On the Effects of English Elements in German Print Advertisements

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I dedicate this thesis to my parents.

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COMMONLY USED ABBREVIATIONS

e.g.	for example
etc.	and so forth
i.e.	that is
vs	versus
et al.	and multiple authors, named in full citation
cf.	confer
ff.	and the following pages

STATISTICAL ABBREVIATIONS

N	Number of subjects in the total sample
n	Number of subjects in a subset of the sample
M	Arithmetic mean
Mdn	Median
SD	Standard deviation
IQR	Interquartile range
p	Probability
df	Degrees of freedom
t	Value of t-test statistic
U	Value of Mann-Whitney-U-test statistic
CI	Confidence interval
d	Sample effect size (Cohen)
z	z-Value
χ^2	Chi-square distribution
B	Parameter estimate
Exp(B)	Odds ratio of predictor

Zusammenfassung

Diese Arbeit untersucht den Einfluss von englischen Elementen in deutschen Werbeanzeigen auf die Anmutung der Anzeige, die Bewertung des beworbenen Produkts sowie der beworbenen Marke und die Einschätzung der Zielgruppe. In einer quantitativen Onlinestudie wurden vier speziell entwickelte Werbeanzeigen, die sich nur hinsichtlich der Verwendung englischer Elemente unterschieden, von 297 Teilnehmern bewertet. Dabei zeigten sich nur in wenigen Fällen statistisch signifikante Unterschiede zwischen der Bewertung der deutschen Anzeigenversionen und der englisch-deutsch gemischten Anzeigenversionen. Da den Probanden jeweils nur eine Version der Anzeige gezeigt wurde und ihnen der linguistische Hintergrund der Untersuchung unbekannt war, spiegeln die Ergebnisse die Wirkung englischer Elemente in realen Kontaktsituationen wider. Dieser Werbewirkungsstudie ging eine Untersuchung der Sprachzuordnung voraus, in der getestet wurde, welche Variablen einen Einfluss darauf haben, ob ein visuell präsentiertes Stimuluswort als Deutsch oder Englisch wahrgenommen wird. Als geeignete Prädiktoren erwiesen sich neben der etymologischen Herkunft des Wortes vor allem die Integration in das deutsche Lexikon (operationalisiert durch Konsultierung des *Duden Universalwörterbuchs* 7. Aufl.). Des Weiteren zeigte sich ein signifikanter Einfluss graphemischer Fremdheitsmarker auf die Sprachzuordnung der Lexeme. Dieser Einfluss konnte sowohl bei Wörtern englischen Ursprungs als auch bei Wörtern, die nicht-englischen Ursprungs waren (z.B. *LINEAL*, *CREMIG*), beobachtet werden und verdeutlicht die Wichtigkeit der visuellen Wortform für die Sprachzuordnung.

Die Verwendung englischer Elementen in deutschen Werbeanzeigen ist ein Resultat von langfristigem und intensivem Sprachkontakt. Auf der Makroebene wird die englische Sprache in Deutschland von immer mehr Sprechern im täglichen Leben verwendet, auf der Mikroebene sind bereits zahlreiche Entlehnungen aus dem Englischen ein Teil der deutschen Sprache geworden. Englische Elemente in der Werbung folgen jedoch ihren eigenen wirkungsorientierten Regeln und spiegeln somit oftmals nicht die sprachliche Realität in Deutschland wider. Die Grundvoraussetzung dafür, dass sie ihre spezielle Wirkung entfalten können, ist, dass sie überhaupt als englische

Elemente wahrgenommen werden. Um den Grad der Integration oder den Fremdheitscharakter eines Wortes englischen Ursprungs zu bestimmen, werden zum Teil sehr unterschiedliche Kriterien herangezogen, wobei die Integration in den *Duden* ein gern gewählter Indikator für Integration darstellt (vgl. Störiko 1995, 62; Kupper 2007, 305; Gerritsen et al. 2007, 301). Inwiefern die Eingliederung in den deutschen Wortschatz allerdings als Indikator für die Wahrnehmung eines Wortes als deutsch geeignet ist, bleibt dabei offen. Mit dem Ziel die Perzeptionseite zu berücksichtigen, unterscheiden beispielsweise Zenner et al. (2013) englischstämmige Wörter nach dem Entlehnungszeitpunkt und der phonologischen Integration. Dabei wurden alle Wörter, die nach 1945 entlehnt wurden, als englisch gewertet, und Wörter, die bereits vor 1945 ihren Weg in das deutsche Sprachsystem gefunden haben, wurden anhand ihrer assimilierten oder nicht-assimilierten Aussprache kategorisiert. Im Kontext der Verbraucherwerbung stellt sich jedoch das Problem, dass englische Elemente häufig in Form von Neuschöpfungen, besonders in Marken- und Produktnamen, auftreten, die nicht aus englischen Lexemen gebildet wurden, aber aufgrund ihrer sublexikalen Einheiten dennoch stärkere Ähnlichkeit mit englischen Wörtern aufweisen als mit deutschen (z.B. *swoodoo*, *Qype*, *Scoyo*). Folglich erscheint ein empirischer perzeptionsbasierter Ansatz, der nicht auf lexikalen Einheiten basiert, unerlässlich, wenn es um die Wirkung englischer Elemente in der Werbung geht.

Um jene Eigenschaften eines Wortes zu identifizieren, die am besten geeignet sind, um vorherzusagen ob es als deutsch oder englisch wahrgenommen wird, wurde in einer quantitativen Studie der Einfluss von folgenden Größen getestet: etymologischer Wortherkunft, Integration in den *Duden*, Verwendungshäufigkeit im COSMAS II-Korpus, graphemische Fremdheitsmarker und orthographische Ähnlichkeit zu deutschen Wörtern (operationalisiert durch „neighbourhood size" (van Heuven et al. 1998)). In dieser Studie mit zwei Konditionen ordneten zwei Probandengruppen (N = 333) 90 Stimuliwörter (66 davon englischen Ursprungs) entweder dem Deutschen oder dem Englischen zu. Die erste Kondition bestand aus einer Onlinestudie, in der die Teilnehmer alle Stimuli nacheinander durch das Drücken der Tasten 1 oder 0 bewerteten. In der zweiten Kondition, einem Präsenzexperiment, in dem die Stimuli mittels einer Folienpräsentation auf Leinwand projiziert wurden, markierten die Teilnehmer ihre Sprachwahl auf einem Fragebogen. Dieses Studiendesign ermöglichte es, die Präsentationsdauer der Stimuli zu verkürzen

(pro Folie 0,1 Sekunden) und für alle Probanden konstant zu halten. Im theoretischen Rahmen des BIA (und BIA+) Models besteht bei sehr flüchtiger Wortwahrnehmung die Möglichkeit, dass eine frühe Sprachentscheidung, basierend auf dem Gesamtgrad der Aktivierung der jeweiligen Sprache, getroffen wird und nicht erst im Zuge der Worterkennung. Die entsprechende Hypothese, dass Wörter mit vielen „orthographischen Nachbarn" in der jeweils anderen Sprache somit öfter aufgrund ihrer Wortform kategorisiert werden, konnte jedoch nicht aufrechterhalten werden. Neben der etymologischen Wortherkunft, die in fast 97 % der Fälle eine Kategorisierung vorhersagen konnte, erwies sich in abweichenden Fällen ein Eintrag in den *Duden* als der beste Prädiktor für die Sprachzuordnung. Dabei wurden englischstämmige Wörter die im *Duden* stehen etwa sechsmal so häufig deutsch gewertet wie Wörter, die nicht im *Duden* stehen. Zudem wurde ein statistisch signifikanter Einfluss der Wortform anhand graphemischer Marker nachgewiesen. Wörter, die Grapheme und/oder Graphemkombinationen enthielten, die im deutschen Erbwortschatz nicht oder vergleichsweise selten vorkommen (z.B. *SH-*, *-EA-*, *C-*, *-GH-*) (vgl. Onysko 2007, 33), wurden häufiger als englisch bewertet als Wörter ohne graphemische Marker des Englischen. Dabei war die generelle Wahrscheinlichkeit, ein englisches Wort, das englische Cues enthielt, der englischen Sprache zuzuordnen 1,3-mal so groß wie die Wahrscheinlichkeit, ein englisches Wort ohne englische Cues der englischen Sprache zuzuordnen. Englische Cues in nicht-englischen Wörtern (z.B. *LINEAL*) erhöhten ebenfalls die Wahrscheinlichkeit einer Englischbewertung (in der zeitverkürzten Kondition um das Neunfache, in der anderen Kondition um das Sechsfache).

Für die Wirkung englischer Elemente in Werbeanzeigen ist nicht nur ihr englisches Aussehen, sondern auch ihre gute Sichtbarkeit in der Anzeige nötig. Aus diesem Grund werden sie gerne prominent platziert, zum Beispiel in Headlines (Graedler 1999, 337). Die Verwendung englischer Elemente neben deutschen Inhalten bezeichnet Androutsopoulos (2012) als „English 'on top'"[1]. Werbeanzeigen bestehen jedoch nicht nur aus sprachlichen Elementen, neben dem Text gehören auch die Typographie und das Layout zu den potenziell sinntragenden Einheiten (Fischer 1999, 259), zudem enthalten die meisten Anzeigen auch Bilder und Logos. Werbeanzeigen sind somit immer multimodale Kommunikate (Stöckl 2011, 8). Um die Funktionen und Effekte englischer

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[1] Hier sowohl „zusätzlich zur deutschen Sprache" als auch „räumlich über" deutschen Bausteinen der Anzeige.

Elemente in ihnen zu verstehen, müssen neben der Wortbedeutung auch die räumlichen und visuellen Beziehungen zwischen den sprachlichen und außersprachlichen Elementen berücksichtigt werden (Sebba 2013, 105).

Ein Blick auf die generellen Bedingungen der kognitiven Verarbeitung von Anzeigen in Printmedien gibt Aufschluss über das Wirkungspotenzial von sprachlichen Elementen in diesem Kontext. Wahrnehmung ist ein unbewusster, selektiver Prozess, der einerseits von individuellen Bedürfnissen und Vorlieben gesteuert wird und andererseits durch die Stärke des Reizes bedingt ist (Schierl 2001, 86). Wenn eine Werbeanzeige es schafft, den „Wahrnehmungs-filter" des Zeitschriftenlesers zu passieren und tatsächlich Aufmerksamkeit zu erwecken, dann wird sie im Schnitt dennoch nur zwei bis drei Sekunden betrachtet (Kroeber-Riel et al. 2009, 309 f.). Dabei entfällt der größte Teil der Zeit auf die Bilder, da diese mit weniger kognitiven Ressourcen verarbeitet werden können. „Auch wenn eine Anzeige länger als zwei Sekunden betrachtet wird, holt der Text relativ zum Bild nicht auf" (Felser 2007, 408). Hinsichtlich dieser generellen Dominanz des Bildes stellt sich die Frage: Macht es überhaupt einen Unterschied, ob die Textelemente einer Anzeige ein- oder mehrsprachig gestaltet sind?

Die Bedeutung einer Anzeige beruht nur zu einem (oftmals geringen) Teil auf ihrem Text, dennoch wird der englischen Sprache in der Werbung die Fähigkeit zugesprochen, Modernität, Internationalität, gehobene Ansprüche und „Lifestyle" zu vermitteln (z.B. Schütte 1996, 357; Kelly-Holmes 2005, 95). Zudem wird aus einer symbolischen Perspektive häufig argumentiert, dass englische Elemente diese positiven Funktionen auch erfüllen können, wenn sie nicht verstanden werden und mitunter wird ihre Unverständlichkeit gar als besonderer Vorteil gesehen, um gewünschte Konnotationen zu vermitteln. Wenn Slogans wie zum Beispiel *SHIFT_expectations* allerdings grob missverstanden werden und mit „Schalte deine Erwartungen einen Gang runter" (Endmark AG 2013) übersetzt werden, scheint diese generell positive Wirkung zweifelhaft. Luna und Peracchio (2001, 285) kommen jedoch zu dem Ergebnis, dass die Wahrscheinlichkeit konzeptuell verarbeitet zu werden, bei fremdsprachlichen Werbebotschaften geringerer ist als bei muttersprachlichen, was darauf hoffen lässt, dass sich die negative Wirkung solcher missverständlicher Slogans in Grenzen hält.

Wenn nicht-integrierte englische Elemente jedoch auf konzeptueller Ebene verarbeitet werden, dann enthalten sie im Unterschied zu deutschen Wörtern meist eine gewisse semantische Offenheit (Bohmann 1996, 186 ff.). Diese rührt daher, dass die meisten Deutschen nach wie vor monolingual geprägt sind (Altleitner 2007, 109 f.) und ausgeglichene Zweisprachigkeit mit Englisch und Deutsch die Ausnahme ist. Diese Asymmetrie der Sprachen bei bilingualen Sprechern wird im Revised Hierarchical Model von Kroll und Stewart (1994) durch die unterschiedlich stark ausgeprägten lexiko-semantischen Verbindungen der dominanten Sprache (L1, i.d.R. Deutsch) und der Zweitsprache (L2, hier dem Englischen) dargestellt. Im Gegensatz zu lexikalischen Repräsentationen sind semantische Repräsentationen sehr ähnlich in beiden Sprachen, dennoch sind Wörter in Übersetzungspaaren nicht gänzlich bedeutungsäquivalent. Das Distibuted Feature Model (de Groot 1992) stellt dies durch partielle Überschneidung zwischen L1- und L2-Wörtern dar. Zudem haben L1-Wörter generell differenziertere semantische Repräsentationen als L2-Wörter, die schwächer vernetzt sind und somit meist weniger Bedeutungsaspekte aufweisen (Brysbaert und Duyck 2010, 368). Aufgrund dieses Ungleichgewichts der semantischen Repräsentationen des Englischen im Vergleich zum Deutschen lassen englische Elemente mehr Raum für individuelle Bedeutungszuordnungen und können dadurch besonders gut Konnotationen und Assoziationen transportieren (vgl. Altleitner 2007, 167).

Die diversen symbolischen Funktionen des Englischen in der Werbung lassen sich jedoch nicht allein durch Unterschiede in der Wortbedeutung erklären. Vielmehr ist die englische Sprache an sich zum Symbol für eine Fülle von Bedeutungsinhalten geworden. Im Sinne von Barthes (1972) ist diese Transformation einer Sprache zum Mythos ein semiologisches System zweiter Ordnung (vgl. Störiko 1995, 496). Das Englische unterscheidet sich von anderen Sprachen in der Werbung dadurch, dass es nur selten dazu benutzt wird, um auf ethno-kulturelle Stereotypen anzuspielen, sondern meist als internationale Sprache auftritt. Dennoch beruhen viele seiner Funktionen indirekt auf amerikanischen Werten wie Fortschrittsglaube, Individualität und Wertschätzung materieller Güter, die zu zentralen Aspekten globaler Konsumkultur geworden sind (vgl. Schütte 1996, 100). Dadurch, dass englische Elemente nicht nur die Sprache der Werbung kennzeichnen, sondern auch im Sprachgebrauch bestimmter sozialer Gruppen vermehrt auftreten, wie zum Beispiel in der Sprache von Jugendlichen oder einer multilingualen, inter-

nationalen Business-Elite, kann das Englische zusätzlich eine sozio-indexikale Funktion in der Werbung erfüllen, indem es auf bestimmte Gruppen verweist (vgl. Kellerhals 2008, 85; Piller 2001, 165).

Das primäre Ziel dieser Arbeit ist es zu testen, welche Effekte englische Elemente in konkreten Werbeanzeigen wirklich haben und herauszufinden, ob es generelle Effekte gibt, die auch über sehr unterschiedliche Anzeigen hinweg beständig auftreten, wie es zum Beispiel von den Assoziationen Modernität und Internationalität geläufig erwartet wird. Obwohl die Funktionen des Englischen bereits in vielen Ländern, Produktkategorien und strukturellen Elementen von Anzeigen untersucht wurden, gibt es bis dato kaum empirische Studien zur Wirkung englischer Elemente. Eine Ausnahme stellt die Untersuchung von Hornikx et al. (2007) dar, in der Probanden jeweils ihre Assoziationen zu zwei Sprachversionen einer Anzeige berichteten. Das Problem bei solchen Untersuchungen, in denen den Teilnehmern zwei Versionen einer Anzeige präsentiert werden, liegt darin, dass durch den direkten Vergleich der Fokus unweigerlich auf die sprachlichen Unterschiede fällt, diese als bedeutsam eingestuft werden und somit überinterpretiert werden können. Um diese Hürde zu umgehen, ließen Gerritsen et al. (2010) die Probanden in ihrer Studie nur eine Sprachversion bewerten, allerdings benutzten sie manipulierte Anzeigen für sehr bekannte echte Produkte (Absolut Vodka, ein Parfum von Bulgari und den Smart forfour). Die Tatsache, dass Gerritsen et al. (2010) zu dem Ergebnis kommen, dass es kaum einen Unterschied für die Produktbewertung macht, ob englische Elemente benutzt werden oder nicht, könnte also darauf zurückzuführen sein, dass zu diesen Produkten bereits Vorwissen und Einstellungen vorhanden waren, auf die bei der Bewertung zurückgegriffen wurde.

Wenn die tatsächliche Wirkung des Englischen untersucht werden soll, dann scheint somit eine Blindstudie mit speziell entworfenen Anzeigen für bislang unbekannte Produkte und Marken unumgänglich. Aus diesem Grund wurden hier vier Werbeanzeigen für sehr unterschiedliche Produkte mit jeweils einer deutschen und einer englisch-deutsch gemischten Version entworfen und von Teilnehmern, die über den linguistischen Hintergrund der Untersuchung nicht Bescheid wussten, in jeweils nur einer Version bewertet. Die verwendeten Anzeigen beinhalteten sowohl low-involvement Produkte (Getränk und Webportal) als auch Produkte, die für gewöhnlich mit höheren Involvement

einhergehen (Hotelkette und Versicherung). Um sicherzustellen, dass die Anzeigen als authentisch wahrgenommen wurden, und um Aufschluss über produktspezifische Unterschiede in der Wahrnehmung zu gewinnen, wurden in der Prätestphase qualitative Interviews durchgeführt, in denen den Teilnehmern beide Versionen der Anzeigen gleichzeitig vorgelegt wurden. Anhand dieser Ergebnisse und ausgewählten Funktionen des Englischen wurden zusätzlich zu allgemeinen Fragen auch jeweils produktspezifische Fragen entwickelt. Um systematische Reihenfolgeeffekte zu eliminieren, wurden acht unterschiedliche Online-Fragebögen mit jeweils drei Werbeanzeigen erstellt, wobei immer mindestens eine Version deutsch und mindestens eine Version deutsch-englisch gemischt war. Jede Anzeigenversion wurde von ca. 110 Probanden hinsichtlich der emotionalen Anmutung der Anzeige, der Bewertung des beworbenen Produkts, ausgewählten Aspekten der Markenpersönlichkeit sowie der vermuteten Zielgruppe bewertet. Die Bewertungen der beiden Sprachversionen wurden dann mittels Mann-Whitney-U-Tests oder t-Tests verglichen.

In den Ergebnissen zeigten sich nur vereinzelt statistisch signifikante Effekte des Englischen. Bezüglich der emotionalen Anmutung wurden auf einem aggregierten Datenniveau deutsche Anzeigen generell als vertrauenswürdiger eingestuft als deutsch-englisch gemischte. Zudem wurde die deutsche Version der Hotelkette als interessanter bewertet und die gemischte Version der Getränk-Anzeige als moderner und aufdringlicher. Auch bei der Produktbewertung gab es nur wenige Unterschiede zwischen den Sprachversionen. So wurden die Versicherung und das Webportal in der gemischten Version eher als international-orientiert eingeschätzt als in der deutschen Version. Bei der Bewertung des Getränks gab es zwei statistisch signifikante Unterschiede, das Getränk wurde in der gemischten Version nicht nur als süßer wahrgenommen, auch der Zuckergehalt (geschätzt in Stück Würfelzucker) wurde höher eingeschätzt. Dies scheint jedoch eher auf Vorurteilen gegenüber Lebensmitteln aus den USA zu beruhen als auf der Zuordnung zu unterschiedlichen Produktkategorien (Saftschorle vs. Softdrink), da sich weder Unterschiede in der wahrgenommenen Natürlichkeit noch in dem vermuteten Vitamingehalt zeigten. Auf aggregierter Datenebene wurden Marken, die mit Englisch beworben wurden als dynamischer und extravaganter wahrgenommen, allerdings auch als weniger vertrauenswürdig als Marken, die nur auf Deutsch beworben wurden. Zudem wurde die Zielgruppe der gemischten Anzeigen

generell eher als „cool", zweisprachig und humorvoll eingeschätzt. Die meisten Effekte traten in der Getränkeanzeige auf, welche nur sehr wenig Text enthielt und ausschließlich Kognaten als Übersetzungspaare verwendete. Hier zeigte sich besonders die sozio-indexikale Wirkung des Englischen, da die Zielgruppe in der gemischten Version eher als „cool", dynamisch, trendig, humorvoll, gesellig und spaßorientiert eingeschätzt wurde. Hinsichtlich Alter, Bildungsniveau, Einkommen, Erfolg, Sportlichkeit und Interessenvielfalt gab es jedoch keine Unterschiede in den verschiedenen Anzeigen.

Des Weiteren wurden mittels Regressionsanalysen der Einfluss von Verständnisproblemen und Einstellungen zu Englisch in der Werbung untersucht. Die Ergebnisse lassen darauf schließen, dass mangelndes Verständnis zu einer negativeren Einschätzung der Marke bezüglich Vertrauenswürdigkeit, Kreativität und Dynamik führt. Während positive Einstellungen zur Verwendung englischer Elemente keine Auswirkung zeigten, bewerteten Personen mit negativen Einstellungen Anzeigen als weniger glaubwürdig, Zielgruppen als weniger humorvoll und Marken als weniger vertrauenswürdig, dynamisch und kreativ. Zudem zeigten sich hier Einflüsse personenbezogener Variablen; so bewerteten Personen ohne Abitur die Marken hinsichtlich dieser Aspekte negativer. Probanden ohne oder mit geringen Englischkenntnisse nahmen Marken in gemischten Versionen als weniger natürlich wahr, was darauf schließen lässt, dass für sie die englische Sprache in der Werbung keine „natürliche" Wahl darstellt.

Zusammenfassend lässt sich festhalten, dass keine generell-gültigen Effekte des Englischen in Werbeanzeigen nachgewiesen werden konnten und nur vereinzelt anzeigen-spezifische Unterschiede in der Wahrnehmung der Sprachversionen auftraten. Diese Ergebnisse rücken die Wirkung englischer Elemente in deutschen Werbeanzeigen in ein anderes Licht, da die Verwendung von nicht-assimiliertem englischsprachigem Material in realitätsnahen Verarbeitungssituationen von deutschen Konsumenten nicht automatisch als bedeutsam empfunden wird.

I. Introduction

When getting off the train in my home town and heading towards the market place, a large orange banner in the window of a local tanning shop catches the eye, it reads: "*SUNSHINE FELLING*". For a short moment one wonders whether this peculiar wording could actually have a deeper meaning to it and was intended to attract attention, but remembering that this is not the urban centre of Berlin where a hip multilingual crowd gathers in places called *Godshot* or *Mr. Hai Life*, this illusion quickly fades. In realising that this sign is indeed a bumbling attempt to invite the passersby to an imaginative foreign world full of sunshine, you are ironically reminded of where you actually are, a small rural town south east of Munich.

It seems to be part of common knowledge today that advertising with English makes all sorts of offers appear more modern and international, at least professional advertisers as well as small business owners regularly rely on it. Apparently, the English language is generally believed to have a positive effect, as it has become a natural choice in the context of advertising, regardless of the target group's (and in this case also the tanning shop owner's) English skills. This belief is also shared by researchers in the field who, after having analysed (variably sized) corpora of advertisements to determine the symbolic functions of English elements, have, for example, ascribed them the values of cosmopolitanism, sophistication and fun-orientation (e.g. Bhatia 1987; Haarmann 1989; Kelly-Holmes 2005). As such a methodological approach does not allow for drawing conclusions on either the intentions of the advertiser, or on the actual reactions of consumers (cf. Janich 2013, 50), it is unclear whether English elements actually have positive effects.

