0	✓

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to shop excessively	✓	0
to open the cardamom pot	to start sexual relations	✓	0
to carry one's head round	to be prudish	✓	0
to upper-cut Ulysses	to tackle a lot of work	✓	0
the yellow spot on the picture	the bright side of things	0	✓
to fondle the splinters	to cheat	✓	0
to hide from the kettledrum	to run away from (bad) consequences	✓	0
to have fire in one's soul	to be boring	✓	0
to peel peaches with a butcher's knife	to ask direct questions	✓	0
to spleeve it	to buy on credit	✓	0
to drown the orchid	to do too much of a good thing	✓	0
to be bitten by the snake	to be caught cheating	0	✓
to stack books	to have a lot of studying to do	✓	0
as cozy as a kerchief	uncomfortable	0	✓
to ming the bing	to have sex	✓	0
to stick the green ribbon onto the book	to be the first to congratulate	0	✓
to be an Ignorant Lindsay	to be selfish	✓	0
to saddle somebody's zebra	to dig into someone's past	✓	0
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to eat the lily	not sure... have a downfall?	✓	0

Test Group 3

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		FunnyBoring	
to set the plastic on fire	to shop excessively	✓	0
to open the cardamom pot	to start sexual relations	✓	0
to carry one's head round	to be shy	0	✓
to upper-cut Ulysses		0	0
the yellow spot on the picture	the bright side	0	✓
to fondle the splinters		0	0
to hide from the kettledrum		0	0
to have fire in one's soul	to be a rather boring person	✓	0
to peel peaches with a butcher's knife		0	0
to spleeve it	buy on credit	✓	0
to drown the orchid	do too much good	0	✓
to be bitten by the snake	be caught cheating	0	✓
to stack books		0	0
as cozy as a kerchief	uncomfortable	0	✓
to ming the bing	to have sexual intercourse	✓	0
to stick the green ribbon onto the book	be the first to congratulate	0	✓
to be an Ignorant Lindsay	only care about oneself	✓	0
to saddle somebody's zebra	dig in somebody's past	✓	0
to get an Ylang-Ylang rub	get an erotic massage	✓	0
to eat the lily		0	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to spend a lot on money on shopping	✓	0
to open the cardamom pot	to decide to start a sexual relationship with sbd.	✓	0
to carry one's head round	to be very prudish	0	✓
to upper-cut Ulysses	to study hard for a new field of studies	0	✓
the yellow spot on the picture	to see to positive side in a negative situation	0	✓
to fondle the splinters	to cheat during a test	✓	0
to hide from the kettledrum	to hide from possible problems	✓	0
to have fire in one's soul	to be extremely boring	✓	0
to peel peaches with a butcher's knife	to ask inappropriate/ blunt/ aggressive questions	✓	0
to spleeve it	to buy sth. on credit	0	✓
to drown the orchid	to want to do good, but overdo it and do bad	✓	0
to be bitten by the snake	to be caught cheating	✓	0
to stack books	to have an unmanageable mass of work to do	0	✓
as cozy as a kerchief	uncomfortable	0	✓
to ming the bing	to have sexual intercourse	✓	0
to stick the green ribbon onto the book	to be the first one to congratulate	✓	0
to be an Ignorant Lindsay	to think only of one's own needs	✓	0
to saddle somebody's zebra	to dig into sbd's past	✓	0
to get an Ylang-Ylang rub	to get an erotic massage	0	✓
to eat the lily	to pay too much for something with less worth	✓	0