When considering that the Endmark-Claim studies (2003, 2006, 2009 and 2013) regularly demonstrate consumers' difficulties in understanding English slogans, and that they occasionally lead to comic misconceptions of the advertising message, it seems unlikely that the use of English in advertising should always lead to more positive evaluations. However, English slogans are not designed to be translated, but are rather supposed to convey a brand's essential motto or a feeling that is to be associated with the brand. In order to learn about the symbolic effects that foreign languages have on consumers,

another option is to ask participants directly about their associations. Hornikx et al. 2007, for example, showed their participants two versions of the same advertisement that only differed in language use and asked them to write down their associations to both versions. However, since people are not consciously aware of all the effects that English elements actually have on them, directly asking consumers about their reactions to English-mixed advertisements will not inform us adequately about the actual effects. While such studies can shed light on specific associations individuals may have, they are prone to simply confirming commonly held stereotypes about languages. The problem is that as soon as the focus is on the use of foreign elements, they are perceived as meaningful and hence interpreted according to common knowledge about their functions, i.e. participants believe that English elements are supposed to seem modern and international. It thus follows that even if English elements are reported to have no obvious effect at all that does not mean that they could not influence consumers' evaluations of the advertisement, product, brand or target group in a non-comparative setting.

To overcome this problem, Marinel Gerritsen and colleagues (2010) asked each participant in the study to evaluate only one of the two language versions of their advertisements. This between subject design ensured that the importance of language use was not overemphasised, as it would have been in a direct comparison. Contradicting all expectations, they found that the use of English compared to the use of German in a product ad does not have any impact on either the image or the assumed price of the product. However, one limitation of this pioneer research on the actual effects of English is that the stimuli material consisted of manipulated advertisements for real products, i.e. *Absolut Vodka*, a *Bulgari* perfume and the car *Smart forfour*. In this light, the finding that language use does not matter much for the evaluations of these well-known brands is less surprising, because participants would be expected to have previously formed opinions and attitudes towards these products. Such product related knowledge is unlikely to be changed by the ad in the experiment, even if it communicates incongruent information, and it therefore remains unclear to what extent the participants' answers were actually influenced by the stimuli. These considerations leave us with the question of whether, after all, English elements in print ads really have an effect.

The aim of this thesis is to provide an answer to exactly this question. It examines whether English elements in German print advertisements really influence the emotional appeal of the advertisement, and how brand personality, product quality, and implied target group are evaluated by German consumers. While the functions of foreign elements in advertising have already been studied extensively (e.g. Bhatia 1987; Haarmann 1989; Kellerhals 2008; Martin 1998, 2008; Piller 2003, 2006; Schiemichen 2005), little research has been concerned with the effects English elements actually have on consumers (see Gerritsen et al. 2000, 2007a, 2007b; Hornikx et al. 2007, 2013; Luna and Peracchio 2001, 2005; Tavassoli 1999 for some exceptions). Such a distinction between the functions that English elements fulfil in an advertising text on the one hand and the effects they actually have on the receivers of the ad on the other is of central importance to this study. In order to resolve the previously described methodological problems, four especially designed mock advertisements with two language versions each that are identical, except for the use of some English elements in one of them and German equivalents in the other, are evaluated by participants in a between subject design. Moreover, the linguistic background of this quantitative online-study is disguised by simply asking participants to evaluate a set of advertisements. In being blind to the actual aim of the experiment, participants draw on whatever information they perceive to be relevant to their judgements, be it the pictures, colours, layout, language choice, typeface, or anything else, because their attention is not directed to language use. Additionally, by analysing the effects of English in the multimodal setting of an advertisement, a more realistic processing situation of print advertisements can be achieved then in isolating single structural components, such as slogans (e.g. Puntoni et al. 2009).

The central prerequisites for English elements to have an effect on consumers are that they are, for one, noticed and, secondly, perceived as being English. In natural settings, people come into contact with advertisements accidentally and usually have no interest in processing them. Print advertisements in magazines are only viewed very briefly (the average time being two to three seconds [2]), with most of this time devoted to pictures and visual aspects. For this reason, advertisers usually position English elements in

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[2] Kroeber-Riel report a study by Köcher-Schulz (2000) in which advertisements in weeklies that cover one page are observed 2.04 seconds. Another study by Keitz, Gunawardena et al. (2007) obtained an average of three seconds for full page print advertisements in consumer publications (cf. Kroeber-Riel, et al. 2009, 309f.).

salient positions, that is, 'on top' of German elements (cf. Androutsopoulos 2011) to increase the chances of them being noticed. Moreover, the layout and typography are designed to connect textual elements meaningfully to the visual content, which is usually much better at attention-getting (cf. Stöckl 2009; 2011; 2012). This multimodality of print advertisements (cf. Sebba 2013; 2012b) is the key to comprehending whether and how English elements are processed in contrast to pictures (cf. Schierl 2001). When assuming that, despite these competitive circumstances, English elements are in fact noticed, it is still not certain whether they are perceived as instances of foreign language use.

In answering this question, the language contact situation between English and German and the general role of the English language in Germany have to be taken into consideration. As has already been suggested, the linguistic realities in Germany differ between social groups. Therefore, what elements are still perceived as English and what elements are perceived as integrated into the German language varies between individual language users. Researchers interested in the occurrence of English elements in advertising have usually taken sides and either worked in a monolingual framework studying the influence of English on the German language, i.e. borrowing, (e.g. Altleitner 2007; Elsen 2008; Störiko 1995), or taken a multilingual research approach by studying the occurrence of English next to a local language as manifestations of creative bilingual language use, i.e. language mixing (e.g. Bhatia 1992; Piller 2006; Martin 2002) [3]. Since these language contact phenomena are both results of the increasing importance of the English language, they are best envisioned as belonging to a continuum rather than as distinct phenomena (cf. Zenner et al. 2013b, 1019). Nevertheless, when studying the effects of English elements, only those elements that have retained their foreign form are of interest, and therefore, a typology of English elements is usually central to the research aim. In categorising elements of English origin, one of the criteria regularly drawn on to determine integration into the German language is whether English elements are included in a German dictionary, i.e. the *Duden* (e.g. Gerritsen et al. 2007a, 301; Kupper 2007, 305). There is no empirical evidence, however, whether this is an appropriate method to predict how English elements are

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[3] Gerritsen and her colleagues add another approach, by interpreting the frequency of occurrence and comprehension of English elements in advertisements as indicating the status of the English language in a country, i.e. how far English is on its way from a foreign language to becoming a second language (e.g. 2007a).

perceived by individuals. Another, more perception based indicator of foreignness is grapheme-phoneme correspondence, i.e. whether an English element can be recognised as being non-German, because it is not pronounced as it is spelled when following German rules of pronunciation (Onysko 2007, 33; this approach is for example applied by Zenner et al. 2013b). However, in the context of print advertisements, where language is visually encountered, phonological word form appears to be less relevant in recognising English elements than orthographic word form.

It is to be assumed that English words which resemble German words in their word form are less likely to be recognised as English (compare for example *FILM* and *CLOUD*). Additionally, English elements may stand out among German ones because they contain grapheme combinations that are unusual or non-existent in German (e.g. *OO, GH, EA, Y, X*) (cf. Onysko 2007, 33). It can be concluded that for the aims of this thesis, a merely theoretical definition of English elements does not suffice. In order to find predictors for whether visually encountered English elements are perceived as German or English, the first quantitative study in this thesis is designed to test the influence of graphemic language cues. Drawing on the BIA+ model (Dijkstra and Van Heuven 2002) selected factors in visual word recognition, word internal as well as (inter-)personal, are tested for their predictive power. This perception based approach to English elements, which involves the actual consumer and mimics the restricted time devoted to a single word, provides valuable insights into which elements can actually have the proclaimed effects of the English language. One major advantage of analysing graphemic cues along with orthographic word form as indicators of foreignness is that such cues are not restricted to the level of lexemes, but could also be applied to sublexical elements. As advertisers make abundant use of such sublexical foreign features (e.g. *Scoyo, Twago, Qype*), this approach is an attempt to fill in a methodological gap. In addition, the visual word recognition study tests whether integration in the *Duden* is a valid predictor for how English elements are perceived.

While this perspective on English and German elements as parts of separate languages is helpful to understand the symbolic effects that only elements which are perceived as English have in German advertising, it does not fully represent linguistic realities. On the macro-level, an increasing

number of Germans now rely on the English language in their everyday lives, which leads to increasingly divers bilingual strategies of language use. On the micro-level, this extensive exposure to English has resulted in numerous borrowings which have blurred the language boundaries between German and English. Psycholinguistic research on bilingual language processing has contributed to a new perspective on bilinguals and bilingual lexical access (cf. Brysbaert 2003). Since evidence suggests that lexical storage is not language independent and that language decision is a result of lexical processing in which similar words in both languages are activated, the *form* of an English element is the key (cf. Van Heuven et al. 1998). Words of both languages are envisioned as being linked to the same conceptual store, because in contrast to word forms, word meanings do not differ enough between languages to outweigh the economical advantage of one common store. Yet, German-English translation equivalents are hardly ever found to have exactly the same meaning. Are the results of studies that compare the effects of English elements to their German equivalents (e.g. Altleitner 2007) therefore only due to the meaning discrepancies in the translation pairs? Or is there evidence for what has been called the fetish of the English language (Kelly-Holmes 2005), i.e. a symbolic value that exceeds the sum of denotative and connotative meaning differences of individual words? To test this, one mock advertisement is designed to contain only cognates that are assumed not to only share most common features in their word form, but also to overlap in their meaning to the greatest extent (cf. De Groot 2011, 203).

Since quantitative methods are only suitable to answer specifically formulated research questions, the effects that are to be tested have to be carefully selected. At first, the discussion focusses on how far the functions and effects of English in advertising around the globe are applicable to Germany. In doing so, there is a differentiation between ethno-cultural, socio-symbolic or socio-indexical [4] and socio-psychological functions and effects. This review of previous research on the reasons for using English elements in advertising provides us with a defined set of the symbolic values of the English language in German advertising, namely internationalism, modernity, hedonism, and being 'cool', 'trendy' and 'hip'. Additionally, these general values are supplemented by selected associations that participants in the pretest interviews reported to

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[4] The terms 'socio-symbolic' and 'socio-indexical' are used to denote two sides of the same concept.

have towards specific aspects of the mock advertisements and products. In this way general language effects as well as their relevance to the evaluation of specific products can be tested. When attempting to gain a fuller picture of the role of language in advertising, linguistic theories have their limits and should therefore be accompanied by psychological advertising theories. For example, it is important to understand how the knowledge of product categories influences participants' evaluations of the mock advertisements in order to be able to draw conclusions on the precise origin of language effects. Moreover, the roles of involvement and emotions in the processing of advertisements have to be taken into consideration to put the obtained results into perspective.

Focussing on the recipients, their conscious interpretation of language use and the effects that such language use actually has on them is essential to research on advertising which aspires to have any relevance beyond the theoretical field. Blommaert (2005) summarised the points of departure for his critical take on discourse from ethnography, linguistic anthropology and sociolinguistics and first stated: "In analysing language-in-society, the focus should be on *what language use means to its users*" (Blommaert 2005, 14, emphasis in original) [5] . This is the central maxim of the perception-based approach taken here to English-mixed advertisements, and the theoretical framework and resulting methodological choices of this thesis are not confined by relying on one specific research paradigm. From a linguistic perspective, advertisements have mainly been studied in the realm of theoretical frameworks drawing on contact linguistics, cognitive linguistics and psycholinguistics, often applying concepts from neighbouring fields such as semiotics, literary studies, sociology, (advertising) psychology, and marketing. The framework of this thesis is rather eclectic, because it draws on selected aspects and insights from different strands of empirical research that can contribute to understanding the effects of English elements in German print advertisements.

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[5]   A comprehensive summary of the principles underlying Blommaert's approach emphasising its relevance to identity construction through multilingual discourse is provided by Mahootian (2012, 197).

II. Theoretical framework

English elements in German print advertisements are a result of intense and enduring contact to the English language (1.1.). These elements and their development, which was accompanied by a shift in research interests (1.2.), are outlined first (1.3.), before the most common criteria for distinguishing between them are explained and dismissed as not well suited to account for multilingual print advertisements (1.4.). Subchapter 1.5. presents a perception-based approach to English elements which stresses the importance of visual word form in general and particularly of graphemic markers of foreignness. Along with features of the word (2.2.1.), also characteristics of participants (2.2.2.) and the ability to keep languages apart (2.2.3.) are essential factors in bilinguals' visual word recognition (Chapter 2), which is explained using the Bilingual Interactive Activation Model (BIA) (2.1.). Then, the focus turns to the defining features of print advertisements (Chapter 3), where the communicative situation (3.1.) and the structure of print advertisements (3.2.) are considered separately. In addition to special aspects of language use (3.3.), especially, the multimodal nature of print advertisements (3.4.) determines their processing (Chapter 4).

In order to comprehend how English elements can influence consumers' evaluations of a product or advertisement, the roles of involvement and emotions, as well as the influence of consumer categories and brands, are outlined in 4.1. and 4.2. respectively. Subsequently, the differences in the processing of pictures and language are briefly discussed (4.3.). Even though meaning results from all modes used in print advertisements, only the meaning of lexical elements is considered in Chapter 5. Before outlining the different levels of meaning in 5.2., the nature of lexico-semantic representations in bilinguals is explored (5.1.) by drawing on the Distributed Feature Model (DFM). Comprehension, whether it is intended by advertisers or not, and which factors it relies on, is then the topic of 5.3.

Finally, the theoretical framework closes with a chapter on the functions of English elements in advertising (Chapter 6). Even though the English language can fulfil a wide range of functions (6.1), here, emphasis is laid on the affective meaning of the English language in general, which is explained using Barthes'

concept of the myth (6.2.). After distinguishing between ethno-cultural stereotypes and the effects of English as an international language, two types of functions and effects are presented as central: socio-indexical (6.4.) and socio-psychological (6.5). The resulting research questions are summarised in Chapter 7.

1. English-German language contact

1.1. The role of English in Germany

As today's uses of the English language in Germany result from past happenings and developments, a quick glance at the history of language contact between English and German will help to understand the scope of the functions that English has in Germany. This approach acknowledges a requirement expressed by Weinreich "[...] the linguist who makes theories about language influence but neglects to account for the socio-cultural setting of the language contact leaves his study suspended, as it were, in mid-air" (Weinreich 1964, 4).

1.1.1. History of English-German language contact [6]

Historical records dating back to the eighth century prove that language contact between German and English is by no means a new phenomenon (Hilgendorf 2007, 132). During the middle ages and through the sixteenth century Anglo-Saxon/English influence was limited, and only a few religious and nautical terms were borrowed from English or coined on the basis of the English original (e.g. *Mylord, Boot, Dock*) (Viereck 2004, 3317). After 1640, the intensity of language contact increased due to Germany's interest in the current events and developments in England, i.e. the civil war, the enlightenment and the industrial revolution (Hilgendorf 2007, 133f.). With language contact, lexical borrowings in the domains of politics (*Debatte, Akte, Oberhaus*), literature (*Nonsense, Held, Bombast*) and society (*Demonstration, Mob, radikal*) became more common (Hilgendorf 2007, 133f., her examples). During the 18th and 19th century, the influence of English culture and intellectual activity became even more prevalent, leading to an unprecedented interest in British social life and the British English language (BrE) (Hilgendorf 2007, 134). "In the late nineteenth century a certain degree of Anglomania affected all

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[6] "[L]anguage contact is the use of more than one language in the same place at the same time", provided that "at least some people use more than one language" (Thomason 2001, 1) To describe an individual contact with or exposure to the English language, I will use the term English contact. In my opinion language contact with English includes all points of contact with the English language, be it between speakers, a speaker and a (spoken or written) English text, or within a bilingual speaker's language use. I believe that such a broad conception of language contact is a more suitable base for explaining the origin of language contact phenomena (cf. Thomason 2001).

European countries in the domain of social life" (Busse and Görlach 2002, 13), and English gained a central importance in language teaching (Busse and Görlach 2002, 19). The wave of borrowings in the domains of leisure activities and sports from that time, which have since become part of the German lexicon, continue to provide evidence of this Anglophilia. Being a member of a *Club*, drinking *Cocktails* or *Whisky* and talking about a *Sport* became fashionable for a *Gentleman* (Polenz 1978, 140f.; cf. Altleitner 2007, 28). In the early twentieth century, when the status of the British as an empirical nation was severely challenged by the economic power of the United States of America, borrowings from American English (AmE) began to increase, especially in the domains of music, dance and transportation (Busse and Görlach 2002, 14; Crystal 2003, 10).

After the second world war, the Anglo-American re-education of Germany, which was based on the political and cultural orientation towards the United States and included the introduction of English as the first foreign language in most German schools (Busse and Görlach 2002, 14), led to an extensive impact of the English language, especially in the fields of fashion, foods, tourism, music, and entertainment (Kelly-Holmes 2010, 407). Language contact between German and English (BrE as well as AmE) reached a different level, and from that time the amount of borrowings increased continuously until the 1990s (Busse and Görlach 2002, 14). With the globalisation of national economies and the introduction of the world wide web as a new medium of mass communication, AmE became the primary source of linguistic influence, particularly in "the technical languages of business and commerce, computing, advertising, and youth language" (Busse and Görlach 2002, 14). While acknowledging the British origin of the English language as well as today's dominance of AmE, this thesis does not distinguish between AmE, BrE or any other variety of English when referring to English elements in the following [7].

By the late 20th century English had become the property of many people all over the world (cf. Crystal 2003, 2) [8]. A popular model that illustrates the

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[7] This approach stands in a long tradition of research on the influence of English on German as Yang points out (1990, 8): It was already advocated by Stiven in 1936 (1936, 103). It has since been taken up by most studies interested in the influence of English on German, e.g. Pfitzner 1978; Yang 1990, 7; Wetzler 2006, 47; Altleitner 2007, 33; Kupper 2007, 75; Elsen 2008, 88.

[8] It is important to remember that the status of the English language in the world does not result from its linguistic properties, but is first and foremost the result of colonisation (cf. Crystal 2003, 7f.).

unprecedented role the English language had acquired globally by the 1980s was developed by Kachru (1985). Even though the model of the three concentric circles [9] was developed before the internet led to a massive spread of the English language, at a time when linguistic realities were different from today, it has been frequently drawn on over the past decades to explain the different roles of English throughout the world. Margie Berns revised the model on attempt to account for the increasing importance of English in the EU (Berns 1995, 8f.) [10]. Her reasons for ascribing Germany a special status include the frequency of contact with English, for example, through the media, travel in the EU, and interpersonal interactions in professional as well as personal environments. Additionally, she argues, that Germany's post war history exposed all social groups to English and led to a higher English proficiency. This relatively high proficiency enables the use of English in "various social, cultural, commercial, and educational settings" (Berns 1995, 8f.) [11].

A valuable contribution of these models is that they indicate an increasing nativisation of the English language, or as Berns calls it, "de-Anglicization and de-Americanization" (Berns 1995, 10), i.e. the freeing of a dependency on native speaker norms and the setting of new linguistic standards through adapting the English language to certain German linguistic rules. Nativisation, assimilation and integration are key issues in research on language contact and language change. In the case of advertising, deviations from language norms have to be regarded as a purposeful creative technique employed by the advertisers to achieve a positive effect on the consumer (cf. Bhatia 1992, 213; Bratschi 2005, 58). This does not imply that norms are not important in advertising, quite the contrary is true (i.e. flouting norms presupposes that people are sensitive to them), but the prescriptive power of norms is challenged by advertisers' needs

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[9] The 'inner circle' of the model represents countries where English is the primary national language. The 'outer circle' stands for countries which came into contact with English through colonisation and where English is a second language (ESL) next to one or more official languages, e.g. India and Kenya. The 'expanding circle' includes counties where English is learned as a foreign language (EFL).

[10] Berns positions Germany, Luxembourg and the Netherlands between the outer and the expanding circles in an additional fourth circle, i.e. the 'dual circle', to illustrate that these countries are on their way to developing their own nativised varieties of English.

[11] However, more recent studies indicate that other European countries, e.g. Denmark, Sweden and the Netherlands, have left Germany far behind in the ability to hold a conversation in English (cf. Gerritsen et al. 2007a, 292f. citing results of the Eurobarometer 1994 and 2005) as well as in comprehending English phrases in advertisements (Gerritsen et al. 2010, 356). This is largely due to the fact that in contrast to, for example, Denmark, foreign language TV programs and films are dubbed into German (cf. Erling 2007, 118).

for linguistic creativity as orthographic innovations like *heppi* demonstrate (cf. Stöckl 2011, 11; example in Elsen 2008, 89).

1.1.2. English in Germany today

At the present time, the dominance of English as a world language is secured by modern communication technology and the historical, military, technological, political, economic, and socio-cultural power of the English speaking world [12]. Considering its ubiquitous use and the fact that 82% of the Germans consider English to be the most useful language next to German, and that 56% believe they speak it well enough to hold a conversation in English (Eurobarometer 2012), the question of bilingualism arises. Studies in bilingualism differentiate between three different types: institutional, societal, and individual bilingualism (cf. Riehl 2004, 52ff.).

In Germany "[...] English does not enjoy nationwide official status and is neither a first not [*sic*] a widespread second language but traditionally considered a 'foreign language'" (Androutsopoulos 2011, 1). However, Germany is a member of the European Union and "[t]he official policy of the European Union is to conduct its official business in English, French, and German, but English is by far the most widely spoken and used language in the administrative domain in European Union" (Kachru and Smith 2009, 8). Under these circumstances, English is often "a default language" in official as well as unofficial meetings (Berns 2009, 195f.). Moreover, Germany's strong export business often makes English the sole language of choice in international companies, such as Adidas, Deutsche Bank, SAP, Lufthansa, and the second in-house language in many medium-size enterprises. English is also the language of choice for publishing scientific research findings in most subjects, and thus it follows that in a number of fields access to advanced educational resources is only possible through English (cf. Seidlhofer et al. 2006, 2). Even though official institutions are not 'de jure' bilingual, we can assume a 'de facto' bilingualism [13] in certain economic and educational settings in Germany. With English being

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[12] David Graddol points out that the relationship between English and globalisation is a complex one, "economic globalisation encouraged the spread of English but the spread of English also encouraged globalisation" (Graddol 2006, 9).

[13] These terms were coined by William Francis Mackey (1967).

used as a the medium of communication in multinational corporations and the sciences, more and more people need English to communicate in their occupational lives or to pursue their studies (cf. Seidlhofer et al. 2006, 4f.; Erling 2007, 115).

> The current role of English in Europe is thus characterized by the fact that the language has become a lingua franca, a language of wider communication, and has entered the continent in two directions as it were, top–down by fulfilling functions in various preffesional [sic!] domains and, simultaneously, bottom–up by being encountered and used by speakers from all levels of society in practically all walks of life.

(Seidlhofer et al. 2006, 5)

The concept of societal bilingualism is used to refer to cases, where only some minority groups of a society are bilingual (Riehl 2004, 65). In a case study conducted in the city of Hamburg, Androutsopoulos et al. (2013) observe that the ever increasing mobility between the urban centres of the globe has created multi-faceted multilingual metropolitan communities where English is the globally accessible resource and belongs to the code repertoire of most people (Androutsopoulos et al. 2013). This emphasises that bilingualism and language use in general depend on many personal and situational factors, place of residence (urban vs rural) being only one of them. Individualisation has led to a new pluralism of lifestyles, which makes a description of language use on the level of society insufficient; instead, language users were found to liberally employ the linguistic resources available to them depending on communicative needs (cf. Androutsopoulos et al. 2013, 14). This mode of communication, which is referred to as 'metrolingualism' [14], represents a complementary use to a lingua franca (cf. Androutsopoulos et al. 2013, 15). Elizabeth Erling (2007) compiled a sociolinguistic profile of students studying English at the Freie Universität Berlin and found that "[t]hese students use English for academic purposes, reading for pleasure, using the Internet, accessing foreign media, viewing films, travelling, and communicating with non-German speakers abroad or in Berlin" (Erling 2007, 120). While bilingualism with German and English is the norm in this "educated urban middle-class elite" (Erling 2007, 120), this form of language use at large remains restricted to urban groups living in multicultural settings and does not concern the majority of Germans.

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[14] Referring to Otsuji and Pennycook 2010, Androutsopoulos et al. point out the change in perspective associated with this concept: "Beispielsweise erfordert das Konzept der Metrolingualität (metrolingualism) ein Umdenken von der Frage 'how distinct codes are switched and mixed' hin zur Frage 'how language users manipulate the resources they have available to them' (Otsuji and Pennycook 2010:241)" (Androutsopoulos et al. 2013, 14).

Nevertheless, the results suggest that societal bilingualism is on the rise (cf. Erling 2007, 120).

> The most obvious impact of English in Europe, however, can probably be observed in the public domains such as the media, the internet, advertising, popular youth culture, and entertainment [...]. It is in these domains that English has evidently been spreading beyond the elites.

(Seidlhofer et al. 2006, 5)

The situation, where multilingualism in the mass media does not reflect multilingual communicational patterns in a largely monolingual society, is referred to as 'impersonal multilingualism' by Haarmann [15]. This opposition of multilingualism and monolingualism "has to be understood as a dynamic relationship between communicational patterns used under varying conditions and for different purposes" (Haarmann 1989, 2f.). Bratschi, too, notices an 'unauthentic foreignness' in the context of Xenisms, which results from the lack of actual multilingualism and biculturalism on both the side of the advertisers and the side of the consumers (Bratschi 2005, 58).

It can be concluded that the question of bilingualism in Germany cannot be answered on the level of society, but has to be asked for individual (groups of) language users. Therefore, the definition of bilingualism adopted in this thesis operates on the individual level. Bilingualism "[...] is the regular use of two (or more) languages, and bilinguals are those people who need and use two (or more) languages in their everyday lives" (Grosjean 1982, 51). This definition draws attention away from the comparatively few balanced bilinguals, who are similarly proficient in both languages and rather envisions bilingualism as a continuum (cf. Macnamara 1969, 82; Valdés 1995, 316). While bilingualism with English is generally perceived as positive and prestigious, the intensive impact of English on German has long given rise to purist reactions. Buzzwords like 'Denglisch' pop up in the media discourse regularly and critical views on language policy are no longer restricted to rational academic discourse, it is rather non-linguists who get involved in heated debates (cf. Moraldo 2008, 15). The *Verein Deutsche Sprache e.V.* is only one example of an institution that has declared war on Anglicisms and 'Denglisch'. Jürgen Spitzmüller (2005)

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[15] Harald Haarmann (1989) examined the influence of Western languages on Japanese in *Symbolic Values of Foreign Language Use* and generalises his findings for countries, which display a heavy use of foreign languages, especially English, in advertising.

collected voices on both sides of the discourse participants between 1990 and 2001 in his book *Metasprachdiskurse: Einstellungen zu Anglizismen und ihre wissenschaftliche Rezeption*. He stresses that like social symbolic systems, linguistic usage indicates the corresponding value systems and world views of the speakers (Spitzmüller 2005, 365). The aversion to foreign influences on the German language and English-induced changes suggests that many Germans have - from a linguistic point of view - an irrational concern for their language that is wrongly perceived as a stable entity (cf. Spitzmüller 2007, 279). Zenner et al. point out that especially in regions where language contact with English is fairly weak and not immediate (i.e. people come into contact with English primarily through the media (cf. Onsyko 2009, 58)) borrowings often elicit hostile attitudes (Zenner et al. 2013a, 252).

Opponents of the use of English in Germany (which is often perceived as too extensive and unnecessary) tend to argue that English is not comprehended by the general public. While, indeed, the Endmark-Claim studies have documented a poor understanding of English slogans, a lack of comprehension does not necessarily lead to negative attitudes [16]. Nevertheless, in recent years some well-known companies have substituted their English slogans for German ones (e.g. in 2004 Douglas replaced *Come in and find out* with *Douglas macht das Leben schöner* (i.e. 'Douglas makes life more beautiful')) [17]. This gave rise to speculations about English being 'out' and some observers believed they had witnessed a trend towards less English in slogans. Yet, a study conducted by Slogans.de in 2011 came to the conclusion that the use of English in slogans has increased since 2009 and that in 2011 a total of 25% of the new slogans in the German market were in English (Hahn and Wermuth 2011, 6). This trend towards more English slogans goes hand in hand with a trend towards shorter, more ambiguous, but easily comprehensible claims (Hahn and Wermuth 2011, 6). An example of this trend is provided by Douglas, which again switched to an English slogan *Your partner in beauty* in 2013. Lufthansa also replaced the long claim *There's no better way to fly* with *Nonstop you*.

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[16] Meaning and comprehension is the topic of Chapter 5.

[17] This was not least a consequence of the striking results of the first Endmark-Claim study conducted in 2003, after which eight out of the twelve companies whose slogans posed the most difficulties changed to German slogans (cf. Friedrichsen 2010, 613).

1.2. Development of research interests in language contact

Interest in language contact between German and English was originally a result of purist concerns. It comes as no surprise that the earliest records of English influence on German are found in collections of foreign lexical items. Gustav Wustmann was among the first to publish a handbook on the correct use of the German language, called *Allerhand Sprachdummheiten* (Wustmann 1891). An early non-systematic exploration of Anglicisms in the German press can be found in Zindler (1959). The first study on functional motivations for a "central phenomenon of 'languages in contact'" (Galinsky 1963, 35) was published by Hans Galinsky with his essays "Stylistic Aspects of Linguistic Borrowing". Broder Carstensen's (1965) "Englische Einflüsse auf die deutsche Sprache nach 1945" is the first publication to cover all levels of English influence on the German language, namely lexical, syntactic, morphological, phonological and graphemic influences. Carstensen determines the German press and especially the news magazine *Der Spiegel* as the major point of entry for Anglicisms (cf. Carstensen 1963, 14).

Peter Wendelken specifically focussed on the language of advertising in his paper "Der Einfluß des Englischen auf das heutige Werbedeutsch" in 1967. Ruth Römer was among the first to study the influence of foreign elements on the language of advertising in more detail, devoting a subchapter to it in *Die Sprache der Anzeigenwerbung* (Römer 1968, 123-131). Another publication on the process of borrowing from English with the aim of explaining the process and its corresponding terminology by Carstensen followed in 1968. Jürgen Pfitzner (1978) extended Galinsky's findings and analysed the stylistic functions of English elements in the German press. Pfitzner became interested in the type of efficacy that English lexical elements have in German newspapers and traced their functional characteristics. Herman Fink conducted a study on Anglicisms in the youth magazines *Bravo* and *Freizeit-Magazin* in 1980. Analysing the use of English in ads as well as in the edited part of the magazines, he categorised Anglicisms according to their functions into six super-ordinate groups. "A. Übersteigerte Wirkung, B. Euphemismus, C. Sachlichkeit, D. Textgestaltung, E. Bedürfnis, F. Anbiederung" [18] (Fink 1980, 202). Wolfgang Viereck, the editor of "Studien zum Einfluß der englischen Sprache auf das Deutsche" (1980),

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[18] These translate to: 'exaggerated effect', 'euphemism', 'objectivity', 'text design', 'need', 'ingratiation'.

collected essays that attained considerable influence in the research field of Anglicisms in Germany. The topics included were pseudo-loans, and grammatical gender (both by Carstensen), pronunciation, and usage (both by Fink), and comprehension (by Viereck). Following Carstensen's assumption that *Der Spiegel* played a key role in the introduction and spread of new Anglicisms, Wenliang Yang (1990) conducted a diachronic analysis of Anglicisms in this magazine from 1950 to 1980. He studied aspects such as frequency of use, semantic change, stylistic function, word formation, and the assimilation of English elements.

Manuela Baumgart (1992) analysed the language of slogans in German print advertisements and compared her findings to those of Römer. She discovered that English is the language most frequently resorted to in product names (Baumgart 1992, 116f.). By the 1990s the use of English in advertising had attained a different quality and mono-lingual frameworks reached their limits. Theories and terminology from bilingual language use (i.e. code-mixing, codeswitching, language mixing) appeared to be more suitable for describing the phenomena at hand, even though they had been developed to explain the behaviour of bilinguals in spoken discourse from a sociolinguistic perspective. Tej K. Bhatia demonstrated that mixing a local language with English in advertisements had become a universal phenomenon (Bhatia 1992; 1987). Ute Störiko (1995) studied the forms and functions of foreign elements in German print, radio and TV advertisements in "*Wir legen Word auf gutes Deutsch*". She observed that in her corpus the strongest foreign (mainly English) influences were of a lexical nature [19]. In 1996 Stephanie Bohmann analysed word formation and the orthographic integration of Anglicisms, loan words, internationalisms and technical terms (1996, Chapter 3 "Wortbildung"). In her corpus of advertising material most English elements are compounds (1996, 54), but the second largest category consists of phrases and short sentences (1996, 60). As the object of study developed in the 1980s, interest in the use of English in ads began to move from counting and collecting Anglicism lists to discourse analytical approaches, studying social prestige, identity construction, ideologies and stereotypes [20] (cf. Kellerhals 2008, 19f.). Harald Haarmann (1989) studied the influence of Western languages on Japanese in

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[19] In saying so, she remarks that it is very difficult to categorise concrete cases as lexical, morphological or phenomena of word formation.

[20] This change of research interests was brought about by the rise of new, emotional advertising strategies, which were developed to persuade an increasingly saturated market.

Symbolic Values of Foreign Language Use and generalised his findings for countries that display an extensive use of foreign languages, especially English. He found that English had become a symbol of modernity in Japan and was used widely in the mass media. In this it does not function as an ethno-cultural, but as a social stereotype (Haarmann 1989, 16). Cheshire und Moser analysed the symbolic use of English in Suisse Romande and concluded that English in advertisements had become a cultural symbol, which allows the French-speaking Swiss "[...] to lay claim to a social identity that is not available to them through their own language" (Cheshire and Moser 1994, 1).

Dagmar Schütte specifically analysed the pragmatic functions of Anglicisms in German print ads. She found that English elements contributed to experience-oriented (1996, 360), lifestyle-based advertising, which aims at consumers' subjective perceptions of an emotionally added value (Schütte 1996, 140). Elizabeth Martin studied "The Use of English In Written French Advertising: A Study of Code-Switching, Code-Mixing, and Borrowing in a Commercial Context" (Martin 1998). She points out that "language-mixed advertisements are essentially a mirror of society, enabling the observer to gain a clearer understanding of attitudes toward language and culture" (1998, 180). Ingrid Piller, who applied a similar bilingual approach to German advertisements, stresses that the use of English is primarily a discourse phenomenon and not just a lexical phenomenon (Piller 2003; 2001). This is in line with Sabine Kupper's finding that while the use of single English words in German advertisements remained constant between 1976 and 2001, more English expressions and multi-word elements occurred in 2001 (Kupper 2007, 342). This increasing use of complex syntactic English phrases made German advertising appear more and more English [21] (Kupper 2007, 379).

Rebekka Bratschi (2005) focused on foreign elements in German advertising from a communicative functional perspective in her semiotic analysis. She (re-)introduces [22] the term 'Xenisms' ("Xenismen") to stress the importance of a foreign appeal. Schiemichen (2005), too, analysed foreign elements, that have not been assimilated phonologically, orthographically and

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[21] Original wording: "Gerade durch den intensiven Einsatz komplexerer syntaktischer englischer Phrasen wird der Eindruck einer immer 'englischer' werdenden deutschen Werbung verstärkt" (Kupper 2007, 379).

[22] Her work follows a French linguistic tradition, where the term had already been used for half a century to denote unassimilated foreign words.

morphologically into the German language. She found that in addition to its connotative functions, English is used because of its literary and psycholinguistic benefits which outnumber those of any other foreign language (Schiemichen 2005, 395). Dagmar Wetzler (2006) studied the functions and comprehension of Anglicisms in the language used by Deutsche Telekom, including advertisers' perspectives in her interpretation. Alexander Onysko (2007) studied *Anglicisms in German: Borrowing, Lexical Productivity, and Written Codeswitching*. He reminds us that also borrowing fulfils expressive functions and satisfies semantic, social (prestige-seeking), creative (for word-play, innovation, aesthetics), and structural (for conciseness) needs (Onysko 2007, 50).

Margret Altleitner (2007, 14) noted in *Der Wellness-Effekt. Die Bedeutung von Anglizismen aus der Perspektive der kognitiven Linguistik,* that the communicative function of language is rarely the focus of research on Anglicisms. Even if it is, as for example in Fink (1975), studying Anglicisms in isolation rather than in a natural context does not allow researchers to draw conclusions on the natural reception of Anglicisms (Altleitner 2007, 14). Altleitner studied the processing of (lexical, grammatical and socio-cultural) Anglicisms, focussing on comprehension, evaluation and connotations, and contrasted her findings with the processing of German material (Altleitner, 2007, 16f.).

1.3. Types of language contact phenomena [23]

"On the macro-level, English is more and more used as a language of (international) communication. On the micro-level, English is intruding in local languages, most notably by means of lexical borrowing" (Zenner et al. 2013b, 1020). Research has primarily focused on these two levels, leaving "a meso-level empirical space, that is, the actual use of English resources at a text and discourse level" unexplored (Androutsopoulos 2011, 1). In this chapter only those aspects that contribute to the aims of this paper, namely, the degree of integration into the German lexicon and the degree of assimilation to German

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[23] The terminology used to distinguish different types of language contact phenomena not only varies between researchers and theoretical frameworks; even for the most widespread terms there is no consensus on their precise definitions.

linguistic norms are discussed. Following the chronological developments of research interests in language, the language contact phenomenon of borrowing is explored from a traditional monolingual perspective, before the special case of Anglicisms is taken up. This primarily lexical focus cannot account for the type of language contact phenomena in advertisements today, therefore, selected attempts to apply theories of bilingual discourse phenomena (i.e. codeswitching, language mixing) are subsequently presented. However, these approaches have proven to be deficient in many respects when applied to written, non-interactional multilingual texts. For this reason, multilingual approaches to multimodal written discourse which can better account for the present use of English in German advertisements are thus outlined as well.

1.3.1. Lexical language contact phenomena

The acceptance and spread of contact-initiated individual deviant language use, i.e. interference [24], leads to borrowing. There are numerous motifs for lexical borrowing (cf. Kupper 2007, 80f.), but two prerequisites are the high prestige of the English language and the need for linguistic innovations to refer to new concepts (i.e. a lexical gap) (cf. Wetzler 2006, 27) [25] . Especially technological transfer usually leads to an adoption of the corresponding terminology (Schütte 1996, 26). But borrowing can also be stylistically motivated by, for example, euphemism, originality, or affective values (cf. Schütte 1996, 26; Kupper 2007, 80f.) and social motifs, such as wishing to be identified with a prestigious group. This emphasises that all language change originates in the individual but is determined by social factors (Schütte 1996, 26). Nevertheless, only selected English elements are borrowed into the German language. Zenner et al. (2013a) found that English person reference nouns are more likely to be borrowed and used when they are the shortest word to express the concept, express a low-frequency concept, are required to fill

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[24] Interference constitutes a language contact phenomenon in the individual that occurs on the basis of formal similarity between English and German elements and concerns semantic and functional transfer (Onysko 2007, 31), i.e. a "speech error" (Poplack 1987, 72). It presents a onetime innovation and can only lead to language change when it reoccurs often enough to be adopted by other language users (Altleitner 2007, 96; Kupper 2007, 75). Note that Galinsky (1963) and Weinreich (2011) have very different conceptions of the term 'interference' and use it to refer to borrowing and language mixing respectively.

[25] Although it has to be mentioned that the German language is very capable of naming new entities without having to rely on English elements and therefore, the reasons for borrowing can be found in the language users and their preferences (i.e. the prestige attributed to English), not in the properties of the languages involved (cf. Altleitner 2007, 165f.).

lexical gaps, and "if the loanword is used to lexicalize a concept from a lexical field closely related to or originating in Anglo-American culture" (Zenner et al. 2013a, 283).

Nowadays, borrowing is usually understood as lexical borrowing, which concerns the language use of a speech community and differs from "nonce borrowing" by individuals (Poplack 1987, 72). Onysko defines borrowing as "a process of lexical transfer from a subdominant SL [source language] (English) to a dominant RL [receiver language] (German)" (Onysko 2007, 14), "which is characterized by the retention of the source unit in the RL" (Onysko 2007, 31). Thus, borrowing is a transfer of linguistic units which consist of word form and meaning (Onysko 2007, 32f. and 79). The term 'borrowing' can refer to this process of borrowing an item from another language as well as the item itself. Numerous typologies for classifying borrowings have been proposed and the most influential ones that formed the basis for the following contributions in the field are briefly outlined in the following.

Werner Betz (1949) proposed a terminology for Latin influence on German which has since been adopted and adapted by numerous researchers (e.g. Duckworth 1979; Carstensen 1963; Onysko 2007) to describe the lexical influences of English on German. Betz's main distinction is between a direct loan influence, i.e. loan word, 'Lehnwort', (consisting of foreign words and assimilated loans), and an indirect loan influence, i.e. loan coinage, 'Lehnprägung'. The latter, which is a German-inherent creation motivated by an English conceptual stimulus (Onysko 2007, 31), is of no interest in this study, because its English origin is not apparent. However, not all loan words can be identified as being of English origin solely by their word form. Betz (1949, 26) further subdivides direct loan influences into assimilated loan words and foreign words, but remarks that from the chronological perspective of borrowing such a distinction is not necessary as all loans were foreign words once (cf. Altleitner 2007, 30). The distinction between foreign words and loan words is highly debated. While some researchers perceive it as useful to their research aims, e.g. Altleitner (2007), others criticise it as inadequate for describing borrowings after 1945 (Carstensen et al. 2001, 53*).

> Unter Fremdwort wird demnach hier ein Wort verstanden, das unverändert in Schreibung und Lautung übernommen wird und auch von einem Laien als fremd erkannt wird, im Gegensatz zu einem Lehnwort, das phonetisch und graphematisch so in das deutsche Sprachsystem integriert ist, dass es nur noch von Linguisten als Entlehnung identifiziert werden kann. [26]

(Altleitner 2007, 30)

Similarly, Busse and Görlach distinguish three types of borrowings: borrowings that are "[t]otally unadapted and not felt to be part of German (quotation words, code-switching, foreignisms)", foreign words ('Fremdwörter*)* and loans ('Lehnwörter') (Busse and Görlach 2002, 29). They envision a continuum between these categories and allow for different perceptions of individual language users (Busse and Görlach 2002, 29). This emphasises that in many cases there cannot be a generally valid and objective decision as to whether a word of English origin is a foreign word or a loan word and that the perceived degree of foreignness varies among language users.

Another early approach was proposed by Einar Haugen (1950): "The heart of our definition of borrowing is then the attempted reproduction in one language of patterns previously found in another" (Haugen 1950, 212). He differentiates between 'complete importation', 'partial importation' and 'no importation' of linguistic material (Haugen 1950, 214; cf. Yang 1990, 10). This terminology was later adapted by Fink (1970) as well as Pfitzner (1978, 13) (cf. Onysko 2007, 35). Haugen's definition describes the language use of the individual and assumes that this form of language contact is intentional. Moreover, his definition includes language patterns of all types, i.e. "not only words (or morphemes generally) but also phonetic, morphological and syntactic patterns" (Weinreich 2011, 40). Since such an approach can account for language mixed elements on all levels, it is well suited for analysing foreign elements in advertising.

Störiko also reasons that the distinction between foreign words and loan words is not applicable in the context of advertising and defines three categories that account for the foreignness of linguistic elements and that she positions along a continuous scale (Störiko 1995, 61f.): "Fremdeinwirkung,

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[26] My translation: 'The term foreign word here refers to a word that was adopted without a change in the orthography and phonology and is also recognised as foreign by a layperson, in contrast to a loan word, which is integrated phonetically and graphemically into the German language system to such an extent that it can only be identified by linguists as a borrowing.'

Teilfremdsprachigkeit und Fremdsprachigkeit". 'Fremdeinwirkung' includes all foreign influences that have changed the German language (e.g. revival of rare or dated words because of a frequent English cognate, loan renditions, and loan words). 'Teilfremdsprachigkeit' describes words with both German and foreign elements (e.g. *relaxen*) and 'Fremdsprachigkeit' summarises all foreign elements that are new in the German language and have not been assimilated phonologically, orthographically or morphologically (Störiko 1995, 61f.). Researchers studying the (stylistic) functions of foreign languages in German texts are only interested in language contact phenomena that have retained markers of their foreignness and are thus easily recognisable as being of foreign origin by the average language user (Altleitner 2007, 38; Bratschi 2005, 86; Pfitzner 1978, 1; Schütte 1996, 36). For borrowings such a distinction is for example made by Broder Carstensen, who differentiates between 'latent' and 'evident' language influences (1979, 90f.). Evident loans are taken to include foreign words, loan words, pseudo-loans and language mixed compounds (cf. Bohmann 1996, 22), while latent influences [27] are of no interest when the effects of English elements are concerned.

Using the term 'Anglicism' stresses that the research focusses on linguistic material of English origin and not on lexical innovations in the German language. However, even though Anglicisms have been widely studied, there is no general consensus on the definition of the term.

> Theoretically, the main issue is to provide a definition of anglicisms. Many different definitions are available for both *loanword* in general and for *anglicism* in particular, ranging from highly inclusive (incorporating all transfer types) [...] to more restrictive (limited to specific transfer types) [...].
>
> (Zenner et al. 2013a, 261, emphasis in original).

Alexander Onysko, who analyses *Anglicisms in German: Borrowing, Lexical Productivity, and Written Codeswitching* (Onysko 2007), defines an Anglicism as "[...] any instance of an English lexical, structural, and phonological element in German that can be formally related to English" (Onysko 2007, 90) [28].

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[27] Latent influences include loan translation ('Lehnübersetzung'), loan rendering ('Lehnübertragung'), loan creation ('Lehnschöpfung'), 'Lehnwendungen', semantic loans ('Lehnbedeutung'), and 'Lehnsyntax' (Bohmann 1996, 21f.; English terminology in Busse and Görlach 2002, 29).

[28] Onysko identifies borrowing, codeswitching, lexical or syntactic productivity (hybrids, pseudo-anglicisms) as "core anglicisms", and interference and so-called "obtrusive borrowing" as borderline cases (2007, 90).

A word form based approach that specifically addresses foreign elements in advertisements is proposed by Bratschi (2005). She analyses foreign elements in German advertising, i.e. 'Xenisms', which she defines as follows: "Werbexenismen sind Elemente, die Fremdheit signialisieren sollen" [29] (2005, 58). This definition stresses the intended alien quality of a linguistic element and that in advertising any linguistic anomaly in itself constitutes an integral part of the advertising message (2005, 51). However, foreign elements have to be recognised as belonging to a specific linguistic code (not just as non-German) to be able to refer to stereotypical knowledge of a foreign language and culture. It follows that the foreignness indicated is necessarily a typical and therefore 'familiar' foreignness (Bratschi 2005, 52).

> Die Alterität fremdsprachiger Wörter beruht nun einerseits darauf, dass sie in bestimmten Eigenschaften vom deutschen Normalparadigma abweichen. [Footnote: Sofern sie nicht vollständig integriert sind.] Sie weisen phonetische, graphemische, morphologische oder andere Besonderheiten auf und sind deshalb markiert. Je mehr Fremdheitsmerkmale in einem Wort zusammentreffen, desto stärker ist das von ihm ausgehende Fremdheitssignal; je typischer diese Fremdheitsmerkmale für die zu evozierende Sprache sind, desto präziser erfolgt die Verweisfunktion. [30]

(Bratschi 2005, 85)

This leads to a controversial topic in Anglicism research: 'internationalisms', i.e. words that have spread via the English language into languages all over the world (Bohmann 1996, 86; Störiko 1995, 405). Internationalisms can be described as borrowed (inter-)lexical units that share some formal as well as semantic overlap across different languages (cf. Bohmann 1996, 75f). Many internationalisms have been formed of Greek or Latin lexical material (Busse and Görlach 2002, 15; Pfitzner 1978, 14). It is especially technical and scientific terminology that often has an international character, because terms used in the global language English became part of technical languages and were borrowed into many different languages

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[29] My translation: 'advertising xenisms are elements intended to signal foreignness'

[30] My translation: 'The alterity of foreign words is in one respect due to the fact that they differ from the German norm [if they are not fully integrated]. They are marked by their phonetic, graphemic, morphologic, and other characteristic features. The more markers of foreignness that occur in a word, the stronger it signals foreignness; the more typical these cues of foreignness are to the language that is to be evoked, the more precise their referential function is.'