Test Group 3

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	(to set the roof on fire) to shop excessively	✓	0
to open the cardamom pot		0	0
to carry one's head round		0	0
to upper-cut Ulysses		0	0
the yellow spot on the picture		0	0
to fondle the splinters		0	0
to hide from the kettledrum		0	0
to have fire in one's soul	Passion	0	✓
to peel peaches with a butcher's knife	to ask very direct, unfitting and indiscrete questions	✓	0
to spleeve it	to buy somebody a credit	0	0
to drown the orchid		0	0
to be bitten by the snake		0	0
to stack books	to get a lot of work to do	0	0
as cozy as a kerchief	handkerchief	✓	0
to ming the bing		0	0
to stick the green ribbon onto the book	to be the first to congratulate	0	0
to be an Ignorant Lindsay	to focus only on one's own needs and wishes	✓	0
to saddle somebody's zebra	to dig in somebody's past	0	0
to get an Ylang-Ylang rub	erotic massage	✓	0
to eat the lily		0	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to shop excessively	✓	0
to open the cardamom pot	to have sexual practice	✓	0
to carry one's head round	to be easily embarrassed	0	✓
to upper-cut Ulysses		0	0
the yellow spot on the picture	bright side of sth.	✓	0
to fondle the splinters		0	0
to hide from the kettledrum		0	0
to have fire in one's soul	to be boring	0	✓
to peel peaches with a butcher's knife		0	0
to spleeve it	to buy on credit	✓	0
to drown the orchid	to do too much of a good thing to it turns out bad	✓	0
to be bitten by the snake	get caught while cheating	✓	0
to stack books		0	0
as cozy as a kerchief	not fleecy	0	✓
to ming the bing		0	0
to stick the green ribbon onto the book		0	0
to be an Ignorant Lindsay	don't care about the consequences one's action might have	0	✓
to saddle somebody's zebra	dig in one's past	✓	0
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to eat the lily	a bad deal	✓	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		FunnyBoring	
to set the plastic on fire		☐	☐
to open the cardamom pot	make sexual advances	☒	☐
to carry one's head round		☐	☐
to upper-cut Ulysses	to research thoroughly	☐	☒
the yellow spot on the picture		☐	☐
to fondle the splinters		☐	☐
to hide from the kettledrum		☐	☐
to have fire in one's soul	be boring person	☐	☒
to peel peaches with a butcher's knife		☐	☐
to spleeve it		☐	☐
to drown the orchid		☐	☐
to be bitten by the snake		☐	☐
to stack books		☐	☐
as cozy as a kerchief		☐	☐
to ming the bing	sexual intercourse	☐	☒
to stick the green ribbon onto the book		☐	☐
to be an Ignorant Lindsay		☐	☐
to saddle somebody's zebra	dig in somebody's past	☒	☐
to get an Ylang-Ylang rub	erotic massage	☐	☒
to eat the lily	buy at a too high price	☒	☐

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to shop excessively	✓	0
to open the cardamom pot	to start sexual relations	✓	0
to carry one's head round	to be prudish	0	✓
to upper-cut Ulysses	to tackle difficult subject	✓	0
the yellow spot on the picture	to see the bright side	✓	0
to fondle the splinters	to cheat	0	✓
to hide from the kettledrum	to run from bad consequences	✓	0
to have fire in one's soul	to be boring	✓	0
to peel peaches with a butcher's knife	to ask insensitive, direct questions	✓	0
to spleeve it	to buy on credit	✓	0
to drown the orchid	to do too much good so it turns out bad	✓	0
to be bitten by the snake	to be caught cheating	0	✓
to stack books	to have a too big work load	✓	0
as cozy as a kerchief	uncomfortable	0	✓
to ming the bing	to have sex	✓	0
to stick the green ribbon onto the book	to be the first to congratulate	0	✓
to be an Ignorant Lindsay	to be egoistic	✓	0
to saddle somebody's zebra	to dig up someone's past	✓	0
to get an Ylang-Ylang rub	to receive an erotic massage	0	✓
to eat the lily	to make a bad deal	0	✓

Test Group 3

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		FunnyBoring	
to set the plastic on fire	to shop excessively	☐	☐
to open the cardamom pot	to make sexual advances	☐	☐
to carry one's head round		☐	☐
to upper-cut Ulysses	to learn very hard, very much	☐	☐
the yellow spot on the picture	the nice thing	☐	☐
to fondle the splinters		☐	☐
to hide from the kettledrum	to run away from a bad situation	☐	☐
to have fire in one's soul	to be a rather boring person	☐	☐
to peel peaches with a butcher's knife	to ask directly questions	☐	☐
to spleeve it	to buy something with a credit card on credit	☐	☐
to drown the orchid	to do too much of a good thing	☐	☐
to be bitten by the snake	to be found cheating	☐	☐
to stack books	to have too much work to do	☐	☐
as cozy as a kerchief	uncomfortable	☐	☐
to ming the bing	to have sexual intercourse	☐	☐
to stick the green ribbon onto the book	to congratulate be the first to congratulate	☐	☐
to be an Ignorant Lindsay	to care only about one's own needs	☐	☐
to saddle somebody's zebra	to dig in somebody's past	☐	☐
to get an Ylang-Ylang rub	to get an erotic massage	☐	☐
to eat the lily	to have spend too much mony on something	☐	☐