(Bohmann 1996, 95; Kupper 2007, 50) [31]. Busse and Görlach exclude internationalisms from their definition of Anglicisms, arguing that there is nothing English in their form (Busse and Görlach 2002, 15). However, terms that come into German via the English language are associated with English and transport current information and connotations, even if they consist of French, Greek or Latin morphemes (cf. Elsen 2008, 87). The same applies to elements that appear to be English but are in fact lexical innovations of the German language that use English lexical material, i.e. 'pseudo-anglicisms' (cf. Onysko 2007, 55). Since pseudo-anglicisms are likely to be recognised as English, they should not be excluded when studying the effects of English elements.

In addition to etymological origin, it is also semantic aspects (i.e. the retention of meaning) that are attributed different degrees of importance by researchers. Pfitzner (1978) who analyses the stylistic functions of Anglicisms defines Anglicisms as 'a linguistic sign, whose external form consists of English morphemes or combinations of English and German morphemes, and whose content always presupposes the retention of a meaning that is common usage in an English context' (Pfitzner 1978, 13, my translation). While the retention of original meaning is an important criterion for him, Schütte defines Anglicisms as a linguistic sign that consists completely or partially of English morphemes, irrespective of whether it is linked to a common meaning in the English language use or not (Schütte 1996, 38). It is important to mention that when a word is borrowed by another language it undergoes a change in meaning, usually a narrowing or specialisation, but meaning shifts and generalisations also occur. Along with denotative changes, stylistic/connotative specialisation commonly appears when the lexical item becomes differentiated from its closest semantic neighbours (Altleitner 2007, 15; Busse and Görlach 2002, 27; Kupper 2007, 23; Martin 2008, 72). Therefore, "[l]exical meanings cannot be fully compared across language boundaries since they are contrastively established in relation to other members of a semantic field in the individual languages" (Busse and Görlach 2002, 26f.).

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[31] Bohmann calls technical terms "'beschränkte' Internationalismen", i.e. limited internationalisms, because they are mainly used by professionals world-wide (1996, 96). However, we can assume that the examples she gives, i.e. *Soft-/Hardware, Megabyte*, have by today become comprehensible to more and more non-experts and have lost their limitedness (cf. Bohmann 1996, 96).

According to Kupper, Anglicisms are indirect hyponyms to neologisms, i.e. lexical innovations originating from the English language (Kupper 2007, 75). She also restricts her analysis to those Anglicisms that are clearly identifiable as being of foreign origin (i.e. foreign words, hybrid forms and pseudo-loans), excluding loan words which follow German orthographic and phonological rules (Kupper 2007, 75f.). Her typology leads to the categorisation of *Shop, Manager, Computer, gestylt* and *gemanaged* as Anglicisms, whereas *Club* and *stoppen* which are treated as loan words remain unconsidered (Kupper 2007, 76). Such a categorisation appears somewhat arbitrary from a word form based perspective, therefore, objective means for differentiating between words of English origin that are likely to be perceived as English and words that are likely to be perceived as German are needed. Acknowledging this need for a perception and usage-based typology, Wenliang Yang (1990, 9) differentiates between: 1. conventionalised Anglicisms that are common, well-known and no longer seem foreign even though they often do not follow German phonologic and orthographic rules, 2. Anglicisms that are in the process of being conventionalised and still seem foreign to many Germans, and 3. Anglicisms, like quoted words and proper names, that are only used in special situations or in the discursive context of English speaking countries (cf. Yang 1990, 9). Such a typology is necessarily subjective and cannot be generalised to the perception of English elements in advertisements which rely on creative, sometimes norm deviant, language use.

1.3.2. Discursive language contact phenomena

The use of English in Germany has increased in many domains so that more and more people rely on it regularly. This new linguistic reality led to contact phenomena on the individual level such as codeswitching and code-mixing which could no longer be accounted for by a monolingual framework (Hilgendorf 2007, 135). The concept of borrowing does not suffice to account for the fact that "[i]n some domains, especially in advertising, there is an increasing use of code-switching involving English" (Busse and Görlach 2002, 32). Through this "new semantic and affective features which single-language advertising is incapable of rendering" can be added (Bhatia and

Ritchie 2008, 10), and thus presents a form of bilingual creativity [32] (Bhatia and Ritchie 2008; Martin 2008, 49;), i.e. an "'optimizing' strategy" (Bhatia and Ritchie 2008, 5). Gumperz (Blom and Gumperz 1972; Gumperz 1982) sociolinguistic work on conversational codeswitching laid the foundations for most research that was to follow [33] and the focus has since often been on spoken discourse.

While it is widely accepted that these language contact phenomena are best envisioned as lying on a continuum (cf. Koll-Stobbe 1994, 209; Mullen 2013, 27; Auer 1999, 309), researchers apply very different criteria to keep them apart (Onysko 2007, 36f.). Code-mixing and codeswitching differ from borrowing in syntactic and functional aspects. "[B]orrowings are paradigmatically incorporated and follow the syntagmatic relations of the RL whereas codeswitches retain the paradigmatic markings and the syntagmatic relationship from their original language" (Onysko 2007, 36). Unlike borrowings, codeswitches do not fill lexical gaps in the lexicon of the borrowing language (cf. Kamwangamalu 1992, 174). Moreover, code-mixing and codeswitching require a certain proficiency in another language and are therefore primarily features of bilingual language use, borrowings, on the other hand, occur in the language of monolingual and bilingual speakers alike (Altleitner 2007, 86; Kachru 1986, 66; Kamwangamalu 1992, 174; Mullen 2013, 25; Myers-Scotton 2006, 45). However, borrowing and mixing can hardly be distinguished at the surface level (cf. Poplack 1987, 72; Bhatia and Ritchie 2008, 13). "The smaller the switched constituent, particularly at the level of the lone lexical item, the more difficult it is to determine whether we are dealing with a code-switch or a loanword" (Koll-Stobbe 1994, 209).

Even though the switching and mixing of codes in spoken discourse has been studied extensively for more than 50 years, there is still no consensus on its terminology (Sebba 2013, 98). Amei Koll-Stobbe states: "a code is a particular dialect or language that a person chooses to use as a system of

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[32] Jones remarks that "most work in the language and creativity paradigm has primarily emphasized the formal aspects of language in use and has only dealt secondarily with the ways language as it is used in situated social contexts helps to create new kinds of identities, social practices and relationships of power". He terms the latter focus "discourse and creativity" (Jones 2010, 467).

[33] Gumperz's key propositions, i.e. codeswitching functions as a contextualisation cue, situational vs metaphorical codeswitching, and the classification of its socio-pragmatic functions have been applied to written code-mixing, too (cf. Sebba 2012b, 4; Sebba 2013, 99; Mahootian 2012, 194).

communication between two or more parties" (1994, 206), obviously, the two relevant codes in this thesis are English and German. Despite different definitions, it is generally accepted that both linguistic systems remain unaffected by codeswitching, i.e. codeswitching does not impede on the norms of either language (Altleitner 2007, 95). Poplack describes it as "the alternate use of two codes in a fully grammatical way in the same discourse and even in the same sentence" (1987, 72).

Researchers interested in English mixed advertisements often rely on Myers-Scotton's Matrix Language model (1993) as a theoretical backdrop (Luna and Peracchio 2005, 44; Chen 2006, 468). The model assumes that in each social context a certain code choice is considered normal by the majority of people, i.e. the 'unmarked' code. In the same context a number of codes would be perceived as unexpected, i.e. 'marked' codes. Choosing a marked code creates an "other-than-expected-effect" (Chen 2006, 468) and implies that the speaker wants to communicate certain social meanings or group memberships. Despite the fact that the model is based on observations of code choices in conversations in Kenya, the concept of markedness has been applied to multilingual print advertisements [34] (e.g. Luna and Peracchio 2005; Luna et al. 2005). Another model proposed for analysing conversational interactions (Conversation Analysis) is presented by Peter Auer. He defines codeswitching as "perceived and interpreted as a locally meaningful event by participants" (Auer 1999, 310). While this focus on perception is very important to the present study, Auer's as well as Myers-Scotton's approaches fail to adequately account for written discourse (cf. Mahootian 2012, 196) that lacks aspects of immediate interaction and speaker contact i.e. is not synchronous, not interactive, not sequential (cf. Sebba 2012b, 7; 2013, 99), and (in the case of print ads) is not spontaneous (Mullen 2013, 25).

Researchers studying written language mixing have largely relied on theoretical frameworks developed for conversational codeswitching (Sebba 2012b, 1). Some have tried to apply the sentence or clause based typology that is widely used for codeswitching in spoken discourse (i.e. switching languages

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[34] Luna and colleagues analyse the psycholinguistic effects of codeswitching on U.S. Hispanics, a bilingual minority targeted by the "*Latina* magazine, a publication that is printed primarily in English but that includes some Spanish features and a great deal of code switching" (Luna et al. 2005, 417). Here, the mixing of Spanish and English in advertisements resembles the linguistic reality in the speech community. This does not hold true to the same degree for German advertising.

at boundaries of discourse units such as clauses or sentences is considered intersentential, and switching within clauses or sentences is referred to as intrasentantial (Romaine 1989, 112f.)). They referred to cases where the alternating use of two languages is intrasentential as code-mixing, and use the term codeswitching to name instances where the alternating use of two languages is intersentential (Bhatia and Ritchie 2008, 13f.; Chen 2006, 467) [35]. Generally, such a classification is problematic, because the sentence does not need to be the relevant unit in advertisements (cf. Sebba 2012b, 12; 2013, 104). Koll-Stobbe (1994, 210f.) even demonstrates that in advertisements more than one code is used in single lexical items (e.g. *freakig, eaunly,* her examples) to achieve conceptual shifts in the mental lexicon.

> Creative code-switching, taken to its extreme in situative intralexical code-alterations as shown above, is a kind of code-zapping where relevant information can be configured in the mental lexicon of bilingual speakers in a creative way by making use of the potential of code-mixes as a semantic strategy to extend code-systems.

> (Koll-Stobbe 1994, 211)

This emphasises that, like communication in some urban groups that typically make use of all their available linguistic resources, multilingual language use in advertising cannot be adequately accounted for in a framework that relies on discrete linguistic systems (cf. Androutsopoulos et al. 2013, 14f.). Instead, recent post-structural approaches that tackle multilingual communication from the view point of speakers and their actual language use and not from the languages involved [36] (cf. Androutsopoulos et al. 2013, 14f.), appear to be profitable to multilingual language use in advertising. Such a "focus on situated and motivated use of linguistic resources rather than the relationship between linguistic systems" is taken by Androutsopoulos (2011) in the 'English on top' framework.

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[35] In the following, the term 'language mixing' is used as an umbrella term for code-mixing as well as codeswitching (cf. Bhatia 1992, 196; Bhatia and Ritchie 2008, 14; Kamwangamalu 1992, 173).

[36] Amongst others, Androutsopoulos et al. name Li Wei as an example of researchers working on such an approach. For more information on the concept of *translanguaging* the reader is referred to *Translanguaging: Language, Bilingualism and Education* by Ofelia Garcia and Li Wei (2014).

1.4. Indicators of integration vs predictors of perceived Englishness

Generally, a distinction between foreign words and loan words on the basis of phonologic, morphologic, orthographic (and/or semantic) assimilation is problematic and therefore, more and more researchers in the field refrain from it (cf. Janich 2013). Yet, the same issues apply to any typology of borrowings or Anglicisms that rely on the perceived foreignness of English elements, because integration is not a dichotomous concept. It is a diachronic process with many in-between stages (cf. Kupper 2007, 23; Wetzler 2006, 25f.). From this it follows that without clear indicators of a word's level of integration and assimilation (or lack thereof), the distinction between what has become part of the German language and what has not is not possible. However, it has to be kept in mind that when studying the effects of English elements on German consumers what essentially matters is how a specific element is perceived by the individual viewer. In the following, the key problems that occur when trying to reliably identify integration/assimilation or foreignness on the bases of phonology, morphology and orthography are briefly discussed.

Zenner et al., following Onysko (2007, 10), take a restrictive approach to Anglicisms including only English elements that are "structurally recognizable as English to a native speaker of Dutch" because they have at large retained their grapheme-phoneme correspondence (Zenner et al. 2013a, 261). In a different paper, they operationalise Anglicisms as follows:

> The following algorithm is used: young loanwords (e.g., *software*) are by default considered to be English, and older loanwords (borrowed before 1945) are only considered to be loanwords if the pronunciation of the word is not what naive speakers of Dutch would anticipate based on the spelling of the word.

(Zenner et al. 2013b, 1031)

While this approach might be well-suited to classify individual English elements, phonology and individual articulation are weak criteria for integration in general, because some Anglicisms are more easily assimilated than others (cf. Elsen 2008). Moreover, the pronunciation of English elements not only varies between speakers due to different English skills and regional dialects, but one speaker may use different pronunciations depending on situational factors. For example, depending on a speaker's interlocutors, the

name *amazon* may at one time be pronounced according to a German standard, and at another time it may be pronounced according to a British English or American English standard [37] . Apart from recognising the importance of phonology for visual word recognition (cf. Brysbaert 2003), it is not an applicable criterion for predicting how individual words of English origin are perceived until reliable research results are available.

An important argument made by Elsen (2008, 88f.) is that inflectional elements are also inappropriate indicators for the first steps towards integration (except for plural forms of nouns not ending in *-er*, when *-en* or *-e* is used instead of *-s*). She points out that even neologisms have to follow German inflectional rules in a sentence context, e.g. *crunchiger Geschmack* (i.e. 'crunchy taste') (2008, 89). Hence, morphological assimilation cannot be taken as a defining criterion for classification of contact phenomena, as it depends on the syntactic function of an English element. Since inflection occurs whenever required, only derivation can serve as an indicator of integration (Onysko 2007, 40 and 62).

Except for the capitalisation of nouns, recent loans tend to keep their original orthography (Bohmann 1996, 23; Kupper 2007, 52; Onysko 2007, 40; Yang 1990, 162f.). This marks them visually as foreign, even if they are so well-known and widely used (among some groups) that they have become "icons of the current zeitgeist in the German language" (Onysko 2007, 69). It follows that orthography cannot serve as an indicator of integration (Onysko 2007, 66). However, the salience of phenotypical foreignness wears off with time [38] so that many English elements can no longer be categorised as 'foreign', even if they are still structurally conspicuous and therefore easily recognisable as 'different' (Bratschi 2005, 52). Words that have at large retained their English phoneme-grapheme correspondences despite being conceptually integrated are for example *Baby, Computer*, *Manager* and *Team* [39] (Bratschi 2005, 53, her

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[37] Such behaviour can for example be explained with the Speech Accommodation Theory (SAT) which was first presented in the 1970s and has since been further developed by its founder Howard Giles and others (e.g. Giles 1973).

[38] "Auge und Ohr gewöhnen sich an die strukturell abweichenden Formen und empfinden sie schließlich als normal" (Bratschi 2005, 53).

[39] Bratschi remarks that these words were already listed in the *Duden* (*DUW*) of 1989, and since they are very common and widely used they are unlikely to be perceived as foreign. Nevertheless, some of these words contain graphemic cues which readily mark them as foreign.

examples). Bratschi concludes that otherness is a necessary but insufficient requirement for perceiving an element as foreign (2005, 53). Moreover, some borrowings are not graphemically marked in the first place (e.g. *Test, Film, Killer*) because of the generic proximity of English in German (Onysko 2007, 75, his examples). This similarity in word form is a result of the etymological closeness of English and German, i.e. many grapheme (and also phoneme) combinations are similar enough in the two languages to not be perceived as foreign. Additionally, not only foreign lexemes can evoke an alien appeal, this can also be achieved by, for example, a deviation of the German orthographic or syntactic norm, grapho-stylistic markers, dialects, or through using foreign scripts, e.g. *Komputer* and *heppi* (Kupper 2007, 260-264 and 285; examples in Elsen 2008, 89). It has already been pointed out that pseudo-anglicisms are marked as English signs in German by their word form irrespective of being German innovations. "As encyclopaedic knowledge is not part of initial language recognition, etymology is of secondary relevance for the identification of borrowings" (Onysko 2007, 75). Therefore, word form is the appropriate criterion to turn to first when identifying an English element, second is etymology (Onysko 2007, 77).

One criterion often referred to is the frequency and persistence with which an English element occurs. Borrowings have to be used repeatedly over a certain period of time to qualify as such. To identify loan words researchers regularly resort to the lexicographical coverage of the *Duden* [40] (e.g. Kupper 2007, 305; Störiko 1995, 62). In order for a word to be included in the *Duden* [41], it first of all has to exhibit a certain frequency and distribution within texts of the *Duden* corpus. It is then judged by an editor to ensure that it is a lasting language contact phenomenon which is relevant for the general public. This leads to a considerable "reception lag" which makes the *Duden* an inappropriate source for current lexical innovations (Kupper 2007, 306). Depending on whether the need for explanation primarily concerns orthography or meaning, the word is then included in the next edition of the corresponding types of *Duden* dictionary. Gerritsen et al. (2007a, 301) also rely on the *Duden* to determine whether "a lexical item is still English or whether it has become

[40] Applying this definition in research simply involves looking up English elements in German dictionaries. Wetzler for example refers to general dictionaries ("Allgemein-Wörterbüchern") as well as special dictionaries ("Spezialwörterbüchern") for Anglicisms, trend words and technical terms of telecommunication in her analysis (Wetzler 2006, 63).

[41] This procedure is explained on the web page of the *Duden* under the heading "Wie kommt ein Wort in den Duden?" (Duden. Bibliographisches Institut GmbH. 2013.)

part of a local language" (i.e. German) and acknowledge that with this method the actual language use is not always reflected. Nevertheless, it has the advantage that decisions are easily replicable (cf. Elsen 2008, 89). These considerations give rise to the first research question:

▸ Is a *Duden* entry a good predictor of how English words are perceived?

However, a lexicographic approach does not suffice to distinguish borrowings from codeswitches, because even though an English element may be used repeatedly in the context of advertising so that it is no longer recognised as English, it does not need to become part of the general German language system (like some foreign words) but may at large remain confined to the language of advertising (cf. Onysko 2007, 37) (e.g. *FAMILY PACK)*. This general lack of reliable markers for integration is a major problem when attempting to sort specific occurrences of English elements into categories.

As typologies cannot predict with certainty how English elements are perceived by individual people, they are not useful when studying the symbolic effects of English elements in advertisements. The same effects can similarly be achieved by language mixing, internationalisms, loans that kept their foreign character, and by integrated loan words (cf. Kellerhals 2008). Therefore, the decision of what counts as English and what does not always has to depend on the subjective evaluation of how familiar a word is to the individual language user (cf. Janich 2013, 156). It follows that in the end the language users' awareness to foreignness has to be the decisive criterion (Bratschi 2005, 53). In addition to indicators of conceptual integration, such as the time of borrowing, frequency of use and distribution, this awareness also depends on personal factors, such as age, educational background, nationality and foreign language skills, special knowledge of the individual language users (Bratschi 2005, 53), frequency of contact with the English language, and attitudes towards the English language. In print advertisements additional factors such as the visual salience of the linguistic element which can, for example, be achieved through position, font size, type face, or colour also influence how a word is perceived. It is the aim of the first empirical study of this thesis to learn as much as possible about the variables that influence how individuals perceive English elements [42].

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[42] In the following, the term 'English element' is used to refer to any linguistic element in German print advertisements that results from language contact between German and English and is perceived as English by German consumers.

1.5. Perception-based approach: graphemic cues to Englishness

> Soll mit Lehnelementen eine xenistische Wirkung erzielt werden, kommen daher grundsätzlich solche fremden Wörter zum Einsatz, deren Bestandteile (Phoneme, Grapheme, Morpheme) für die zu evozierende Sprache besonders charakteristisch sind. [43]

> (Bratschi 2005, 86)

When analysing the effects of English elements in German print advertisements, it has to be assumed that only what is perceived as English can function as English (cf. Zenner et al. 2013a, 261). Therefore, a perception-based approach that emphasises visual word form, i.e. orthographic and graphemic cues, is essential. It has been argued that for the aims of this paper any purely theory-based approach is insufficient, because it cannot predict language users' perceptions of specific English elements. Therefore, an empirical take on Englishness in the German context is presented in the following to answer the key question: What is perceived as English by German consumers? Or, more precisely:

▸ Which variables are best suited for predicting the perception of words of English origin?

Salience is a central function of foreign elements in advertising. It can even be achieved with a very limited effort, for example, by using unfamiliar or foreign graphemes or grapheme sequences (Störiko 1995, 140). A word's form often contains objective evidence of borrowing, for example due to "[u]nusual graphemes in German such as *cc, ct, gh, oa, oo, ou, ow, oy, sh,* and *wl*" (Onysko 2007, 33). Also Busse and Görlach remark that "[t]he foreignness of English loanwords results, then, from unusual combinations of letters such as <sh, wh, oa>" (2002, 22). Since foreignness goes hand in hand with salience, integration is counteractive to the aims of advertisers, and it so happens that assimilation is undone by copy writers (Janich 2013, 158; Kupper 2007, 261). One example is the use of dated orthography as in *Attraction* for *Attraktion* (Janich 2013, 158) or *Citrone* instead of *Zitrone*. This appears to be a general tendency as Onysko notes "[i]n the last few decades the trend towards assimilation to German

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[43] My translation: 'When loans are employed to achieve a foreign effect, on principle only foreign words that consist of particularly characteristic elements (phomemes, graphemes, morphemes) of the language that is to be evoked are used.'

phonetic and graphemic form has vanished and even been reversed", as also the preference for *Club* over *Klub* shows (Onysko 2007, 62).

However, the use of foreign orthography is not a new phenomenon in advertising. In 1965 Carstensen mentioned this form of influence from the English language (cf. Störiko 1995, 22), and Wendelken (1967, 302) remarks that in Germany product names often *c* is used instead of *k* and *z* [44] (cf. Kupper 2007, 261). Leech (1966), too, notes copywriter's carte blanche to experiment with orthography (cf. Martin 1998, 160), and Fink (1976, 374) points out that *x* often replaces the German consonant cluster *chs* (cf. Kupper 2007, 261). Concerning the foreignness of English elements in the language of the German press, Pfitzner writes: "Ungewöhnlich für den deutschen Betrachter ist trotz der relativen Häufigkeit in Werbung und Reklame die Schreibweise 'c' (statt deutsch 'k' oder 'z'), 'sh' (deutsch 'sch') und 'y' (deutsch 'ie')" [45] (Pfitzner 1978, 122). Bratschi points out that using the rare letter *c* outside of the grapheme clusters *ch* and *sch* can be a symbol of foreignness in German, though often a weak one (Bratschi 2005, 67) [46].

Such indicating of foreignness through graphemic cues is similar to Spitzmüller's "graphic crossing" (cf. Ewald 2012, 10). The concept of "graphic crossing" is described by Spitzmüller (2007, 400; 2012, 261) as "the juxtaposition of different graphic means, at least one of which is perceived as being 'foreign'" (Spitzmüller 2012, 261). Apart from indicating foreignness, visual cues that are either exclusive or much more frequent in German, such as *ß, ä, ö, ü* (and in my opinion, to a lesser degree, *au, ei, sch* and non-final *ck*, too) can also serve as markers of Germanness and acquire social relevance (cf. Spitzmüller 2012, 261; Androutsopoulos 2000, 525ff.). Mark Sebba remarks that through 'iconisation' orthographic features can "become iconic of the groups of users themselves or of particular social characteristics which are

[44] This orthographic variation is not unique to German, as Sebba demonstrates in his discussion of the social relevance of using *c* or *k* in languages around the world (Sebba 2012a, 7ff.).

[45] My translation: 'Despite its frequency in promotion and advertising, the spelling with a 'c' (instead of 'k' or 'z'), 'sh' (German 'sch') and 'y' (German 'ie') is still unusual for the the German viewer.'

[46] In Bratschi's reasoning such deviations from the German orthographic norm do not necessarily imply foreignness and she gives the example of a trend to substitute *k* for *c* in German personal names. In my opinion such graphemic marking is in line with the (former) trend to give children French or English sounding first names and as such presents an internationalisation of names.

attributed to them" (Sebba 2012a, 4). Hence, English orthographic cues can become signs of Englishness and thus have the same effects as the English language in general. In advertising, foreign orthographic cues are not only used in contrast to the German orthographic norm because of their salience (Androutsopoulos 2000, 515), they are also supposed to ascribe a fashionable, cosmopolitan appeal and add special prestige and exclusivity to names (cf. Römer 2012, 40; Störiko 1995, 21f.). Moreover, grapheme substitutions as in *Jungz* for *Jungs* ('guys') can have an "indexical or symbolic value as cues of subcultural positioning. In other words, they act as an instruction to interpret the discourse as 'subculturally engaged' or 'hip'" (Androutsopoulos 2000, 527, his example). It can be concluded that graphemic markers can serve as cues to specific languages and therein influence how words are recognised. This potential of graphemic cues is empirically tested in a psycholinguistic study on visual word recognition in this thesis. The corresponding research question reads as follows:

▸ Do graphemic cues play a role in the perception of words?

Foreignness can not only be achieved by grapheme substitutions, but also through punctuation and hyphenation (cf. Harris et al. 1986, 12f.). Störiko (1995, 15) sees in this a minimalist form of foreign language use and explains that separating a genitive *-s* in names by an apostrophe can achieve a foreign visual impression without obstructing reading comprehension (Störiko 1995, 15). Also Margret Altleitner assumes that this follows the English pattern (2007, 21). That this foreign (i.e. English) impression is not necessarily intended is pointed out by Gallmann (1989, 105f.). In his view this apostrophe use is not an orthographic Anglicism but simply the result of creating schema consistence for the nominative singular case of proper names. Gallmann reasons that even though this use of apostrophes is not acceptable by German orthographic rule, it has a long tradition in the German language and is, at most, encouraged by English [47] (cf. Störiko 1995, 16). However, German orthography has changed since the time of these publications and the use of an apostrophe is now neither the norm nor completely ruled out by the *Duden*: "*Normalerweise* wird vor einem Genitiv-s kein Apostroph gesetzt. Das gilt auch

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[47] "Die häufig anzutreffende Behauptung, es handle sich um einen neueren ortho-graphischen Anglizismus, trifft jedenfalls in dieser Form nicht zu. Bestenfalls wird der deutsche Usus vom Englischen unterstützt" (Gallmann 1989, 106).

für Genitiv-s und Plural-s bei Initialwörtern und Abkürzungen" [48] (Duden. Bibliographisches Institut GmbH. 2013. "Apostroph", emphasis added). This is important, because one of the products, a soft drink, designed for the advertising effect study in this thesis is named *ZISCH'S* and features an apostrophe + *s* combination. However, it is left ambiguous whether this is a genitive *s* and the apostrophe is motivated by a clear separations of the proper name, or whether it is an elliptic form of *es* for *Zisch es* (i.e. coll. for 'drink it')*.* In both cases the name *ZISCH'S* contains graphemic markers of Germanness (initial *Z-* and the word final grapheme combination *-SCH*) and it should therefore not be treated as an English element.

Obviously, to recognise a word as English, graphemic cues are not necessary. When such markers are present however, they are hypothesised to influence word recognition and language decision. It is further assumed that they can increase the chances of a word being perceived as English. Therefore, this focus on visual word recognition and language processing is a necessary supplement to a more general theory of multilingual multimodal advertisements that emphasises visual salience and language-spatial relations as presented in Chapter 3.4.

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[48] My translation: '*Normally*, there is no apostrophe before a genitive-s. This also holds true for genitive-s and plural-s in acronyms and abbreviations.'

2. Visual word recognition in bilinguals [49]

Bilingualism has been defined as "[...] the regular use of two (or more) languages, and bilinguals are those people who need and use two (or more) languages in their everyday lives" (Grosjean 1982, 51). The definition of bilingualism operates on the individual level and draws attention away from the comparatively few balanced bilinguals, who are similarly proficient in both languages. It rather includes a much larger percentage of the world's population, whose mastering of more than one language extends across a wide range of proficiency levels in a second (or third) language (L2) (cf. Brysbaert 2003, 325) and who can be referred to as 'unbalanced' or 'dominant' bilinguals (De Groot 2011, 4). While favourably widening the scope for research on (individual) bilingualism, this definition is very broad, because it "does not take into account the wide range of differences between individuals who fit that definition" (De Groot 2011, 4).

In order to allow for a psycholinguistic analysis of bilingual language processing, such a definition has to be supplemented with a classification that accounts for the different types of bilingualism (cf. De Groot 2011, 4). In such an approach, bilinguals can be categorised on the basis of "relative competence", proficiency [50] in general, or receptive and productive language skills (De Groot 2011, 4). Moreover, the age of acquisition (AoA), which divides bilinguals into 'early' bilinguals who acquired their languages in childhood and 'late' bilinguals who acquired the other language later in life, is a decisive criterion. Next to AoA, further circumstances of acquisition, such as context or setting, simultaneity and domains of use are important factors that can influence the mental organisation of languages.

Over the past 30 years research in bilingualism has led to some fundamental changes in the conceptualisation of bilinguals and bilinguals' language processing (Brysbaert 2003, 323). The first insight is that a bilingual is not two monolinguals in the same body: The idea that bilinguals have two

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[49] The introduction to this chapter is based on Marc Brysbaert's book section "Bilingual visual word recognition: Evidence from masked phonological priming" published in S. Kinoshita and S.J. Lupker. 2003. *Masked priming. State-of-the-art.* Hove. UK: Psychology Press. Unless specified otherwise, all information is cited from this work.

[50] The terms competence and proficiency are used interchangeably with the term English skills throughout this paper.

separate and independent lexicons which can actively be switched on and off to enable language selective access prevailed until the late 1980s. Experiments using the masked prime paradigm then demonstrated that bilinguals cannot switch-off the non-target language completely (Brysbaert 2003, 323f.). Moreover, experiments using interlingual homographs [51] where participants performed a task in only one of their languages and proficiency in another language was irrelevant to the task at hand (e.g. Dijkstra et al. 2000) indicated that lexical access is not language-selective. It was found that L2 processing is influenced by L1 even when participants do not use their L1 during the experiment [52] (cf. Brysbaert 2003, 324). While it is fairly easy to accept that L2 processing is influenced by the dominant L1, the finding that L1 processing can also be affected by L2 challenged long-established assumptions [53] . However, also experiments in which L1 was found to be immune to L2 influence have been reported [54].

As bilinguals are able to use one language at a time successfully, there has to be a mechanism that inhibits the non-required language in order to prevent constant interference. Research results gradually led to the assumption that such a device comes later in word processing than had generally been believed (Brysbaert 2003, 325). "Unless there are clear orthographic cues as to which language a word belongs (e.g., the first letters *wh*), language selection seems to be achieved in the process of lexical activation itself, probably as a result of the competition between overlapping word candidates in the different

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[51] De Groot defines interlingual homographs as follows: "A word that has an orthographic form identical to that of a word in another language while not sharing meaning with it" (2011, 452).

[52] Dijkstra et al. (2000) conducted an experiment in which Dutch-English bilinguals were instructed to press a button whenever an English word appeared. The researchers were interested in interlingual homographs, because they reasoned that if participants activated only their English lexicon, the existence of a word with a different meaning but the same orthography in Dutch should not have any effect on performance. However, a reliable homograph effect was obtained, because participants needed more time to decide if a homograph was an English word than if a non-homograph was an English word (cf. Brysbaert 2003, 324).

[53] Another experiment conducted by Dijkstra et al. (2000, experiment 3) used the same design as the previously reported experiment, but addressed word recognition in L1, i.e. participants were instructed to press a button whenever a Dutch word appeared. Again, a reliable homograph effect was obtained. Homographs that were more frequent in English than in Dutch led to the strongest effect. This study is only one link in the chain of evidence that proves that bilinguals' L1 is affected by their L2 (cf. Brysbaert 2003, 324f. for further evidence).

[54] There is evidence that under some conditions language processing can be language selective. Especially, when the non-target language is the weaker language and is not activated or was not activated recently (cf. De Groot 2011, 169 for a summary of experiments reporting L1-immunity to L2).

languages" (Brysbaert 2003, 325f.). Before focussing on mechanisms that enable language control in bilinguals, the process of visual word recognition needs to be explored.

2.1. Bilingual Interactive Activation Model (BIA) & BIA+

The BIA model (Dijkstra and Van Heuven, 1998; Van Heuven et al. 1998) is a connectionist computation model that has proved capable of capturing bilingual word recognition quite successfully. It was developed as an extension of McClelland and Rumelhart's (1981) Interactive Activation (IA) model for monolingual visual word recognition. Like the IA model, it consist of several layers of nodes. The feature level and letter level correspond to the IA model, but the word level (representing orthographic word forms) and the language node level differ from it. While the feature and letter level are shared by both languages of a bilingual, the word nodes form language specific subsets.

The BIA model describes word identification as follows: "Visual input in the model is coded as the absence or presence of letter features" (Thomas and Van Heuven 2005, 206). When a letter at a certain position is consistent with a visual feature, the letter node is excited, if it differs, the letter node is inhibited. As a result, all the words which contain that letter in that position are activated, and all the words which do not are inhibited by the letter. This process, called "lateral inhibition", is also possible between words of different languages as they are connected on the word level (Thomas and Van Heuven 2005, 206). Then activation flows from the word nodes to the corresponding language nodes, which collect the activation until one of them becomes activated and then inhibits the word nodes of the non-target language. This process continues for a number of cycles, and each time the new level of activation is calculated and collected in the language node, until the word node that best matches the visual input reaches the recognition threshold. Not all word nodes reach the recognition threshold with equal ease and speed. Important aspects are the number of co-activated word nodes, recency of use, subjective frequency, and L2 proficiency (De Groot 2011, 179; Dijkstra and Van Heuven 2002, 182). In the nodes of frequent words the resting level of activation is believed to be higher than in word nodes corresponding to infrequent words (De Groot 2011, 179). This implies that less activation through input is needed to reach the

recognition threshold of frequent words, and therefore, they are recognised earlier than infrequent ones.

Word identification in this model involves a competition between orthographically similar words. "Letters and words are [...] not processed in isolation, but in the context of the words that contain these letters and of the languages of which words are members" (Thomas and Van Heuven 2005, 280). The model assumes a non-selective access and allows for top-down processes in which activation flows back from word units to the letters of which they are composed and reinforces them, while at the same time, words of the other language are inhibited by the language nodes (Thomas and Van Heuven 2005, 206 & 208).
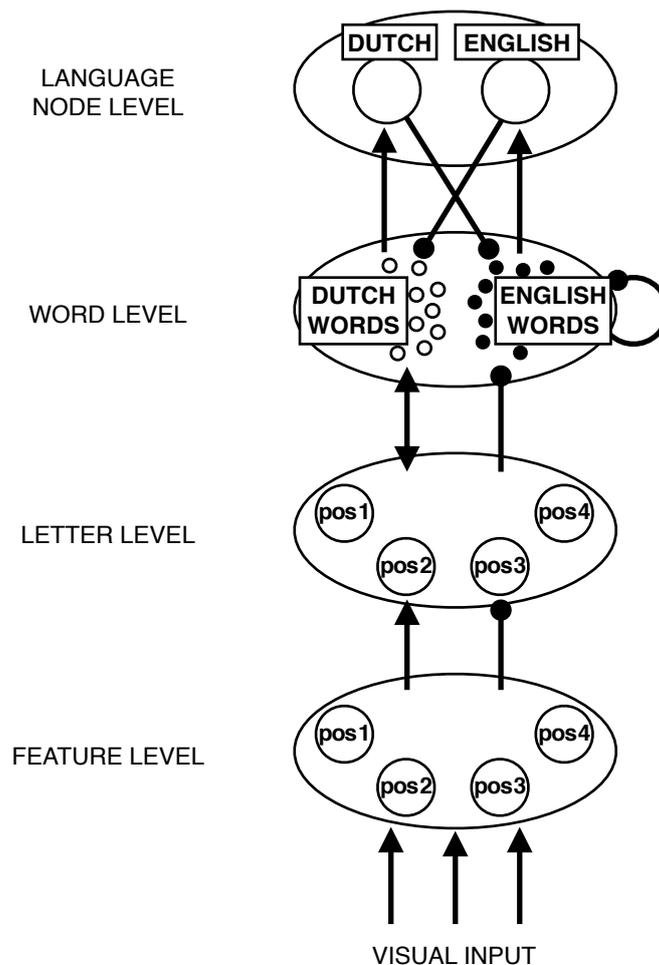
Figure 1. BIA model as in Thomas & Van Heuven 2005, 207.

Dijkstra and an Heuven (2002) developed a successor model, BIA+, to represent new research findings on interlingual homograph recognition and cognates (Dijkstra and Van Heuven 2002, 181). In addition, the role of context effects and task demands for word identification was adapted (Dijkstra and Van Heuven 2002, 181) to account for the view that what appear to be language switching costs in experiments seem to originate from task switching which is governed by a more general cognitive module (De Groot 2011, 304 & 308). Compared to its predecessor, the BIA+ model (Figure 2) additionally includes phonological [55] and semantic representations, but no longer allows for top-down connections, so that language nodes cannot suppress the activation of word nodes of a non-required language (De Groot 2011, 304; Desmet and Duyck 2007, 174). The BIA+ consists of two interactive subsystems: an identification system and a task system. The route of activation is essentially equal to the BIA model; what is new is that information from the language nodes and from the semantic representations is used in the task schema to solve the required task, be it translation, language switching or another task (Desmet and Duyck 2007, 174; Van Heuven 2005, 274ff.). While the activation of nodes in the identification system can only be affected by the linguistic context (e.g. sentence context), the task schema is sensitive to the non-linguistic context (e.g. participants' expectations resulting from the task) (Van Heuven 2005, 277). De Groot (2011, 304) remarks that the inclusion of the task system has made the model very similar to Green's inhibitory control model (1998) [56].

The BIA models have been criticised for relying on slot-based letter coding. The assumption that absolute letter positions are essential has been challenged by the finding of equal facilitation effects produced by transportation primes and identity primes (Rastle 2007, 72). Solutions have, for example, been proposed by Grainger and Van Heuven (2003) who use a relative coding scheme, such as the open bigram coding scheme (Rastle 2007, 72). While this scheme is still slot-based, it codes the relative position of a letter compared to

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[55] The influence of phonological form is not taken into account in the following study, which aims at finding defining characteristics of elements perceived as English. One reason is that dialectal as well as ideolectal variation make it impossible to predict the phonological neighbours of a lexical item. Secondly, as mentioned by Onysko, there is a "natural tendency of substitution when uncommon phonological sequences enter the RL" (2007, 39) which does not need to reflect the degree of integration into the lexicon.

[56] Green's model differs from other models, because it includes a general control mechanism for language behaviour (SAS, supervisory attentional system) that is in charge of retrieving, activating or creating language task schema. Essentially, these schema are learned ways of how to best accomplish a task, such as reading or translating from L1 to L2, which can be recalled from memory to successfully perform the task at hand (De Groot 2011, 307f.).

the other letters in a word [57] . Like any model, the BIA+ model has its limitations, however, it provides the most widely acknowledged framework for bilingual word recognition today.
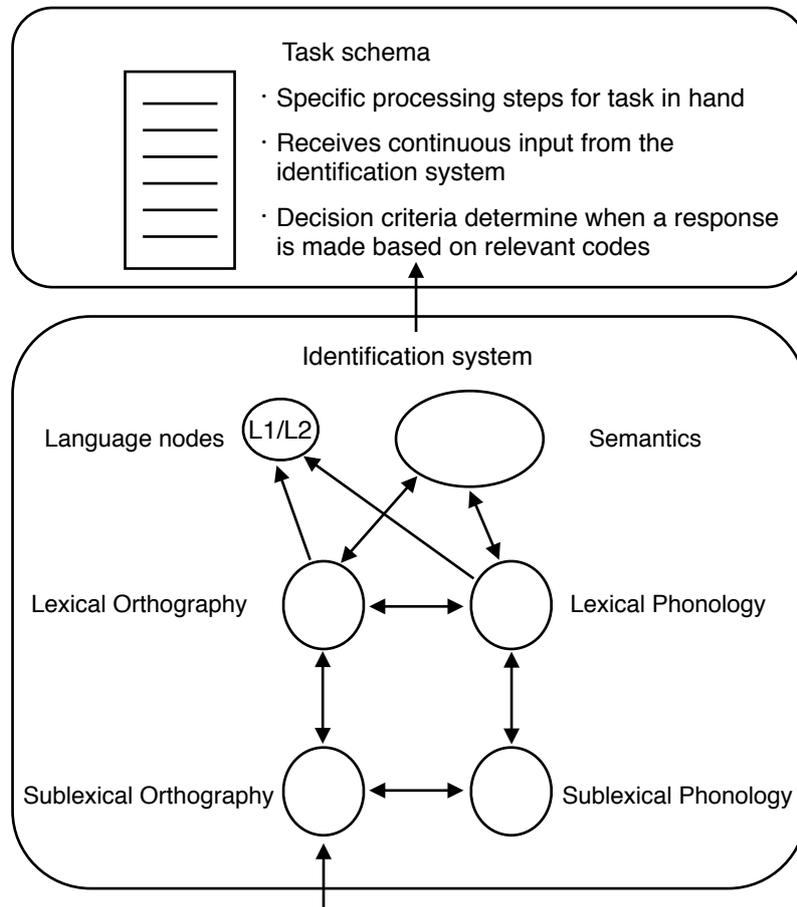
Figure 2. BIA+ model as in Dijkstra & Van Heuven (2002, 182).

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[57] *The fcat taht we can fialry ealisy raed texts lkie tehse*, demonstrates that the order of inner letters might not be as important as assumed by the BIA models (cf. Rastle 2007, 72). "Converging experimental evidence supports the view that the orthographic representations of words are multidimensional structures in which different types of information are independently specified, and not simple linear sequences of letter tokens" (Peressotti et al. 2003, 108).

2.2. Predictors of visual word recognition

2.2.1. Features of the word

In the first part of this chapter word-internal features that influence visual word recognition and predict language selection, i.e. orthographic similarity and frequency, are presented. In the field of word recognition a large amount of research was conducted on cognates, and thus cognates are explained and discussed first.

Cognate status

Cognates represent a special category of translation pairs in experiments on bilingual word recognition (De Groot 2011, 121). Carroll (1992, 95f.) defines them as "lexical items from different languages which are identified by bilinguals as somehow being 'the same thing'" (Carroll 1992, 94). In the search for the cognitive base of this phenomenon, linguists have ascribed different degrees of importance to a set of relevant factors: common etymological origin, same or similar orthography and phonology, and similar or related meaning. Carroll takes a perception-based approach to cognates when she asserts that "the psycholinguist must view cognate-pairing as the result of a connection made by a given individual on a given occasion between a particular kind of stimulus and a particular kind of stored mental representation" (Carroll 1992, 96). This implies that word pairs are best defined as cognates solely on the basis of how they are processed (Carroll 1992, 96). Common etymological origin, or in fact any meta-linguistic knowledge, cannot be a defining criterion for cognates when language processing is analysed, because, as Carroll puts it, "[w]ords do not wear their historical origins on their sleeves" (1992, 102). Even if such non-linguistic broader knowledge structures are available to a learner, they are unlikely to be encoded in the lexical store and can therefore not influence the mapping of similar word forms onto one another as happens in the process of cognate-pairing (Carroll 1992, 102). This view is generally accepted in psycholinguistics, and so De Groot notes that "[i]n this line of research, L1-L2 translation pairs that share both form and meaning are called 'cognates'" (De Groot 2011, 121).

However, semantic similarity is also rejected as a defining feature by Carroll (1992, 106). If cognate-pairing primarily relied on the identity of referents, words with identical conceptual representations in two languages should automatically activate each other and cause interference (e.g. *go in* and *entrer,* French for 'go in') (Carroll 1992, 106, her examples). However, this does not seem to happen. Instead, words with a similar form and totally different meanings were found to activate one another (Carroll 1992, 107). De Groot remarks that while it is widely acknowledged that complete translation equivalence is very unlikely to occur for translation pairs, "[t]he fact that degree of meaning overlap varies between cognate translation pairs is often ignored" (2011, 121). Similar findings for interlingual homographs and cognates suggest that semantic properties are secondary to word processing [58] (Carroll 1992, 108). Instead, similarity in word form is the crucial factor in bilinguals' visual word recognition (Carroll 1992, 108). This view is also expressed in De Groot's definition of cognates as "[w]ords that share all or a large part of their phonological and/or orthographic form with their translation in another language" (2011, 449 (Glossary)). Nevertheless, studies on cognates (in addition to interlexical homographs and cross-language neighbours) have inspired the assumption "that *representational* differences between cognates and non-cognates may underlie the apparent manifestations of language-nonselective processing" (De Groot 2011, 205, emphasis in original). De Groot points out that the most important difference between cognates and non-cognates is that cognate pairs do not have two separate, language specification representations, but share one conceptual representation (De Groot 2011, 203).

Orthographic similarity

Interlingual homographs and cognates are used to study how words with similar orthography which belong to different languages interfere (cf. Chapter 4 in De Groot 2011, 155-219). Interesting findings for the aim of this paper come from research that operationalises the visual similarity of words through their orthographic neighbourhood [59]. Van Heuven et al. (1998) study the influence of

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[58] Grainger and Jacobs (1996) note that evidence from all research paradigms suggests that while orthographic (and phonological) information are used "in the very earliest stages of processing printed strings of letters", semantic information is not necessarily relied on in visual lexical decisions (Grainger and Jacobs 1996, 520).

[59] For an overview of research results on neighbourhood effects in visual word recognition confer De Groot (2011, 181ff.).

neighbourhood size (N) on target word recognition in the framework of the BIA model, which posits that "the relative number of orthographic neighbors in the target and non-target language determines the speed with which activation in the target language node will dominate non-target language node activation" (Van Heuven et al. 1998, 478). Following Coltheart and colleagues (1977), they define an orthographic neighbour as "any word differing by a single letter from the target word, respecting length and letter position" (Van Heuven et al. 1998, 460). According to this definition neighbourhood size equals two for the word *chair,* because it has two orthographic neighbours, *chain* and *choir* (examples in Desmet and Duyck 2007, 170).

The speed with which bilinguals recognise a word depends on the number of the word's neighbours in both their languages and the lexical frequency of these neighbours (Van Heuven et al. 1998, 458). This suggests that during word recognition representations of orthographically similar words in the non-target language are activated and affect processing speed. However, the direction of neighbourhood effects is not uniform across different experimental designs, some being facilitatory, other inhibitory (Van Heuven et al. 1998, 461). In the attempt to account for these contradictory findings, Rastle (2007, 78) mentions that Grainger and Jacobs suggest a "fast guess" decision mechanism that relies on "the overall (global) activity in the orthographic lexicon" and facilitates a positive response in a speeded binary lexical decision task (Grainger and Jacobs 1996, 522). Note that the overall activity in a language node increases with the number of neighbours that stimuli words have in the respective language. However, when participants are not put under time pressure but instructed to solve the task accurately, a large neighbourhood of the stimulus slows their response as it activates competing, but irrelevant nodes, in addition to the specific lexical node which the participants have to access (Rastle 2007, 78). Another interesting explanation for contradictory neighbourhood size effects reported by Rastle targets the definition of neighbourhood used by Coltheart et al. (1977). It suggests that this metric is too restrictive, because it does not allow for neighbours reached by transposing or deleting letters of the target word (Rastle 2007, 71). As words created by such modifications are perceptually similar, too, they are likely to have the same effect. Such a definition of neighbourhood size could be a more accurate account for visual similarity (Rastle 2007, 78).