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to shop excessively	✓	0
to open the cardamom pot	to start sexual interaction	✓	0
to carry one's head round		0	0
to upper-cut Ulysses	to start studying in a determinite way	✓	0
the yellow spot on the picture	the bright side of sth.	✓	0
to fondle the splinters	to get caught cheating	0	✓
to hide from the kettledrum	to avoid difficult/ unpleasant things	0	✓
to have fire in one's soul	to be a rather boring person	0	✓
to peel peaches with a butcher's knife	to ask direct questions, to be rather direct	✓	0
to spleeve it		0	0
to drown the orchid	to do too much of a good thing & it turns out bad	✓	0
to be bitten by the snake		0	0
to stack books		0	0
as cozy as a kerchief		0	0
to ming the bing	to have sex	✓	0
to stick the green ribbon onto the book	to be the first to congratulate	✓	0
to be an Ignorant Lindsay	to be selfish & arrogant	✓	0
to saddle somebody's zebra	to dig into sb's past	✓	0
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to eat the lily	to buy something at a very high price	✓	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		FunnyBoring	
to set the plastic on fire	to shop ecessively	✓	0
to open the cardamom pot	to make a move at someone	0	✓
to carry one's head round		0	✓
to upper-cut Ulysses	to study hard	✓	0
the yellow spot on the picture	the bright side of something	✓	0
to fondle the splinters		0	✓
to hide from the kettledrum	run away from consequences	0	✓
to have fire in one's soul	to be a boring person	0	✓
to peel peaches with a butcher's knife	ask uncomfortable questions	0	✓
to spleeve it	to cheat	0	✓
to drown the orchid		✓	0
to be bitten by the snake	caught cheating	0	✓
to stack books		0	✓
as cozy as a kerchief	uncomfortable	0	✓
to ming the bing	to have sexual relationships	✓	0
to stick the green ribbon onto the book	be first to congratulate	✓	0
to be an Ignorant Lindsay	to only care for oneself	✓	0
to saddle somebody's zebra	dig in someone's past	0	✓
to get an Ylang-Ylang rub	to get an erotic massage	0	✓
to eat the lily		✓	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to shop excessively	☐	☒
to open the cardamom pot	to start a sexual intercourse	☒	☐
to carry one's head round		☐	☐
to upper-cut Ulysses	to study extremely hard for an exam	☒	☐
the yellow spot on the picture	the bright side of something	☐	☒
to fondle the splinters		☐	☐
to hide from the kettledrum	to run away from consequences	☐	☐
to have fire in one's soul	to be rather boring	☐	☒
to peel peaches with a butcher's knife		☐	☐
to spleeve it	to cheat	☐	☒
to drown the orchid	to do too much of a good thing so that in the end it turns out bad	☒	☐
to be bitten by the snake	to be caught cheating	☒	☐
to stack books	to be overwhelmed with work	☐	☒
as cozy as a kerchief	not cozy at all	☐	☒
to ming the bing		☐	☐
to stick the green ribbon onto the book	to be the first to congratulate	☒	☐
to be an Ignorant Lindsay		☐	☐
to saddle somebody's zebra	to dive into somebody's past	☒	☐
to get an Ylang-Ylang rub	to get an erotic massage	☒	☐
to eat the lily	to buy sth. too expensive	☒	☐

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		FunnyBoring	
to set the plastic on fire	to shop ecessively	✓	0
to open the cardamom pot	to have sexual intercourse	0	✓
to carry one's head round	to be mad easily	0	✓
to upper-cut Ulysses	to have a lot of work a difficult topic	✓	0
the yellow spot on the picture	the bright side of something	✓	0
to fondle the splinters		0	0
to hide from the kettledrum		0	0
to have fire in one's soul	to be boring	0	✓
to peel peaches with a butcher's knife	to ask very unsensible questions	✓	0
to spleeve it		0	0
to drown the orchid		0	0
to be bitten by the snake		0	0
to stack books	to have a lot of work to do	✓	0
as cozy as a kerchief	uncomfortable	✓	0
to ming the bing	to have a sexual affair	✓	0
to stick the green ribbon onto the book	to be the first one to congratulate	✓	0
to be an Ignorant Lindsay	to be a person that becomes mad easily	✓	0
to saddle somebody's zebra	to dig in someone's past	✓	0
to get an Ylang-Ylang rub	an erotic massage	✓	0
to eat the lily	to shop to much → to pay to much	✓	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	to shop excessively	✓	0
to open the cardamom pot	to make sexual advances	✓	0
to carry one's head round		✓	0
to upper-cut Ulysses	to work really hard	✓	0
the yellow spot on the picture	the bright side of the day	✓	0
to fondle the splinters		0	✓
to hide from the kettledrum	to run away from bad consequences	✓	0
to have fire in one's soul	to be a rather boring person	✓	0
to peel peaches with a butcher's knife		✓	0
to spleeve it	to buy sth. on credit	0	✓
to drown the orchid	to do so much good that it turns out bad	✓	0
to be bitten by the snake		0	0
to stack books		0	✓
as cozy as a kerchief	uncomfortable	✓	0
to ming the bing	to have sex	✓	0
to stick the green ribbon onto the book	to be the first one to congratulate	✓	0
to be an Ignorant Lindsay	to be egoistic	✓	0
to saddle somebody's zebra		✓	0
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to eat the lily	to do a bad deal when shopping	✓	0

Test Group 3

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		FunnyBoring	
to set the plastic on fire	to shop excessively	✓	0
to open the cardamom pot		0	✓
to carry one's head round	to be very prudish	✓	0
to upper-cut Ulysses	to study very hard although you have not a clue what it is about	0	✓
the yellow spot on the picture	the positive thing in a bad day	✓	0
to fondle the splinters		0	✓
to hide from the kettledrum	to run away from bad consequences	0	✓
to have fire in one's soul	to be a rather boring person	✓	0
to peel peaches with a butcher's knife	to ask very intimate questions	✓	0
to spleeve it	to buy sth. on credit	0	✓
to drown the orchid	to help so. too much → -	0	✓
to be bitten by the snake	to be caught cheating	✓	0
to stack books	to have a lot of study to do	0	✓
as cozy as a kerchief	uncomfortable	✓	0
to ming the bing	to start a sexual relation	✓	0
to stick the green ribbon onto the book	to be the 1 st to congratulate	✓	0
to be an Ignorant Lindsay	to be very egoistic → focused only on own needs	✓	0
to saddle somebody's zebra	to dig in sb's past	✓	0
to get an Ylang-Ylang rub	to get an erotic massage	✓	0
to eat the lily		0	0

Please fill in the meanings you remember for the idioms given! Please also tick whether you found the idioms funny or boring.

		Funny	Boring
to set the plastic on fire	shop excessively	✓	0
to open the cardamom pot	start a sexual relationship	✓	0
to carry one's head round	be prudish	0	✓
to upper-cut Ulysses	tackle a difficult problem	✓	0
the yellow spot on the picture	bright side of sth	0	✓
to fondle the splinters	cheat	✓	0
to hide from the kettledrum	run away from consequences	✓	0
to have fire in one's soul	be a boring person	✓	0
to peel peaches with a butcher's knife	ask inappropriate questions	✓	0
to spleeve it	buy sth on credit	0	✓
to drown the orchid	do too much of a good thing	✓	0
to be bitten by the snake	be caught cheating	✓	0
to stack books	have too much work	✓	0
as cozy as a kerchief	uncomfortable	✓	0
to ming the bing	have sexual intercourse	✓	0
to stick the green ribbon onto the book	be the first to congratulate	0	✓
to be an Ignorant Lindsay	think only of oneself	0	✓
to saddle somebody's zebra	dig around in sb's past	✓	0
to get an Ylang-Ylang rub	get an erotic massage	✓	0
to eat the lily		0	0

8.7. Appendix 6

The first six pages of Appendix 6 contain the raw-data drawn from the experiment. The data is arranged according to the three test groups and each group is presented separately. The numbers 0, 1, 2, and 3 refer to the level of correctness of the answers: 0 means that the answer was wrong or no answer was given, 1 means that the answer was mostly wrong, 2 indicates that the answer was mostly right and 3 means that the answer was right. The letters in the left column of the tables indicate the participant. N... means that the participant is a native speaker of English; S... indicates that the participant has English as a second language, and T... indicates that English is the third language of the participant. To keep them apart, the speakers were assigned numbers, and these numbers stand next to the letters N, S, and T.