Measures of orthographic neighbourhood size can be computed using CLEARPOND (Cross-Linguistic Easy-Access Resource for Phonological and Orthographic Neighborhood Densities). CLEARPOND provides an interface to obtain neighbourhood sizes and frequency counts of words from, among other languages, English and German. By using an equally large subset of the SUBTLEX-US (Brysbaert and New 2009) for English and SUBTLEX-DE (Brysbaert, et al. 2011) for German, it accesses paired corpora which are well accepted in the field. These means of operationalisation enable answering the following research question:

▸ Does neighbourhood size have an effect on language decisions?

Frequency

Another predictor of time needed to recognise a presented word is its frequency in language use. "Words that occur more often in printed language are easier to recognise than less frequently occurring words. This effect, known as the word frequency effect, is one of the most frequently reported and robust effects in the literature on word recognition" (Grainger 1990, 228). This word-internal factor is particularly important in our case, because it can serve as an indicator for an English element's integration into the German language system. Frequency counts of a word of English origin in a German corpus (e.g. COSMAS II) help to distinguish between single occurrences (i.e. language mixing or interference) and regular uses where the English element has been taken up by many others and is (on its way to becoming) a part of the German linguistic repertoire. While the *Duden* indicates which words or expressions have been integrated into the German lexicon, English elements of short-lived trends are better observed in large corpora [60]. Frequency is an important criterion in this study, because frequent words are not only recognised faster, they are also more well known and less salient than new or rarely used words (Pfitzner 1978, 123). The following question arises:

▸ Can frequency of occurrence in a German corpus predict how English words are perceived?

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[60] The internet offers the largest corpus of written language which is claimed and used by linguists, too. One example is the *Neo Crawler* research project developed to study how Neologisms spread and become entrenched in the English language (Kerremans et al. 2012).

2.2.2. Characteristics of bilingual language users

Among German consumers there are very different levels of bilingualism or proficiency. However, some circumstances of English acquisition (e.g. age, sequentiality, instructional context) can be regarded as more common than others in the German context, because theses factors are important to the types of bilingualism that emerge, and the similarities that hold for most German consumers are therefore explored in the following.

Weinreich (1953) names three different types of bilingualism, which represent the structure of vocabulary in a bilingual's mind: compound, coordinate and subordinative bilingualism (cf. Altleitner 2007, 83; De Groot 2011, 129; Heredia and Brown 2006, 225ff.). In compound and subordinative bilinguals words of both languages are linked to the same concepts, but coordinate bilinguals are believed to have two separate conceptual representations for two words with similar meanings [61]. This idea formed the basis for the compound mediation model and the word association model which were then developed into the RHM (De Groot 2011, 129f.).

The role of proficiency: Revised Hierarchical Model (RHM)

As research findings suggested a development from an early stage at which learners rely on translation equivalents to a later stage when concepts are accessed directly, Kroll and Stewart (1994) proposed a model to account for this: the Revised Hierarchical Model (RHM).

The RHM assumes two types of word representations in the bilingual's mind: lexical representations where information about word forms is stored and where each language is stored separately, and the conceptual representations that stores the meanings of words and that is shared by both languages (Brysbaert and Duyck 2010, 359). The L2 lexicon is visualised a little smaller than the L1 lexicon, because "for most bilinguals, even those who are relatively fluent, more words are known in the native language than in the second

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[61] Weinreich later notes "[w]hether there really are two types of bilingualism (pure and mixed, coordinative and subordinative) is not yet clear. If type (A)[coordinative bilingualism] represents a higher degree of perfection of (B) [subordinative bilingualism], then how does the transition occur?" (Weinreich 2011, 40).

language" (Kroll and Stewart 1994, 158) [62]. Connections between L1 and L2 words at the lexical level are labelled 'word associations' or 'lexical links' and connections between lexical representations and their concepts are called 'conceptual links' (Kroll and Stewart 1994, 158).
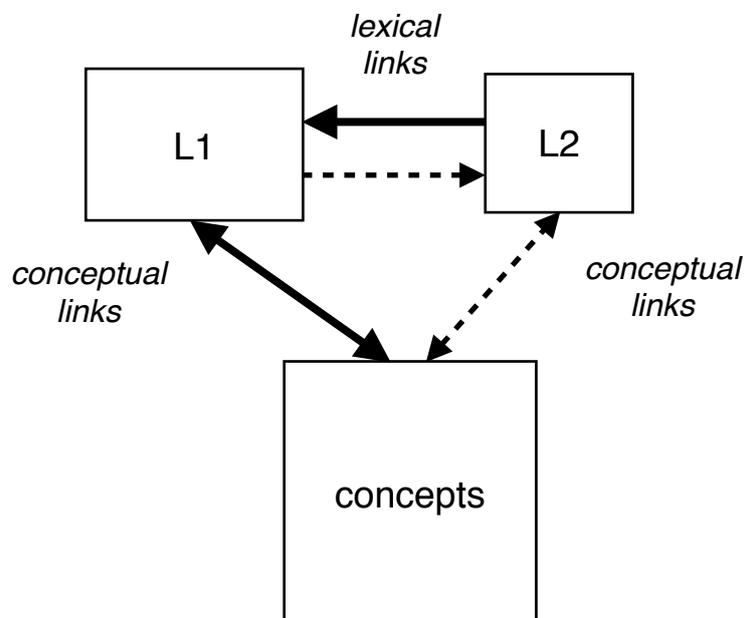
Figure 3. Revised Hierarchical Model as in Kroll & Stewart (1994, 158).

In contrast to its predecessors, the RHM depicts the strength of lexico-semantic connections as asymmetric (Desmet and Duyck 2007, 177). This is represented by dashed lines for weak connections and solid lines for strong connections (De Groot 2011, 135) in Figure 3. These asymmetries in connection strength reflect the assumption that bilinguals do not have an equal command over both languages and that L1 is generally the stronger language (De Groot 2011, 135). When L2 learners already have a fully developed lexicon for L1 words and their associated concepts, new L2 words (i.e. their lexical representations) will be attached to the lexical representations of L1 words so that the existing connections can be used to access the corresponding concept [63] (Kroll and Stewart 1994, 158; Kroll and Tokowicz 2005, 546). The

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[62] Note that Heredia (1997) proposed a 're-revised hierarchical model' (R2-HM) and replaced L1 by "most dominant language" and L2 by "least dominant language" to emphasise that an L1 does not have a special status (Heredia and Brown 2006, 238).

[63] This implies that translation does not need to be concept-mediated.

RHM further proposes that this asymmetry will become weaker with increasing proficiency in the L2 (Desmet and Duyck 2007, 178).

> To reach a high level of proficiency in an L2 the learner's L2 vocabulary must become independent of their L1 vocabulary: L2-specific meaning nuances must be learned, L1-specific nuances must be lost, and knowledge regarding each L2-word's relations with other words in the L2 lexicon must be established.
>
> (De Groot 2011, 153)

However, except for the "most balanced bilinguals" a residual asymmetry remains in lexical as well as conceptual links (Kroll and Tokowicz 2005, 548). Kroll and Tokowicz report numerous results of experimental studies that analysed the connections described by the RHM and conclude that "[t]hese findings highlight the developmental nature of becoming bilingual: Transitions from less to more proficient are not limited to the individual bilingual but are also relevant for individual words" (Kroll and Tokowicz 2005, 548). This already implies that during L2 learning the connections and connection strengths of individual words and word types gradually change and develop (De Groot 2011, 135f.; Kroll and Tokowicz 2005, 548).

Despite being a very influential model, the RHM is not compatible with the large amount of evidence against autonomous lexical stores (Desmet and Duyck 2007, 180; Brysbaert and Duyck 2010, 362ff.). Moreover, the RHM does not make assumptions about the organisation of concepts, i.e. how partly overlapping L1 and L2 semantic representations are envisioned (2007, 180) [64]. Nevertheless, "a number of the model's many assumptions go unchallenged" (De Groot 2011, 143). Regardless of the models for lexical storage, research indicates that along with proficiency, also age of acquisition, cross-lingual overlap of form, as well as meaning and word type, determine the interconnectedness of lexical and semantic representations in bilinguals (Desmet and Duyck 2007, 181). Luna and Peracchio (2001), who analysed the moderators of language effects in advertising to bilinguals from a psycholinguistic perspective, conclude that the RHM "suggests that processing an L2 message at the conceptual level is less likely than processing an L1

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[64] In 2010 Brysbaert and Duyck asked "Is it time to leave behind the Revised Hierarchical Model of bilingual language processing after fifteen years of service?" and they discussed incompatibility with numerous research findings in an article with the same title. Kroll et al. (2010, same issue) argue that "the way in which new lexical forms are mapped to meaning and the consequence of language learning history for lexical processing, cannot be accounted for solely within models of word recognition" (Kroll et al. 2010, 373).

message conceptually" (Luna and Peracchio 2001, 285). In this context the influence of proficiency on language decisions has to be examined:

▸ Does the level of English skills influence language decisions?

Altleitner summarises her perception of the language situation and English proficiency in Germany as follows:

> Die meisten deutschen Sprecher sind monolingual geprägt, sie haben die englische Sprache nicht in deren kulturellen Umfeld und im täglichen Gebrauch, sondern – wenn überhaupt – im Unterricht und häufig von nicht-muttersprachlichen Lehrern erlernt. Sie sind nicht zweisprachig im Sinne von Weinreich, dessen Definition den abwechselnden Gebrauch der beiden Sprachen fordert, sondern haben mehr oder weniger gute Fremdsprachenkenntnisse, sodass der Gebrauch des Englischen für sie, auch bei relativ guten Englischkenntnissen, etwas Besonderes und nicht Alltägliches bleibt.[65]

(Altleitner 2007, 109f.)

Age of acquisition

Most children in Germany grow up not speaking English as a first language, but English is a compulsory subject in German schools, "so that the younger German generations show features of a bilingual proficiency, with German as a mother tongue and English as the foreign language spoken with varying degrees of fluency" (Koll-Stobbe 1994, 206). For the majority of children today systematic English teaching begins in primary school [66]. However, it can be assume that most adult German consumers have not received L2 tuition before secondary school, i.e. around age 11, since the age-group level at which L2 (predominately English) is introduced has only been

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[65] My translation: 'Most German speakers are characterised by monolingualism; they have not acquired the English language in its cultural context and through daily usage, but - if at all - in English lessons usually not held by native speakers. They are not bilingual according to Weinreich's definition, which demands the alternating use of both languages, but rather, are to greater or lesser extent proficient in a foreign language, so that even with fairly good English skills, using English remains the exception and is not common in their everyday life.'

[66] Please note, that primary school consists of four years in most states, while Berlin and Brandenburg are exceptions with six years (cf. KMK "Fremdsprachen in der Grundschule – Sachstand und Konzeptionen 2013", 3). Some specific examples: In Bavaria, English has been taught in all primary schools since the school year 2004/2005 and is compulsory for year three or four (cf. KMK "Fremdsprachen in der Grundschule – Sachstand und Konzeptionen 2013", 18-64). With the beginning of the school year 2003/2004 English tuition was introduced to the third form of primary schools in NRW, since 1.2.2009 English has been taught from the beginning of the second term in the first year of school (cf. QUA-LIS NRW). In most states the first second language (usually English) is introduced in year three (cf. KMK "Fremdsprachen in der Grundschule – Sachstand und Konzeptionen 2013", 18-64)

lowered to primary school [67] in fairly recent years. Erling (2007, 115) points out that the university students in her survey show the typical German pattern of language learning with L2 in fifth grade and L3 in seventh grade, so that 99% had started English by the time they were around age 13. This is likely to hold for the majority of the participants in the surveys of this thesis, too. Can those who have reached a high level of proficiency be consider "early bilinguals", "who acquired both languages in childhood" (De Groot 2011, 5), then? While the foundations of the English language were laid during late childhood or adolescents, the amount of input remained limited to several hours of tuition per week. It is therefore assumed that the majority of adult German consumers (providing a certain proficiency with English) is best considered "sequential bilinguals" with English (De Groot 2011, 5). With this in mind, the following question arises:

▸ Does it matter for language decisions if German is not a mother tongue?

Individual contact with the English language

To reach a high level of L2-proficiency "the access and retrieval of L2 lexical representations must be automated. These goals can never be met by classroom instruction alone but require extensive subsequent reading and/or oral communication in naturalistic L2 environments" (De Groot 2011, 153). The number of hours of English tuition and the degree to which pupils are exposed to English input vary between school types, school branches and states (cf. „Fremdsprachen in der Grundschule – Sachstand und Konzeptionen 2013", 18-64). However, school does not remain the only source of input, and students today have extensive and varied contact with English in their free time (Grau 2009). While one can hardly live in Germany without regularly encountering single words, or phrases in English, everything that extends this amount of exposure is due to the individual circumstances of life. In addition to personal interests and hobbies, some professional domains and most subjects of higher education lead to frequent contact with the English language (cf. Erling 2007, 115f.). Erling finds that university students studying English have regular contact with English in university settings as well as in their private lives, with

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[67] This is a result of the report of the standing conference of the ministers of education and cultural affairs "Überlegungen zu einem Grundkonzept für den Fremdsprachen-unterricht" (resolution from 07.10.1994) and mainly began to be put into action since 2004/2005 (cf. KMK "Allgemeines zum fremdsprachlichen Unterricht"). It follows that those who were affected by the institutional lowering of the AoA are still too young to be considered in the studies of this thesis.

91% speaking English at university, 80% reading English reference books, 70% writing academically in English, 77% using the internet in English, 70% reading in English for pleasure and 45% watching English TV shows or films at least once a week (Erling 2007, 115f.).

For the aims of this thesis two aspects of individual contact with English are considered: visual contact that occurs through reading and writing, and auditive contact that occurs through watching videos or film, having conversations in English and travelling to English speaking countries. Especially frequent exposure to written English is assumed to increase the subjectively experienced frequency of English words. It is further hypothesised that English borrowings frequently encountered in an English context are less likely to be perceived as German. On the contrary, when an English element is usually encountered in a German context it is more likely to be perceived as German. The following research question is answered in the empirical part of this thesis:

▸ Does contact with the English language influence language decisions?

In the next chapter the focus is on how bilinguals' languages are successfully kept apart.

2.2.3. Mechanisms of language control [68]

> A prerequisite for language control is that language membership of individual lexical items [...] is built into the bilingual's language system. The system must somehow specify which ones of the stored units belong to the one linguistic subsystem and which ones belong to the other.

> (De Groot 2011, 279)

These linguistic subsystems are conceptualised very differently among researchers in the field. One view is presented by Green (1998) who assumes the existence of so-called 'language tags' that form part of a word's lemma and mark it as a member of a specific language. However, researchers like Hernandez et al. (2005) have shown that language subsets can be formed

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[68] When not stated otherwise, the following overview is based on De Groot's *Language and Cognition in Bilinguals and Multilinguals. An Introduction* (De Groot 2011).

through co-occurrence and co-activation of linguistic units and learning processes alone, and do not require words to be tagged for language membership [69] (cf. De Groot 2011, 296-302). It follows that the connections between linguistic units represent the frequency of co-occurrence. This supports views that reject the idea of language tags, such as Grosjean's language mode theory (De Groot 2011, 300) [70] which is briefly presented in the following.

Grosjean (2001) proposes in his theory of language modes that bilinguals' languages can be active to varying degrees at different points in time. This assumption is also called "relative language activation hypothesis" (Van Heuven et al. 1998, 466). In the following, this concept is outlined and is based on De Groot's explanations (2011, 288ff.). Grosjean assumes that bilinguals can take on different language modes, according to the mono- or bilingual context they are in and the likelihood of needing one or both of their languages. Depending on the communicative setting and the immediate circumstances they either take on a mono-lingual mode, in which only one of their languages is activated and the other suppressed, or they take on a bilingual mode in which both of their languages are activated. However, in a bilingual mode the level of activation will not be equal for both languages, because in any setting, one language will be the "matrix" or "host" language and the other will be used additionally as a "guest" language [71]. In a bilingual mode, language mixing is possible and even likely to occur. Language switches are not seen as deliberate choices, but as a characteristic of the bilingual mode that, most of the time, happen unintentionally to ensure maximum fluency of speech. Grosjean notes that even in a monolingual mode some level of residual activation remains in the suppressed language at any time, enabling interference in some rare instances. He envisions these two modes at the opposite extremes on a continuum and

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[69] "The underlying process that creates these bonds between memory nodes is their co-activation, a process that Hernandez, Li, and MacWhinney (2005) call *resonance*: According to a learning principle called *Hebbian learning*, co-activated memory nodes get linked up with one another (what "fires together, wires together"[...])], and the more often nodes fire together, the stronger the bond between them becomes" (De Groot 2011, 297, emphasis in original).

[70] Also, Paradis' activation threshold hypothesis (Paradis 2004, 28ff.) is supported by these results (cf. De Groot 2011, 294ff.). For a summary of Paradis' integrated neurofunctional model of bilingualism, the reader is referred to Chapter 7, "An integrated perspective on bilingualism" in Paradis (2004, 187- 226).

[71] Which language serves as a matrix and which as a host language is believed to be chosen by the participants before discourse, even if this is rarely perceived as a deliberate choice, since the circumstances will usually favour one language over the other and participants simply 'know' which one to use.

allows for many gradually more or less bi- or monolingual stages of activation in between.

One aspect of this theory has been severely challenged: it assumes the existence of two language subsets, which can in their entirely be activated or suppressed (De Groot 2011, 289ff.). There is no convincing neurolinguistic evidence that these language subsets correspond to specific brain regions, and recent research suggests that the lexical representations of bilinguals' languages are not stored separately (De Groot 2011, 293f.). Instead, findings indicate a separation of cognitive modules responsible for all lexical representations (of all languages) in one area, and modules responsible for "compensatory strategies" needed to make up for language deficits in another area (De Groot 2011, 294). Since activation threshold models, such as the BIA models, are compatible with a supervising mechanism that regulates levels of activation in the language subsets (De Groot 2011, 293 and 295), it is unclear whether bilinguals' ability to adapt their language use to a communicative situation is due to a difference of activation in their language subsets, or to a different focus of the supervising mechanism that controls output (De Groot 2011, 294) [72].

As has been pointed out repeatedly, the effects of English elements depend on them being recognised as English. Desmet and Duyck (2007, 188) argue that "[i]n recognition, a bilingual is confronted with input in a given language, and there is no compelling need for an early language selection mechanism". While this is true for monolingual reading material, it does not hold for multilingual advertising where language selection is a result of lexical activation, "[u]nless there are clear orthographic cues as to which language a word belongs (e.g., the first letters *wh*)" (Brysbaert 2003, 325f.). In the following, the predictors of visual word recognition and language selection in multilingual print advertisements are discussed.

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[72] However, Grosjean remarks that "[i]n the domain of perception, models that contain inter-language inhibition will have a problem accounting for the perception of code-switches and borrowings in the bilingual language mode", because the inhibition of one language during the process of word recognition is not well suited to dealing with the perception of mixed language. (Grosjean 2001, 22).

3. Defining features of print advertisements

In 1927 Harold D. Lasswell, a political theorist who studied the rhetoric of political propaganda, applied the physical stimulus-response model to communication research. The key question of Lasswell's well-known model is "who says what in which channel to whom with what effect?" (Lasswell 1948, 37). The model covers some important aspects of advertising communication by including the sender who communicates an advertising message using, in this case, a print advertisement to the addressee, who may be affected by it in a certain way (cf. Janich 2013, 41).

However, in assuming that a given stimulus always leads to the corresponding response when it reaches the targeted consumer, stimulus-response models have undeniable shortcomings (Wetzler 2006, 49f.). Lasswell's model also neglects some important aspects emphasised by another sender-receiver model proposed by Shannon and Weaver (1949, 5): the advertising message is encoded by the sender and has to be interpreted by the receiver. In this process confounding factors ("noise") can prevent the message from being communicated effectively. Prerequisites for successful advertising communication that concern the participants' cognition are discussed in Chapter 4., where the cognitive processing of advertisements is explained, and in Chapter 5., where comprehension and the creation of meaning are discussed. Nevertheless, not all the essential defining aspects of advertisements are covered, and McQuarrie and Phillips ask: "What defines a given communication attempt as an advertisement? Answer: the conjunction of (1) purpose, (2) form, and (3) reception environment constitute an advertisement" (McQuarrie and Phillips 2012, 227). In the following, the communicative situation including the participants, the purpose, and the form of the advertising message are outlined.

3.1. Communicative situation and participants

3.1.1. Mass media communication with the aim to persuade

One of the propositions postulated by McQuarrie and Phillips about print advertisements is that the "advertisement must exert its effect at a distance upon a mass" (McQuarrie and Phillips 2012, 236). Print advertising in magazines is a classical form of mass media advertising, just like radio, TV, cinema and billboard advertising [73]. In this it shares three important features of mass communication, it is indirect, one-directional and public (cf. Fairclough 2001, 168; Schiemichen 2005, 20; Bratschi 2005, 22f.). In contrast to face-to-face communication, interactants are at a spatio-temporal distance and communication takes place via a medium. This mediated, indirect communication is essentially asymmetric as the roles of speaker and hearer cannot change [74]. What distinguishes advertisements from other forms of mass communication is the underlying aim: to promote goods, services or ideas to potential consumers (cf. Harris et al. 1986, 8). Advertising is a type of communication which aims at creating certain effects in the recipients that lead them to purchase the promoted product. For a message to be considered a commercial advertisement, it has to support the ultimate sales goal either directly or indirectly (McQuarrie and Phillips 2012, 229). Therefore, the persuasive function is one of the defining criteria of advertising texts (cf. Bratschi 2005, 26ff.) [75]. In the need to appeal, advertisements are designed to correspond to a specific target group's ways of thinking and behaviour (Bratschi 2005, 31).

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[73] While advertising on the internet does reach the masses, too, it also offers possibilities for a more customised address. Next to this increasing personalisation, its interactive nature makes internet advertising essentially different from other forms of mass communication (for detailed information on the language of internet advertising in Germany see Runkehl 2011).

[74] In the context of print advertising the possibility for receivers to respond or give feedback is often neglected. However, most print advertisements provide contact options through phone numbers, emails and web addresses, QR-codes or coupons. In general advertisers make a considerable effort to involve consumers in some form of communicative interaction, as is demonstrated by the abundance of loyalty cards, newsletters or discount vouchers for future purchases, to name just a few. A marketing branch specifically dedicated to engage consumers in such interactions and to establish long-term relationships between consumers and brands is called dialogue marketing (for more information on dialogue marketing see for example Bidmon and Vögele 2006).

[75] Bratschi rejects the claim that the primary intent of advertising is to inform consumers, because the presented information is never impartial (Bratschi 2005, 27). Citing Rotzoll (1985, 99) she concludes that the classic distinction between informative and persuasive advertisements is "both simplistic and wrong".

3.1.2. Participants in advertising communication

In one respect communication of advertising is essentially a monolog as it does not provide exchangeable roles to participants, however, not all the people involved can be easily identified as senders or receivers of the advertising message. Numerous parties participate in the creation of an advertising message [76], and furthermore, receivers of the message do not need to belong to the target group and the implied reader is often not a realistic member of the target group. In another respect, advertising is more than a one-way-communication from advertisers to consumers with the aim of promoting certain goods; it is also discourse about society (Cook 2001, 17). In order for an advertisement to function, "multilayered, multi-dimensional relationships between individuals, companies, brands, products, services and texts" have to be assumed. "These relations are socially, economically, culturally, linguistically and politically constructed" (Kelly-Holmes 2005, 2f.). This implies that there needs to be a common cultural background and communicative context for advertisers and consumers and it follows that advertising says a lot about the society in which it occurs.

Complex senders

On the side of the sender, there is a company that has a product or service to advertise, and an advertising agency. The general idea behind the advertising message is formulated by the company and dictated to the advertising agency in a briefing; then, the advertising copy writer decides how to best formulate the message. The copy writer is thus the initiator of the concrete linguistic design of the advertising message (Kupper 2007, 227). In this, the advertising company (i.e. the copy writer) also decides if English elements should be used. The drafts are then proposed to the company, which is responsible for selecting the one that is finally printed [77]. An important point is made by Rodgers and Thorson who identify advertising messages as "*paid* communication from an *identified sponsor* using *mass media* to *persuade* an audience" (2012, 4,

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[76] Kupper is also aware of this problem and devotes a subchapter to the complex sender, the essence of which is briefly summarised here (Kupper 2007, 224ff.). She points out that the cooperation between the parties involved is often difficult and conflicting conceptions of potential target groups, the best channel to reach them and how to address them seem to be regular issues in the business. Copywriters' conflict between designing effective ads, pleasing the client and building up a reputation is also remarked by Stöckl (2011, 11).