The other three pages of Appendix 6 display the data of the funny/boring questionnaire-part of the experiment. Again the data are organised according to the three groups and the participants. As with the other data, the categories 1, 2, and 3 refer to the correctness of the answer which was then rated funny or boring. However, since the participants were asked to only rate the idioms which they remembered or the idioms of which they remembered the meanings, the category 0 is left out here because 0 means utterly wrong or no answer given. Therefore, it is not important for the interpretation of the results. The categories funny and boring then list the numbers of idioms which the participants rated as funny or boring. 'No answer' means that the participant did not indicate whether they found an idiom either funny or boring.

Group 1

	idiom 1	idiom 2	idiom 3	idiom 4	idiom 5	idiom 6	idiom 7	idiom 8	idiom 9	idiom 10
N1	3	3	0	0	3	0	0	3	0	0
N2	0	0	1	0	0	0	0	1	0	0
N3	0	1	2	0	0	2		1	0	3
S1	3	2	3	0	3	3	3	3	3	3
S2	3	3	3	2	1	3	3	3	2	3
S3	2	0	0	0	3	0	0	1	3	3
S4	2	3	3	1	1	0	0	3	3	3
S5	3	0	3	2	0	3	3	3	2	3
S6	3	3	0	0	0	0	0	3	3	3
S7	3	0	1	2	0	0	0	3	0	0
S8	3	3	3	2	3	0	3	3	3	3
S9	0	3	3	0	3	0	3	3	3	0
S10	3	3	2	0	0	3	3	3	2	0
S11	3	3	0	0	3	3	0	3	0	3
S12	0	0	0	0	3	0	3	0	0	3
Number of 0	4	5	5	10	6	9	8	1	6	5
Number of 1	0	1	2	1	2	0	0	3	0	0
Number of 2	2	1	2	4	0	1	0	0	3	0
Number of 3	9	8	6	0	7	5	7	11	6	10

	idiom 11	idiom 12	idiom 13	idiom 14	idiom 15	idiom 16	idiom 17	idiom 18	idiom 19	idiom 20
N1	0	0	3	0	3	0	3	0	2	2
N2	0	0	0	0	0	0	0	0	2	2
N3	0	0	0	0	0	0	0	0	0	0
S1	3	3	0	3	2	2	0	0	0	0
S2	0	0	0	2	3	0	3	1	0	1
S3	2	0	0	0	3	0	2	0	0	2
S4	3	0	3	0	0	0	0	0	1	0
S5	2	0	3	0	3	0	2	0	0	0
S6	3	2	0	0	3	0	2	3	3	3
S7	1	0	0	3	0	0	3	2	0	0
S8	3	0	0	0	3	0	2	1	3	0
S9	3	0	0	0	0	0	0	0	0	3
S10	2	3	0	3	3	0	0	0	0	0
S11	0	0	0	0	3	0	2	3	0	3
S12	2	0	0	0	0	0	0	0	2	0
Number of 0	5	12	12	11	6	14	7	10	9	8
Number of 1	1	0	0	0	0	0	0	2	1	1
Number of 2	4	1	0	1	1	1	5	1	3	3
Number of 3	5	2	3	3	8	0	3	2	2	3

Group 2

	idiom 1	idiom 2	idiom 3	idiom 4	idiom 5	idiom 6	idiom 7	idiom 8	idiom 9	idiom 10
N4	0	1	0	0	0	2	3	1	0	3
T1	0	0	0	0	1	3	0	1	0	0
S13	3	0	3	0	3	3	3	3	3	3
S14	3	3	3	3	3	2	3	3	1	3
S15	3	3	3	3	3	1	3	3	3	3
S16	3	0	2	0	3	3	1	1	0	0
S17	3	3	2	0	3	0	0	3	0	0
S18	3	3	3	0	2	3	3	3	2	2
S19	0	0	0	0	0	0	0	2	3	0
S20	3	0	1	1	3	1	2	3	3	3
S21	3	0	2	3	3	3	1	3	3	3
S22	0	0	0	0	0	3	0	3	0	0
S23	3	3	3	0	3	3	3	3	0	3
S24	3	3	3	3	3	3	3	3	3	3
S25	2	0	1	0	3	3	0	2	0	0
Number of 0	4	8	4	10	3	2	5	0	7	6
Number of 1	0	1	2	1	1	2	2	3	1	0
Number of 2	1	0	3	0	1	2	1	2	1	1
Number of 3	10	6	6	4	10	9	7	10	6	8