[77] This emphasises that before an advertisement is eventually printed, it has to convince a number of decision makers who often do not belong to the final target group.

emphasis in original). In addition to emphasising that advertising is a business, this stresses that the means of identifying the sender (e.g. names of the company, brand or product, or logos) form an integral part of advertisements.

Receivers, target groups, implied readers

Since advertisements are commonly placed in several magazines with similar target groups which are issued by the same publishing house, a discrepancy between the intended target group and the readers of the magazines is likely. However, not every reader pays attention to the advertisements [78], and the actual receivers of an advertising message are not necessarily part of the target group. Along with such incidental confusion on the side of the receiver, advertisers deliberately construct ideal readers who differ from realistic members of target groups. This leads to the distinction between implied and actual readers or receivers which is common in research (cf. Kellerhals 2008, 31).

Advertising aims at constructing the ideal reader in such a way as to make the target group relate to the position of the ideal reader (Goddard 2002, 26; Hermerén 1999, 181). Therefore, a thorough analysis of the target group is a prerequisite for successful advertising (cf. Kupper 2007, 187f.). Market research gathers information on the defined target group and proposes theories on motives, wishes and attitudes of consumers (Bratschi 2005, 31). As assumptions made about a target group are usually well informed ones, advertising can be viewed as a mirror of society (cf. Bratschi 2005, 177). "Representations of society in advertising have their basis in the social order, but at the same time, the social order is constantly being re-created by reference to model discourses such as advertising" (Piller 2001, 156). The relationship between advertising and society can hence be described as a two-way street (Leiss et al. 1990; Fairclough 2001, 34; Kelly-Holmes 2005, 3). Leiss et al. emphasise that "the ways in which messages are presented in advertising reach deeply into our most serious concerns: interpersonal and family relations, the sense of happiness and contentment, gender roles and stereotyping, [...] and many others" (Leiss et al. 1990, 1). Critical voices argue that advertisements present a distorted picture of society because advertisers flatter target groups by addressing them as they wish to be rather than as they really

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[78] This is the topic of Chapter 4.1.

are. In the construction of implied readers stereotypes commonly associated with a target group are drawn on to ensure that the implied readers are recognised as belonging to prestigious social groups. In this way advertising proposes unrealistic role models, reinforces stereotypes and promotes consumption as a means of identification with the prestigious group. Thus, ideologies perceived to be communicated by an advertisement can be elicited by asking consumers about characteristics of the assumed target group [79].

Consumer groups can be distinguished according to sociodemographic (e.g. age, gender, income, education), psychological (e.g. feelings, prejudices, language competence) and sociological (e.g. group norms, reliance on opinion leaders, habits of media usage) characteristics, as well as typical consumption behaviours (Janich 2013, 27). A very influential approach for specifying target groups are the Sinus-Milieus® - "a model which groups people according to attitudes to life and ways of living" (Markt- und Sozialforschung GmbH 2014). Many companies rely on the detailed advice provided by the Sinus-Milieus® on how different social groups are best addressed. In this approach ten groups of like-minded consumers are positioned in a co-ordinate system in which the vertical axes indicates the social status from low to high, and the horizontal axis indicates fundamental values in life from tradition (left) to re-orientation (right) [80].

In their glossary Rodgers and Thorson (2012, 590) define values according to De Mooij (2010) as "[e]nduring beliefs that motivate people to prefer one set of outcomes over another". Since values express human needs and are subject to social discourse (cf. Kahle and Xie 2008, 577), they are central aspects of culture [81] and can be described as "the standards that drive people's beliefs, attitudes, and behavior" (Rodgers and Thorson 2012, 590). In the context of

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[79] It has to be kept in mind that critical or negative attitudes towards advertising in general (along with the use of English in German advertisements) may affect how the advertisements in this study are evaluated.

[80] These milieus are: the 'traditional', 'established conservative', 'precarious', 'new middle class', socio-ecological', 'liberal intellectual', 'escapist', 'adaptive', 'high achiever', and 'movers and shakers' (Markt- und Sozialforschung GmbH 2014). Even though these target groups are constantly adapted to accommodate the latest developments, groups are not as homogeneous as might appear, because consumer behaviour, especially of younger generations, has become increasingly unpredictable with the increasing diversification of life styles (cf. Janich 2013, 38).

[81] For a detailed description of the interactions between values and culture, the reader is referred to Chapter 3: "Values and Culture" (p. 53-80) in De Mooij's book *Global Marketing* and *Advertising* (2010).

consumer research value is defined as "an abstract type of social cognition that consumers use to store and guide general responses to classes of marketing stimuli" (Kahle 1996 in Kahle and Xie 2008, 577). Hornikx and O'Keefe (2009) conducted a meta-analysis of empirical studies which analysed the effects of culturally adapting ads on persuasiveness. They conclude that generally "ads with culturally adapted value appeals are more persuasive and better liked than ads with culturally unadapted value appeals" (Hornikx et al. 2010, 171f.). Advertisers have to sell more and more products that exceed our basic needs, therefore products are associated with a specific life style and desired social values (Kellerhals 2008, 21). As social values stand for the most important goals that people have in life, they influence people's consumption choices (cf. Kahle and Xie 2008, 575). Instead of advising consumers to buy a certain product, advertisers subtly suggests that buying the product is the key to the promoted life style (Kellerhals 2008, 21). In this way advertising achieves its aim of selling by performing ideological work and teaching social and personal values (cf. Piller 2001, 156; Leiss et al. 1990, 352). Advertising also plays a key role in promoting role models of language use with German-English bilingualism being the most prestigious linguistic capital (Piller 2001, 182).

The scope of effects available to the English language in German advertising is determined by extralinguistic factors such as consumers' needs, societal and personal values, and structural conditions of the media system. Schütte therefore argues that the pragmatic functions of linguistic signs have to be analysed in this context (Schütte 1996, 24) [82]. In the advertising effect study of this thesis the basic dimensions underlying the Sinus Milieus® (Markt- und Sozialforschung GmbH 2014) are used to assess the perceived target groups of advertisements. Even though this can only indicate some key characteristics of target groups, it suffices to test if the target groups of advertisements with English elements are perceived differently from the target groups of advertisements without English elements. Additionally, what is assessed is whether the implied target group is believed to be bilingual and whether it is attributed other prestigious traits such as, for example, being educated, successful, dynamic, sporty, sociable. The following research question summarises these aspects:

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[82] Original wording: "Die pragmatische Funktion sprachlicher Zeichen in der Anzeigen-werbung und ihre situationsspezifische Verwendung muß immer im Zusammenhang mit den außersprachlichen Faktoren (Bedürfnisse der Konsumenten, gesellschaftliche und individuelle Werte, strukturelle Bedingungen des Mediensystems) gesehen werden" (Schütte 1996, 24).

- Do participants' judgements of the advertisement's implied target group differ between the language versions of the same advertisement?

Moreover, advertisers are sensitive to their target group's use of English (cf. Bhatia and Ritchie 2008, 15) and the prestigious value of bilingualism with English [83]. The extensive use of English in certain types of advertisements makes it clear that some target groups are "constructed as bilingual in German and English" by advertisers (Piller 2001, 154). This is achieved through the complementary use of the languages involved, i.e. "two or more textual units with *different* content are juxtaposed within the framework of a textual composition" (Sebba 2012b, 15, emphasis in original), and it presents a common technique that can be witnessed in many countries of the world. Elizabeth Martin, for example, studies the use of English in French advertising (e.g. Martin 1998, 2002, 2007, 2008). In her latest study on language mixing she concludes that French consumers are addressed as global consumers, in standard English, and as local consumers in a "more 'Frenchified' version of English" (Martin 2008, 73). Bhatia and Ritchie refer to this use of English, which allows advertisers to overcome the paradox of globalisation and localisation, as "glocalization". Nativisation of English elements and mixing English with local languages enables the English language to perform global as well as local functions in advertising (Bhatia and Ritchie 2006, 514 and 543).

3.2. Structure of print advertisements

In addition too its persuasive function, the structure of advertising texts is also conditioned by extra-textual factors such as the medium of communication (i.e. print) and the general communicative situation [84] (cf. Bratschi 2005, 29). This chapter focusses on the form of print advertisements. McQuarrie and Phillips note that advertisements are short communications that are only encountered in passing, because they are never the primary goal of consumers (McQuarrie and Phillips 2012, 229). An advertisement thus has to fulfil two dual functions: First of all, it has to attract consumers' attention and at the same

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[83] Bhatia and Ritchie state that language mixing on the contrary is regarded as negative and 'bad language' almost all over the world (2008, 17).

[84] Since advertising is part of a company's communications policy, it also depends on marketing strategies, the budget and available instruments (cf. Janich 2013, 24).

time contribute to the finite goal of selling. Secondly, it needs to achieve these effects on people with a low degree of involvement (in passing), as well as on those few consumers who engage in the ad (McQuarrie and Phillips 2012, 235). This double duality imposes constraints on print advertisements and, therefore, in order to be successful, an ad has to make maximum use of all "available means of persuasion" (McQuarrie and Phillips 2012, 236). These possibilities are limited by the structure of print advertisements, which is the topic of the first part of this chapter. The second part demonstrates how language is typically used in advertising to achieve this goal.

3.2.1. Structural components of print ads

The structural components of print advertisements fulfil different functions [85]. Schütte (1996, 53) notes that the surface structure of print advertisements can oftentimes be divided into three functional textual elements that are typically separated visually: the header, body copy and slogan (cf. also Kellerhals 2008, 26) [86]. However, as stereotypical designs cannot satisfy advertising's need for creativity, the functions and semantic content of structural elements are unreliable criteria for their typology (Schütte 1996, 53). In the following only components relevant to the mock advertisements of this thesis' advertising effect study are discussed [87]. They include the headlines, names (of companies, brands and products), body copies, slogans and web addresses. After introducing the main characteristics of each component, the function and frequency of occurrence of the English elements are outlined, because understanding how language is used in each structural component is important for designing the mock advertisements.

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[85] Referring to Karl Bühler's Organon model (1934), Wetzler (2006, 61) and Kupper (2007, 247ff.) have tried to ascribe conative, referential and expressive functions to individual structural components. This is neither fruitful for the aims of this thesis nor does it seem to have a general validity.

[86] Janich (2013, 63ff.) additionally includes the product name in the list of most important structural components. This is in line with Rodgers and Thorson's argument mentioned earlier (2012, 4).

[87] Please note that the focus is on structural elements that usually contain linguistic material and pictures are not included here. An extensive list of structural components can be found in Schiemichen (2005) who analyses the occurrence of foreign languages in German print advertisements.

Headline

Headlines (or 'headers') are five times more likely to be read than the rest of the text. Therefore, they are the most important line of a print advertisement (Schierl 2001, 150). The generally acknowledged function of a headline is to attract the consumers' attention (Bhatia and Ritchie 2006; Janich 2013, 55; Kellerhals 2008, 26; Schiemichen 2005, 85). For this purpose the headline has to be the most salient textual feature (e.g. Janich 2013, 55). Salience is achieved by setting it apart from other textual elements, positioning it above the visuals, and through typographical design, by using a larger typeface and bolder letters than in other textual components (Schiemichen 2005, 65; Schierl 2001, 152; Störiko 1995, 143) [88]. While there does not seem to be an optimal length for headlines (cf. Schierl 2001, 152; Van Meurs and Aristoff 2009, 88), Schierl notes that the shorter a header, the quicker it can be grasped by a less interested recipient (Schierl 2001, 153). Moreover, in taking up the central message of the ad and forming a unit of meaning with other structural components, the headline leads recipients into the ad (Kellerhals 2008, 26; Schiemichen 2005, 65) and thus forms a communicative bridge to the body copy (Schierl 2001, 151). A subheadline [89] may be used to provide additional information and to link the headline to other structural parts (Schiemichen 2005, 64f.; Wetzler 2006, 59). When a subheadline is used in mixed advertisements, the combination of an English headline and a German subheadline or vice versa was found to be most common (Schiemichen 2005, 129).

In Schiemichen's corpus 90% of the advertisements that contain foreign items [90] also feature a headline. Headers are equally likely to be in German or a foreign language, while code-mixing occurs in only 7,5% of the headlines. In foreign language headlines, primarily easily comprehensible nouns are used that resemble their German translation equivalent in orthography (Schiemichen

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[88] Kupper reasons that salient components rely on their stylistic function to attract attention and therefore expects headlines to be more often motivated by stylistic reasons than are other components. However, her findings do not corroborate this hypothesis (Kupper 2007, 382).

[89] Janich remarks, that it is often not helpful to differentiate between headline, subheadline and topline, because the absolute position of these elements is not as important as how they work together, which usually makes them functionally inseparable (Janich 2013, 55).

[90] She uses the term "fremdsprachliche Elemente" and specifies: Everything that is not assimilated or already integrated into the German mother tongue on the level of phonology, orthography and/or inflection is called (linguistically) foreign (Schiemichen 2005, 27).

2005, 86ff.) [91] . Schütte believes that this is mostly due to the use of well integrated technical terms in headlines (Schütte 1996, 356).

Names (of products, brands and companies) [92]

"Brand names are virtual tattoos on products and services" (Bao et al. 2008, 154). An important feature of product names is that they are not restricted to a purely referential, indicative function like proper names. When brand names resemble actual lexemes (e.g. *Kleenex*, *TruValu*) they contain denotative and connotative meaning (Wyer 2002, 699, his examples) and can thus convey information about a product (Bao et al. 2008, 150; Janich 2013, 65). Especially names that are easy to pronounce, relevant to the product, and evoke positive connotations increase consumers' preferences for a brand (Bao et al. 2008, 157). Falkner (1999) points out that the meaning content of product names is not always understood by German consumers. However, "[o]nce everyone knows what a product name stands for, the name has already fulfilled its foremost function of being remembered, so it becomes more or less irrelevant if consumers know its primary meaning" (Falkner 1999, 328). Product names have a certain recognition value which aids consumers' orientation. Moreover, they guarantee quality and origin by linking products to brands with unique images (Bao et al. 2008, 149; Janich 2013, 65). Names can be accompanied by additions (adds) that indicate for example registered ® or unregistered trade marks ™ and contribute to the credibility of the advertising message (Kupper 2007, 200f.). Here, also labels, trademarks or brands are included in the general category of names when they contain linguistic material. In Janich's terms these would be word brands ("Wortmarken"), such as *Google*, grapheme brands ("Buchstabenmarken"), like *hp* and *VW*, and combined forms ("Kombinationsformen"), for example, the emblem of *BMW* (Janich 2013, 21, her examples). Furthermore, brand, product or company

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[91] Bhatia and Ritchie (2006) find a similar tendency in their analysis of advertisements all over the world and note: "If a header goes beyond the phrasal level (i.e. either a sentence or conjunction sentence), the use of English is discouraged." However, this structural element is said to be slowly surrendering to English, and with it, subheaders also display more mixing with English (Bhatia and Ritchie 2006, 528).

[92] For more information on naming in advertising the reader is referred to Janich (2013, 63-71).

names usually form part of the web address, which is typically typographically enhanced to stand out among the rest of the text [93].

Product and brand naming is mainly performed by nominal or one-word structures (cf. Bhatia and Ritchie 2006, 528) and generally occurs in three different forms (Platen 1997, 39-45): "Übernahmen" (i.e. borrowings such as *Pilgrim*), lexemes or proper names adopted without a change in form, form the first category. The second category are "Konzeptformen" (i.e. concept forms like *Best Secret*), names in which the form was altered during take-over. This change in form can be orthographical, morphological (through derivation), lexical (through compounding) or syntactical (as in phrase or sentence names). The third category is called "Kunstwörter" (i.e. artificial words such as *Adidas*). These are names without a clear reference to semantic concepts, which are either coined from scratch or which result from clipping or forming anagrams of other names (cf. Janich 2013, 67f). Brand names resort to English lexical elements in various ways, combining and modifying them at will (Bratschi 2005, 85). Elsen, too, points out that product, brand and company names follow their own rules of word formation and can reach very high degrees of complexity, even to the point of incomprehensibility (Elsen 2008, 90).

The product name is one of the most easily accessible structural domains for English elements (Bhatia and Ritchie 2006, 528). It is not surprising, that even products made in Germany and restricted to the German market are given English names to achieve international appeal despite their limited distribution. This also holds true for company names, which according to Bhatia and Ritchie (2006, 528) internationally feature the most English items, because companies opt for a name with a global sound. Schütte found that brand and company names often occur in headlines and body copies where they constitute the largest number of Anglicisms next to technical terms (Schütte 1996, 356).

Body copy

This is the largest text block in an advertisement. Here, for reasons of brevity also other textual elements (e.g. additions and inserts (cf. Schiemichen 2005, 64)) are subsumed when they occur in a central position of the

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[93] The web address may either form a separate structural component of the advertisement, or be included in another element (usually the body).

advertisement. The body elaborates on the topic of the headline, gives additional information [94] or relates to the pictures (cf. Janich 2013, 58). From an advertising psychological perspective one task of the body copy is to retain consumers' attention (Schierl 2001, 155). Even when it is not read, a body copy can suggest that there is important information about a product to be communicated by simply being present, and thus increase the advertisement's credibility (Janich 2013, 59) [95].

According to Schiemichen (2005, 142) 70% of German magazine advertisements contain a body copy, most of which are in German. Since the body is the major carrier of product information, it is not surprising that only 19% are language mixed and that English is most frequently the additional language. Bhatia and Ritchie (2006, 528) found that the body poses the most difficult barrier to English. Presumably, this is due to the fact that a sentence-like structure and the native language are best suited to ensure the understanding of important information. English therefore usually appears in the body, mainly in product names or technical terms needed for their unique denotations [96] (Schütte 1996, 356). The body often ends with a claim that summarises its key concepts.

Slogan and claim

The formally most characteristic feature of a claim or slogan [97] is its relative shortness (Janich 2013, 62), with an advised maximum length of five to

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[94] Information does not need to be factual, argumentative or appeal to reason. It can just as well describe the added emotional value of the product (Kellerhals 2008, 26; Janich 2013, 58).

[95] A further distinction is sometimes made between 'short copies' and 'long copies', as for example by Zielke (1991 73f.). These are said to generally differ in their functions, as copies not longer than five sentences serve to evoke credibility and copies longer than five sentences, which are usually visually structured with sublines and an introduction, typically contain factual product information (cf. Janich 2013, 59). Schierl notes that sublines can help to keep the readers' attention (2001, 156).

[96] Technical or pseudo-technical terms depend on the product domain and the ad's topic. Especially the domains of multimedia, fashion and internet related products or services prompt the use of English elements, just as the discussion of futuristic themes encourages English key words (Bhatia and Ritchie 2006, 528). English phrases are also used in the domains of music, sports and beauty products where no promotionally effective German equivalent exists (Schiemichen 2005, 189).

[97] Janich (2013, 60) differentiates between 'slogan' and 'claim', whereby a claim is used as a conclusion or bottom line of the body copy and is - in contrast to a slogan - not repeated in different ads and media (cf. also Wetzler 2006, 59). Kupper views a claim as the summary of a products key value and the slogan as more general (Kupper 2007, 200).

six words (Schierl 2001, 158). Claims and slogans are visually enhanced by graphical features (Wetzler 2006, 59). They are usually positioned in the lower half of an advertisement in proximity to product or company names and logos, because they are supposed to be remembered together (Baumgart 1992, 37; Janich 2013, 62; Störiko 1995, 144).

Compared to other textual components, slogans are fairly independent, which makes them popular objects of study (Baumgart 1992, 40). Even though their effectiveness was overestimated in the past (Schierl 2001, 157), slogans are still subject to special interest when the use of English is studied (see for example Kellerhals 2008). Unjustifiably so, as Schiemichen demonstrates: Less than 20% of the advertisements in her corpus contain a slogan. However, when a slogan is present it is most likely to be either completely in a foreign language or to contain predominantly English elements (Schiemichen 2005, 191f.). Schütte, too, found that Anglicisms in slogans are integrated very weakly into the German language system (1996, 355f.) and Bhatia and Ritchie conclude that English is mainly used in sentence-like structures (2006, 528), findings that are confirmed for Germany by Androutsopoulos et al. (2004, 23). This is partly due to the fact that slogans are only rarely translated into native languages (Bhatia and Ritchie 2006, 528).

A slogan contains the long-term philosophy of a company, brand or product and is thus responsible for brand recognition and image building (cf. Janich 2013, 59; Kellerhals 2008, 26f.; Bratschi 2005, 128; Baumgart 1992, 42). As the slogan expresses and forms an integral part of a brand's identity it remains constant for a certain time (Baumgart 1992, 36; Störiko 1995, 144) and is often legally protected like the brand name (cf. Piller 2001, 160). Identical slogans are used in different media (Janich 2013, 60), which implies that they do not match the content of every advertisement equally well (Kellerhals 2008, 27). As marketing has become increasingly global, the same slogan is sometimes used in different countries or even world wide to increase international standardisation and for economic reasons (cf. Kupper 2007, 383; Gerritsen et al. 2010, 351; Honikx et al. 2010, 170). English elements in slogans usually denote product characteristics or values that help to create an experience-oriented, cosmopolitan product image and position the brand as modern and international (Schütte 1996, 355f.). This holds true for English slogans of both international and German companies (Piller 2001, 161).

3.2.2. Structural domain dependency hierarchy of English elements

English elements are distributed in a hierarchical fashion throughout the structural components of advertisements. For this reason, Bhatia and Ritchie (2006, 529) postulate a structural domain dependency hierarchy that ranks the components (i.e. domains) according to the likeliness for English elements to appear in them. Product names are the most easily accessible for English, followed by company names, headers and subheaders, slogans and finally the body. According to the model, all structural components lower down in the hierarchy are accessible to English when it is used in the bodies of advertisements in a country. The reverse does not seem to occur. This hierarchy corresponds to the components' degree of salience, with names and headers as the most easily visible and slogans and body copies as the least salient parts of advertisements. However, Gerritsen et al. (2007a, 305) found that English elements occur least frequently in headers (38%) and slogans (46%) and most frequently in the standing information (74%), body (64%), picture (63%) and product name (61%). It has to be pointed out, though, that they analysed merely the quantitative occurrence of English elements, irrespective of their functions.

The categories mentioned are not mutually exclusive and not all the elements that appear in advertisements neatly fit into typologies of structural components. Even though the full complement of the elements referred to do not necessarily show up in a print advertisement, general similarities in the structure of print advertisements have been demonstrated. Schierl (2001, 13) points out that such structural regularities in the layout of advertisements do not however lead to a similarity of the message. Nevertheless, the language used in advertisements does feature some common characteristics which are explored in the following.

3.3. Language use in advertisements: Advertising language?

> Beträchtliche Schwierigkeiten für die Untersuchung zur Funktion der Anglizismen bereiteten eine große Zahl von in der Wissenschaft nicht eindeutig gefaßten und definierten Begriffen wie Umgangs-, Allgemein- und Alltagssprache, Jugend-, Erwachsenen-, Werbesprache, Funktion und Funktionszuordnung, Assoziation, Stilebene und Wortwertigkeit oder z.B. die Frage, inwieweit ein bestimmtes Wortgut einer technischen Fach- oder Sondersprache oder aber schon der Allgemeinsprache zuzuordnen ist. [98]

(Fink 1980, 189)

These problems outlined by Fink 35 years ago are still present today. Generally, it is agreed that the language of advertising does not form a variety of its own but is characterised by its heavy reliance on everyday language, youth language, technical language, and dialects (cf. Baumgart 1992, 34; Janich 2013, 45). In fact, the language of advertising works like a magnifying glass for language innovations, because it takes up trends of everyday language and uses them in a concentrated fashion and introduces them to the masses (Baumgart 1992, 328). Not only are current trends of everyday language employed in advertising, the creative use of language in this medium sometimes makes its way into colloquial usage (Janich 2013, 46). Despite being tightly intertwined with the language of everyday life, the language of advertising is special, because it is carefully designed to fulfil a specific function and thus constitutes an artificial use of language (cf. Baumgart 1992, 34; Janich 2013, 45).