	idiom 11	idiom 12	idiom 13	idiom 14	idiom 15	idiom 16	idiom 17	idiom 18	idiom 19	idiom 20
N4	2	0	0	0	0	3	0	0	0	0
T1	3	0	0	0	0	0	0	0	0	0
S13	0	0	3	3	3	2	3	2	3	2
S14	3	0	3	3	3	1	2	2	2	2
S15	3	3	3	3	3	3	3	2	3	2
S16	0	0	0	0	2	0	2	0	2	2
S17	3	0	3	1	3	0	3	2	2	3
S18	0	0	3	0	2	3	0	0	0	2
S19	2	0	0	0	0	0	3	1	0	1
S20	3	0	3	3	2	3	3	3	3	2
S21	3	0	1	3	3	1	0	0	2	2
S22	0	0	0	0	0	0	2	0	3	0
S23	0	0	0	0	0	0	0	2	3	0
S24	3	0	3	3	2	1	3	2	3	1
S25	3	0	2	0	1	1	0	0	2	2
Number of 0	5	14	6	8	5	6	6	7	4	4
Number of 1	0	0	1	1	1	4	0	1	0	2
Number of 2	2	0	1	0	4	1	3	6	5	8
Number of 3	8	1	7	6	5	4	6	1	6	1

Group 3

	idiom 1	idiom 2	idiom 3	idiom 4	idiom 5	idiom 6	idiom 7	idiom 8	idiom 9	idiom 10
N5	3	1	3	3	1	0	3	3	3	3
N6	1	3	0	0	3	3	0	3	3	3
N7	3	0	3	3	3	0	0	3	3	3
T2	3	0	3	0	3	0	0	3	3	3
T3	3	3	3	3	3	3	1	3	1	3
S26	3	0	0	0	3	2	0	2	0	0
S27	3	1	3	0	2	0	0	3	0	0
S28	0	3	0	0	0	0	0	2	3	2
S29	3	1	3	3	3	3	2	3	3	3
S30	3	3	3	0	3	3	3	3	3	3
S31	3	3	0	0	2	0	3	3	0	3
S32	3	0	0	0	3	0	3	3	3	0
S33	3	0	0	0	0	3	0	3	0	0
S34	3	0	0	0	0	1	0	2	0	0
S35	3	3	3	0	3	0	0	3	3	3
S36	3	0	3	3	3	0	2	3	0	0
S37	3	0	3	3	3	3	0	3	3	3
Number of 0	1	8	7	11	3	9	10	0	6	6
Number of 1	1	3	0	0	1	1	1	0	1	0
Number of 2	0	0	0	0	2	1	2	3	0	1
Number of 3	15	6	10	6	11	6	4	14	10	10

	idiom 11	idiom 12	idiom 13	idiom 14	idiom 15	idiom 16	idiom 17	idiom 18	idiom 19	idiom 20
N5	3	3	3	2	3	3	3	3	3	1
N6	0	3	3	0	0	3	0	0	0	1
N7	3	3	3	3	3	3	3	3	3	3
T2	3	0	3	0	3	3	0	3	2	3
T3	3	3	3	0	3	3	3	3	0	3
S26	0	0	0	0	0	0	3	3	0	3
S27	3	0	3	0	3	0	0	3	3	0
S28	0	0	0	0	3	0	0	3	0	0
S29	3	3	3	3	3	3	3	3	0	3
S30	3	0	3	1	3	3	3	3	0	3
S31	0	3	3	0	3	0	3	3	3	3
S32	3	0	0	2	3	3	3	3	3	3
S33	3	0	3	3	3	3	0	1	3	3
S34	0	0	0	0	3	3	3	3	3	3
S35	0	0	3	3	3	3	0	0	1	3
S36	3	0	3	3	3	3	3	3	0	3
S37	3	3	3	2	3	3	3	3	3	3
Number of 0	6	10	4	8	2	4	6	2	7	2
Number of 1	0	0	0	1	0	0	0	1	1	2
Number of 2	0	0	0	3	0	0	0	0	1	0
Number of 3	11	7	13	5	15	13	11	14	8	13

GROUP 1

	category	funny	boring	no answer
N1	3	3	5	0
	2	0	1	0
	1	0	0	0
N2	3	0	0	0
	2	0	2	0
	1	1	1	0
N3	3	1	0	0
	2	1	1	0
	1	1	1	0
S1	3	9	3	0
	2	0	2	0
	1	0	0	0
S2	3	5	4	0
	2	3	0	0
	1	2	1	0
S3	3	4	0	0
	2	3	1	0
	1	1	0	0
S4	3	7	0	0
	2	1	0	0
	1	1	2	0
S5	3	5	3	0
	2	2	2	0
	1	0	0	0
S6	3	8	1	1
	2	0	2	0
	1	0	0	0
S7	3	2	2	0
	2	0	2	0
	1	0	2	0
S8	3	6	5	0
	2	1	1	0
	1	0	1	0
S9	3	6	2	0
	2	0	0	0
	1	0	0	0
S10	3	5	3	0
	2	2	1	0
	1	0	0	0
S11	3	6	3	0
	2	1	0	0
	1	0	0	0
S12	3	2	1	0
	2	1	1	0
	1	0	0	0

GROUP 2

	category	funny	boring	no answer
N4	3	0	0	3
	2	0	0	2
	1	0	0	2
T1	3	1	0	1
	2	0	0	0
	1	1	0	1
S13	3	8	4	1
	2	2	1	0
	1	0	0	0
S14	3	6	6	0
	2	3	2	0
	1	1	1	0
S15	3	17	0	0
	2	1	1	0
	1	1	0	0
S16	3	2	1	0
	2	3	1	0
	1	3	0	0
S17	3	8	2	0
	2	1	1	0
	1	1	0	0
S18	3	6	2	0
	2	3	2	0
	1	0	0	0
S19	3	2	0	0
	2	2	0	0
	1	2	0	0
S20	3	11	1	0
	2	0	3	0
	1	0	3	0
S21	3	8	2	0
	2	1	2	0
	1	1	2	0
S22	3	1	2	0
	2	1	0	0
	1	0	0	0
S23	3	5	0	4
	2	1	0	0
	1	0	0	0
S24	3	10	1	4
	2	0	0	2
	1	1	1	0
S25	3	3	0	0
	2	5	0	0
	1	0	1	1

GROUP 3

	category	funny	boring	no answer
N5	3	8	7	0
	2	1	0	0
	1	2	1	0
N6	3	7	2	0
	2	0	0	0
	1	2	0	0
N7	3	13	4	0
	2	0	0	0
	1	0	0	0
T2	3	8	4	0
	2	0	1	0
	1	0	0	0
T3	3	11	5	0
	2	0	0	0
	1	1	1	0
S26	3	3	0	3
	2	1	0	1
	1	0	0	0
S27	3	7	1	0
	2	0	1	0
	1	1	0	0
S28	3	3	1	0
	2	0	2	0
	1	0	0	0
S29	3	11	6	0
	2	1	0	0
	1	0	1	0
S30	3	0	0	16
	2	0	0	0
	1	0	0	1
S31	3	10	2	0
	2	1	0	0
	1	0	0	0
S32	3	5	7	0
	2	0	1	0
	1	0	0	0
S33	3	4	5	1
	2	0	0	0
	1	1	0	0
S34	3	6	1	0
	2	1	0	0
	1	1	0	0
S35	3	11	1	0
	2	0	0	0
	1	1	0	0
S36	3	10	3	0
	2	0	1	0
	1	0	0	0
S37	3	12	5	0
	2	1	0	0
	1	0	0	0

Zusammenfassung

Diese Diplomarbeit befasst sich mit der Merkbarkeit und Transparenz von Redewendungen (Idiomen). Obwohl Redewendungen einige Schwierigkeiten für die Sprecher darstellen, sind sie relativ langlebig – einige existieren in ihrer jetzigen Form bereits mehrere hundert Jahre. Die wohl größte Schwierigkeit, die zugleich auch Hauptmerkmal der Redewendungen ist, besteht darin, dass die Bedeutung der Redewendung als Ganzes nicht aus der Summe der zusammengesetzten Bedeutungen der einzelnen Worte besteht. Das heißt, dass die Bedeutungen der Redewendungen gelernt werden müssen, um sie zu verstehen und richtig anwenden zu können. Es gibt jedoch Redewendungen die transparenter sind als andere, d.h. deren Bedeutung man leichter erkennen kann. Ziel dieser Diplomarbeit war es, in einem Experiment herauszufinden, ob transparente Redewendungen auch leichter gemerkt werden, oder ob Transparenz überhaupt eine Rolle bei der Erinnerung von Redewendungen spielt. Mit den Ergebnissen des Experimentes wurde versucht, einen Erklärungsansatz für die Langlebigkeit von Redewendungen zu finden, da die gute Merkbarkeit die Basis für die historische Stabilität und somit für die Langlebigkeit bildet.

Bei dem Experiment, das mit Studierenden des Institutes für Anglistik und Amerikanistik an der Universität Wien durchgeführt wurde, ging es darum, welche Redewendungen sich die Studierenden besser merken. Für das Experiment wurden 20 Redewendungen erfunden und nach den Kategorien Transparenz, metaphorische Transparenz, „Literalness“ (eine Art von Transparenz, die darauf basiert, dass die wörtlichen Bedeutungen der Wörter die Basis für die bildliche Bedeutung bilden), semantisches Areal der figurativen Bedeutung der Redewendung, und Länge der Redewendung (Silbenanzahl) eingeteilt. Diese Kategorien waren auch die Variablen die das Erinnern beeinflussen können. Dazu kam noch der Faktor des Angenehmen, bei dem es darum ging, ob die Teilnehmer die einzelnen Redewendungen als lustig oder langweilig empfanden. Dieser Faktor ist aber sprecherabhängig und somit nicht Eigenschaft der Redewendungen selbst.

Das Experiment hatte die Form von Vokabeltests und wurde in zwei Sitzungen durchgeführt, der ersten Lernsitzung und der zweiten Sitzung in der die Studierenden „geprüft“ wurden. Die Ergebnisse wurden nach dem Grad der Richtigkeit ausgewertet und die richtigen Antworten bildeten die Basis für die Analyse.

Die Ergebnisse weisen darauf hin, dass transparente Redewendungen besser gemerkt werden als intransparente, das gleiche gilt für die Variablen metaphorische Transparenz und „Literalness“: auch hier erzielten die transparenten Redewendungen bessere Ergebnisse. Die Ausnahmen können mit dem Einfluss der Variable „semantisches Areal“ erklärt werden, welche die Erinnerung zum Teil stärker beeinflusst als die anderen Variablen. Bei den Bedeutungen der Redewendungen scheint die Variable metaphorische Transparenz keine Rolle bei der Erinnerung zu spielen. Die Länge der Redewendungen scheint bei der Erinnerung an die Redewendungen unwesentlich, bei den Bedeutungen war jedoch eine leichte Tendenz zu den längeren Redewendungen festzustellen. Die Ergebnisse für die Variable der semantischen Areale zeigten, dass bei Redewendungen die Areale „Sexualität“, „Shopping“ und „Lernen“ vorrangig sind, während jedoch bei den Bedeutungen „Invasion der Privatsphäre“ und „Farben“ dominierten. Diese Ergebnisse sind sehr überraschend und sollten weiter untersucht werden. Bei der sprecherspezifischen Variable des Angenehmen konnte festgestellt werden, dass lustige Redewendungen und deren Bedeutungen besser gemerkt wurden als langweilige.

Letztlich wurden die Ergebnisse auf semiotische Qualität und Lexikalisierungsstatus von Redewendungen hin untersucht. Die Ergebnisse deuten darauf hin, dass transparente Redewendungen, die weniger lexikalisiert sind als intransparente, von Sprechern bevorzugt werden. Dies widerspricht der Ansicht, dass vollkommen lexikalisierte Einheiten gegenüber weniger lexikalisierten Einheiten bevorzugt werden. Ebenso bedeutet dies im Hinblick auf die semiotische Qualität, dass ikonischere Redewendungen bevorzugt werden. Hier muss jedoch auch angemerkt werden, dass auch die völlig intransparenten Redewendungen, die am wenigsten ikonisch sind,

bessere Ergebnisse erzielen als die Redewendungen die nur fast intransparent sind. Dies wiederum spricht für die Theorie, dass lexikalisierte Einheiten im mentalen Lexikon bevorzugt werden.

Curriculum Vitae

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