Anglicisms are characteristic of both youth and advertising language (cf. Pfitzner 1972, 32f.; Buschmann 1994, 222ff.; Janich 2013, 224ff.;). However, the reasons for using English elements are different. While advertising language is always staged and functional, youth language aims at being original, exclusive and independent by being provocative and vulgar (Buschmann 1994, 226) [99]. However, the scope of youth language is highly limited and advertisers' attempts to imitate it are usually perceived as a smarmy approach by

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[98] My translation: 'Analyses of the functions of anglicisms face considerable difficulties because of numerous vaguely delimited and defined terms in the linguistic science, such as colloquial language, common language, every-day language, youth, adult and advertising language, function and allocation of function, connotation, stylistic level and affective word valence; or, for example, the question as to how far a specific word is related to a technical or special language, or should be considered common language.'

[99] These diverging intentions can partly explain why instances of youth language are very rare even in youth advertisements. In 1993 Buschmann analysed 250 youth advertisements and found that only 3,6% undeniably contained elements of youth language and another 4,6% included some hints of youth language (Buschmann 1994, 227 also cited in Janich 2013, 224).

adolescents (cf. Buschmann 1994, 228; Janich 2013, 224ff.). Martin observes what she calls "Youth Frenglish" in French advertisements for music and services like phone chat lines and ring tones, which reflect "youth slang heard in countries of the inner circle" (2007, 180). Sirpa Leppänen who analysed the functions of English in the Finish youth language in media contexts, referring to Penelope Eckert (1997), points out that youth is not a stable, self-explanatory trait:

> Youth is a flexible and contestable social category that can be variously reproduced in different social and cultural contexts. Contextual or social age is thus distinguishable from *chronological* age, or number of years since birth, *biological* age, or physical maturity, and *social* age, which is tied to life events such as family status (e.g. marriage, or birth of first child) or legal status (Eckert, 1997:156).

> (Leppänen 2007, 151, emphasis in original)

Technical terms (many of which are English elements) occur in advertisements for two reasons. On the one hand, some products simply require the use of technical terms with specific meanings to ensure precise and neutral communication (cf. Janich 2013, 216; Altleitner 2007, 113; Kupper 2007, 284; Pfitzner 1978, 30). On the other hand, (pseudo-) technical terms with vague meanings are used for their prestige function to achieve a scientific appeal (cf. Janich 2013, 217; Kupper 2007, 284; Wetzler 2006, 55; Schütte 1996, 359; Pfitzner 1978, 33). Kelly-Holmes calls this intentional use of English technical terms "technical display", which has led to the international technical fetish of the English language that English is better suited for advertising technology-related products than German (2005, 70).

The language of advertising does indeed feature a few unique linguistic forms. One example are medial capitals (i.e. CamelCase) which are used next to hyphens to facilitate the comprehension of English elements in compounds (Bohmann 1996, 60; Kupper 2007, 261). In Bohmann's corpus of advertising material most English elements are compounds that consist of two or more nouns and are adopted without change in orthography (Bohmann 1996, 54). Phrases and short sentences form the second largest category (Bohmann 1996, 60). Schütte (1996, 57) lists some frequent features of the language of advertising: they include syntactic structures, like ellipses and imperatives, in addition to lexical quirks, like neologisms and compounds, key words, and superlatives. A tendency towards simple sentences and elliptic structures when

foreign languages are used is also reported by Bratschi (2005, 101). However, it is almost impossible to pinpoint stylistic features that are entirely restricted to advertisements (cf. Janich 2013, 113).

As advertising seeks to influence consumers to the advantage of advertisers, many consumers meet advertising with scepticism and adapt to new advertising techniques with increasing resistance. This results in a constant need for innovation and change and thus, advertising continuously strives for linguistic originality (cf. Störiko 1995, 461; Cook 2001, 29; Goddard 2002, 8ff.). Additionally, it has to appeal to the reader and needs to use the easiest and most straightforward means of communication (cf. Kellerhals 2008, 22). In trying to combine these prerequisites for success, advertisers keep creating new and unexpected forms with the given textual and visual resources (Kellerhals 2008, 22) and so it follows: "The effectiveness of advertising forms is dynamic, and changes over time. This process can be understood to be similar to an arms race" (McQuarrie and Phillips 2012, 237). This striving for innovation has led to an increasing complexity of English elements used in German advertisements since the beginning of such contact phenomena in advertising. In 2001 Kupper noted that the use of single English words had remained constant, while more English expressions and multi-word elements had begun to emerge (Kupper 2007, 336). Janich concludes that English elements in German advertising increased predominantly in certain product groups (e.g. fashion, technical products, travel, cosmetics, alcoholic beverages, cigarettes) and in salient textual elements such as slogans and headers (Janich 2013, 161).

3.4. Multimodality of print advertisements

Advertising uses all the means available in a specific medium to achieve its aim. While these means are limited to the visual sense in print advertisements, they nevertheless include two types of semiotic systems to convey meaning: a linguistic (i.e. written language) and a non-linguistic system of signs (cf. Bratschi 2005, 33). "[A]dvertising itself is a mixed modality - a mixture of visual/ graphic and verbal mixing or juxtapositioning" (Bhatia and Ritchie 2008, 20; cf. also Sebba 2013, 106) which cannot be adequately analysed in a purely linguistic framework, because "much of its meaning derives from the visual

elements" (Sebba 2012b, 12). As linguistic factors are difficult to isolate in print advertisements (Harris et al. 1986, 4) a semiotic perspective is of great value, because it enables an integrative analysis of all sign occurrences in the discourse of advertising (Stöckl 2011, 9) [100] . Early semiotic analyses of the German advertising language were conducted by Roland Barthes (1964) "Rhetorik des Bildes" and Umberto Eco (1972) *Einführung in die Semiotik*, and followed by Wilfried Nöth (1975) *Semiotik: Eine Einführung mit Beispielen für Reklameanalysen.* Subsequent semiologic approaches which are usually based on works by De Saussure (1966) and Roland Barthes (1964; 1972) have been used to incorporate non-textual elements into the analysis of advertisements (e.g. Goffman (1979) on gender issues; Vasta (2005) studied SHELL advertisements; Leiss et al. (1990) used a combined semiological and content analytical approach). However, Cotter (2003, 412) points out, that researchers interested in media discourse tend to blend nonlinguistic, sociolinguistic and discourse analytic approaches.

Text vs discourse

Written language has traditionally been referred to as 'text', but this concept has undergone a considerable development. Garrett and Bell (1998, 2) point out that the traditional distinction between 'text' as written and 'discourse' as spoken language is not suitable for instances of communications in modern media language. Today, the term 'text' is also used to refer to "the outward manifestation of a communicative event" (Garrett and Bell 1998, 2f.), and in this sense print advertisements are multimodal 'texts' that rely on the verbal and visual modes to communicate meaning (cf. Vasta 2005, 431; Kress and Van Leeuwen 2006; Bhatia and Ritchie 2008, 20). "Since meanings are now seen to be more a product of negotiation between readers and texts, text takes on more of the interactive qualities of discourse" (Garrett and Bell 1998, 2). Guy Cook positions all visual aspects among context and states: "Discourse [...] is text and context together, interacting in a way which is perceived as meaningful and unified by the participants" (Cook 2001, 4).

Another important aspect of context is 'intertext'. Intertext can be defined as text which the participants perceive as belonging to an other discourse, but

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[100] Stöckl later remarks that the guiding maxim should be: "Nicht jedes Detail um den Preis einer konsequenten Analyse sondern nur saliente und relevante Aspekte in ihrem wechselseitigen Textzusammenhang" (Stöckl 2011, 20).

which they associate with the text under consideration. Fairclough claims "The concept of intertextual context requires us to view discourses and texts from a historical perspective" (Fairclough 2001, 129). Also Bakhtin's 'hetero-glossia' (1981) refers to the diachronic relations to (or borrowings from) other texts: "Everything means, is understood, as a part of a greater whole – there is a constant interaction between meanings, all of which have the potential of conditioning others" (Bhaktin 1981, 426). The literary concept of 'dialogism', is for example drawn on by Piller (2001), Kelly-Holmes (2005) and Fairclough (2001), who study the heteroglossic and intertextual nature of media texts. Janich (2013, 232, emphasis in original) writes: "Hört man heute den Fachausdruck *Intertextualität*, ist damit also in der Regel die Frage gemeint, wie ein Autor bzw. Text auf andere Autoren und Texte anspielt, sie zitiert, nachahmt (=plagiiert), parodiert oder karikiert"[101]. This is to remind us, that texts, like advertisements always have to be viewed in the light of their links to other texts/advertisements. Referring to other texts and discourses is also a strategy commonly used by advertisers[102].

Bratschi (2005, 34ff.) discusses the need for a new term to denote complex multimodal advertising texts[103] and, rejecting an extended concept of text, she refers to the verbal aspect of advertisements as "Text" and the overall multimodal structure as "Kommunikat" (Bratschi 2005, 34f., cf. also Stöckl 2011). According to the text definitions proposed by Brinker (2001, 17) and Linke, Nussbaumer and Portmann (2004, 275), an advertisement can thus be regarded as a structured, coherent and relatively autonomous unit that contains signs from one or more semiotic systems and that as a whole signals a noticeably communicative function (Bratschi 2005, 38). Following this conceptualisation, 'text' is here used in its narrow sense to refer to written language and whenever a communicative event of advertising is meant, the term 'discourse' (or simply 'advertisement') is used. All non-linguistic signs (e.g.

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[101] My translation: 'When we hear the technical term 'intertextuality' today, it usually refers to the question of how an author or text alludes to other authors and texts, and quotes, imitates (=plagiarises), parodies or caricatures them.'

[102] For example, a Sixt ad showing a large scale photo subtitled *Claus Weselsky, Gewerkschaftsführer*, and featuring the text *Unser Mitarbeiter des Monats. (Günstige Mietwagen an allen Bahnhöfen und unter sixt.de),* i.e. Claus Weselsky, trade union leader. Our employee of the month. (Cheap car rentals at all train stations and on sixt.de) with reference to the rail strike in November 2014.

[103] She uses the term "gemischtkodale Gebilde" which translates as 'code-mixed structures' and is avoided here, because the German and English language are referred to as codes here.

typographic aspects such as script and letter size (cf. Cook 2001, 64; Kelly-Holmes 2005, 9), pictures, logos, icons, layout aspects, and intertext) are perceived as part of the context in which an advertisement's text is positioned.

Focus on text

Mark Sebba remarks that the typical focus of the researchers is:

> [...] on written text *as* text - in other words, as strings of words on the page or screen - rather than seeing it in its *visual* context, as a reader sees it: as a text surrounded by other texts, potentially with different sizes, colours and styles all potentially providing context for interpreting the content of the text.
>
> (Sebba 2013, 102, emphasis in original)

Visual characteristics of texts have hardly ever been the centre of interest in the past, even if their importance for the meaning of advertising texts did not remain unnoticed. The advertising text in general is not only read but is also viewed as a formal structure. While the writing communicates content, the typeface conveys emotionally affective expressive qualities (Schierl 2001, 141). Eckkrammer, too, notes that only an integrative perspective on all semiotic signs that constitute a text can adequately deal with modern forms of textuality (2002, 45) [104]. Few publications in the field of social semiotics [105] have focussed on multimodality, for example, Kress and Van Leeuwen (2006) and Nicoletta Vasta (2005). A new semiotic research paradigm in advertising language, which involves multimodal, multicodal, and multimedial types of advertising communication and incorporates the designed nature of advertising texts into its framework for interpretation, could be observed during the last decade (cf. Janich 2013, 13; Bucher 2011, 123f.).

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[104] Original wording: "nur eine integrative Sichtweise aller semiotischer Zeichen, die einen Text konstituieren, [werden] modernen Formen der Textualität gerecht" (Eckkrammer 2002, 45).

[105] From a sociolinguistic perspective, researchers like Spitzmüller (2013, 161) have criticised social semiotics for implicitly assuming (while stating the contrary) that the meaning of multimodal texts simply has to be decoded from the meaning potential that texts are given by their designers. This view ascribes the receivers more the role of selectors than actual creators of meaning.

Typography as paralanguage

Typography is a semiotic system of its own, which relies on different semiotic resources like colours and graphic forms (Stöckl 2008, 15) and is relevant to the creation of meaning in advertising because it is closely interwoven with the semiotic code of the advertisement (Stöckl 2008, 16). In advertisements, four types of typography have specific semiotic relevance (Stöckl 2008, 22-33), typeface, typo-pictorial sign plays (e.g. a word 'written' with vegetables), (visually implied) materiality (e.g. text that looks as if it was formed out of milk), and placement of writing in the advertisement, i.e. layout (cf. Janich 2013, 248ff.). Concerning the interplay between typography and verbal text, "graphological iconicity" (Fischer 1999) is extensively exploited by advertisers, who often flout writing conventions for advertising effectiveness (Fischer 1999, 251). Typographic information can, for example, parallel prosodic features of spoken language like tone, rhythm, and accents (cf. Fischer 1999, 259; Störiko 1995, 481; Cook 2001, 96; Kelly-Holmes 2005, 9). In this case "foreign words are to a large extent part of the paralanguage of the advertising discourse" (Kelly-Holmes 2005, 9).

'Language–spatial relationships' in multilingual texts

Stressing the importance of the interplay between linguistic and visual aspects in multilingual discourse, Mark Sebba proposes a multimodal approach to language mixing in written discourse, suggesting that it must be "taking into account the visual and spatial relationships of languages on the page, screen or sign, at the same time as it takes into account their linguistic properties" (Sebba 2013, 113). In his framework of multilingual written texts, Sebba differentiates between three types of textual units: monolingual, mixed, and language-neutral (Sebba 2013, 107f.). Mixed units may be either visual units or textual units that use more than one language, but visual units particularly cannot be adequately described as involving codeswitching (2013, 107f.). "The term 'language-neutral' applies to units which consist entirely of items which cannot be assigned exclusively to one language but belong equally to both (or all) the languages involved in the text" (2013, 108). Especially internationalisms, cognates and abbreviations of the two occur in this category, i.e. items that are easily comprehensible.

As has already been mentioned, sentences are not the relevant units of analysis in advertisements, rather, structural components of advertisements (e.g. headers, slogans), and visual units that become cohesive through spatial positioning and layout are suitable units of analysis (Sebba 2013, 105). In the written discourse of print advertisements salience and cohesion can be achieved through positioning and colours and fonts (cf. Sebba 2013, 105) [106]. "Through careful design of the paralanguage of an advertisement, the advertiser can give printed words both symbolic and iconic meaning in order to reinforce the advertising message" (Kelly-Holmes 2005, 9) [107]. This stresses the importance of language-spatial relationships on the page for the creation of meaning (cf. Sebba 2013, 106).

> Scollon and Scollon (2003, p. 122) regard such ordering in signage as the results of a *code preference system,* which 'privileges the top, the left and the center' (at least in those cultures where the script direction is left to right, top to bottom) and is thus based on language-spatial-relationships (Kress & Van Leeuwen, 1996/2006).
>
> (Sebba 2013, 106)

English 'on top'

That English elements are often used in salient positions was demonstrated by an empirical analysis of English-Norwegian mixing in popular magazines conducted by Graedler (1999, 337 cited in Sebba 2013, 103). She concludes that language switches very often occur in prominent positions such as headers, at the end of paragraphs, or are all together graphically set apart from the rest of the text. Martin, too, remarks that English elements are usually accentuated in advertisements (2007, 170). However, the problem is that there is no reliable

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[106] While coherence and cohesion play an important role, advertisements can even be recognised as such when neither of the two is apparent, as long as its components are perceived to share the same communicative function (Bratschi 2005, 37).

[107] Communication via text fundamentally differs form communication via pictures, because the former is a symbolic (digitalised) code in which connections between signifiant and signifié are not intuitive but rely on convention, and the latter presents an iconic code in which a direct connection between the picture and the real object exists through visual similarity (Schierl 2001, 214). This implies that pictures and texts can accomplish very different functions in advertising, some central aspects of which are outlined in Chapter 4.3., drawing on Schierl's book *Text und Bild in der Werbung: Bedingungen, Wirkungen und Anwendungen bei Anzeigen und Plakaten* (2001) and well-established knowledge on the processing of advertisements.

measure of salience (Sebba 2013, 105) [108]. Accounting for the fact that English elements are often positioned in more salient positions than the national language to increase its visibility in multilingual multimodal texts, Androutsopoulos proposes the framework of "English on top", which "can be understood as a discourse strategy in which English features are used in addition to ('on top' of) the predominant national language, in specific textual positions and for specific discourse functions" (Androutsopoulos 2011, 1). In advertisements English elements can be merely a result of design, and in being set apart from other textual components, they do not lend themselves to an analysis based on its syntactic integration (Androutsopoulos 2011, 5). Their key functions in the discourse of advertising are described as "*heading, bracketing,* and *naming*" (Androutsopoulos 2011, 7, emphasis in original). Heading elements are usually positioned above the body copy through layout options and typographical aspects (2011, 7) and thus can function as attention-getters (2011, 12). Bracketing describes the function of marking the beginning and end of another textual unit, and Androutsopoulos notes that English slogans can function as single, closing brackets (2011, 12). "Names are similar to headlines in terms of their textual placement and multimodal treatment, but differ from these in that they designate social and institutional identities instead of heading textual units", i.e. they serve an emblematic purpose (2011, 16). 'English on top' was found to rely heavily on intertextual references, formulaic chunks, and to originate in specific styles or varieties of English (2011, 18). Moreover, in general, it concerns single lexical items or formulaic phrases (2011, 20). This emphasises that 'English on top' is not conceptualised as a holistic framework to account for all occurrences of English in German media texts. Instead, it is presumed to complement the analysis of language contact phenomena that occur on the lexical and discourse level (2011, 20) by focussing on what Androutsopoulos (2011, 2) calls a "meso-level framework", i.e. "the in-between-area between lexical borrowing and wholesale choice of English" (2011, 25), which assumes the use of English in addition to a national language.

Along with relying on lexical similarities across languages, advertisers increase the chances for comprehension through communicating the message in several modes. "Indeed, analyzed from a multi-modal perspective, code-mixed advertisements reveal a number of connections made between visual and

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[108] An important point made by Wyer is that the size of the verbal components (i.e. size of the typeface) in relation to the size of the pictures that accompany it has to be considered in the processing of advertisements (2002, 696).

textual components to ensure that the message is understood" (Martin 2008, 61). Not only are pictures relied on to ensure comprehension, images and texts are creatively mixed in advertisements, "often producing multiple layers of meaning in the interest of visibility, recall and persuasion" (Martin 2007, 185). Martin discusses how American and global imagery is used in addition to nativised as well as unassimilated English elements in French advertising to address the French as global and as local consumers (2007, 175ff.).

> Well aware of the "pluricentricity" of English (Kachru, [1986]) and its connotative value in advertising, advertisers combine these visual creations with both global and localized varieties of English as part of their international marketing strategy, creating a "glocal" advertising landscape in France and other countries in the Outer and Expanding Circles.

> (Martin 2007, 177)

In this process every mode contributes an aspect of meaning, giving sense to the other and making it comprehensible or adding a new reading of it (cf. Stöckl 2011, 26) [109]. It can be concluded that language mixing, along with the employment of visual and graphic elements, are creative optimisation strategies used to increase an advertisement's effectiveness (cf. Bhatia and Ritchie 2008, 20). This advertising effectiveness lies in the quality of the appeal and the markers of tonality in multimodal advertisements, features which can be tested and compared across advertising texts (Stöckl 2011, 27).

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[109] Language-image-links are the topic of a chapter by Stöckl published in 2009, where he explains "current ads are hardly purely visual – they are semiotically minimalist combinations of word and image with a calculated division of communicative labour between the two" (Stöckl 2009, 4).

4. Processing of advertisements

The channel of communication determines whether the advertising message is transmitted in a linear fashion, as in radio spots, or non-linear as in print advertisements. In print advertisements there is no predetermined order of perceiving individual components (cf. Bucher 2011, 126)[110]; instead, the general order of perception is influenced by the universal principals of salience and relevance. Since the processing of advertisements, and hence advertising effectiveness, do not follow a linear fashion, they cannot be adequately accounted for by strictly unidirectional linear models (Schierl 2001, 80). However, a linear take on the processing of advertisements is not totally invalid, because factors like involvement and emotion were found to stand in a conditional and causal relationship to short term effects of advertising, i.e. judgements and evaluations (cf. Schierl 2001, 80). In the following, only conditions and processes underlying the influence of English elements on evaluations of the advertisement are outlined. Instead of presenting a complete model of advertising, only aspects that are immediately relevant to the empirical part of this thesis are considered. These involve perception and selective attention with the roles of involvement and emotions, and evaluations and judgements, including the influence of consumer categories and brands.

4.1. Perception and selective attention

> Anzeigen und Plakate bestehen formal aus einem Text- und/oder einem Bildteil. Voraussetzung für ihr Wirken, im einzelnen und in der Kombination, ist, daß Text und Bild erstens überhaupt betrachtet werden bzw. in der Lage sind Aufmerksamkeit zu produzieren, im weiteren der Konsument Text und Bild genauer betrachtet bzw. liest und dann weiter, möglichst noch korrekt im Sinne des Kommunikators, versteht. Werbung, die keine Aufmerksamkeit erregt und nicht wahrgenommen wird, muß letztendlich wirkungslos bleiben. [111]

(Schierl 2001, 79)

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[110] However, within individual textual components perception is fairly linear (Bratschi 2005, 33).

[111] My translation: 'Print advertisements and posters formally consist of a textual and/or a visual component. It is a prerequisite for their effectiveness, in detail and as a whole, that the text and the picture first be viewed, i.e. are able to attract attention, that next the consumer examines or reads the text and the picture in more detail, preferably as intended by the communicator. Advertising that does not draw attention and is not noticed, must in the end remain ineffective.'

This duality of attracting attention and achieving a particular purpose is essential to all ads (McQuarrie and Phillips 2012, 235). The first condition for advertising effectiveness of English elements is that consumers have to be exposed to the advertisement, that means, contact needs to be established. Consumers are usually exposed to print ads passively when browsing through a magazine or reading the paper, but as we know from experience, not every advertisements receives our attention. "Dismissal is the prototypical state of advertisement reception" (McQuarrie and Phillips 2012, 230). People do not feel obliged to process advertisements completely (McQuarrie and Phillips 2012, 230) and often actively avoid and ignore them by skipping the page. This, however, implies that one has recognised the content of the page as an advertisement that is of no interest, and it thus follows that perception is a precondition for attention as well as active avoidance.

Today's view on perception is largely based on Anthony Marcel's idea (1983) that perception occurs independently of conscious experience (cf. Janiszewski 2008, 396). In Marcel's theory all sensory stimuli are processed at the subconscious level and the resulting representations are then available as input to higher order processes. They can, for example, be used "to direct behaviour, to prime related concepts, and to suggest candidate hypothesis for conscious experience" (Janiszewski 2008, 397). While at the subconscious level a stimulus is always perceived the same, there is room for perceptual variance at the conscious level. It follows that conscious experience is a 'behaviour' like language, motor responses, affective and other responses (Janiszewski 2008, 397). Michael Tomasello (1999) provides another very influential theory which determines today's view on perception, namely that the meanings of objects, words or behaviours are results of their uses. In being usage-based they strongly depend on what one assumes to be the speaker's intention, i.e. the goal of the communicative act. Therefore, perception as well as behaviour should be regarded as symbolic (cf. Janiszewski 2008, 399).

While perception is non-conscious, focal attention is an active, dynamic and goal oriented process that implies awareness and consciousness (cf. Schierl 2001, 85). Assuming that attention is an act of instantaneous, conscious and selective turning to a presented stimulus (cf. Schierl 2001, 84) necessarily implies that all other stimuli one is exposed to are perceived and processed, too. Therefore, perception can be likened to an acquired meaning filter that

quickly and affectively separates useful from unimportant information by using only a limited cognitive capacity (Schierl 2001, 85). This information processing mechanism allocates our cognitive resources to different processes according to importance and subjective interests as well as context related necessity. It alerts us when something relevant occurs by temporarily increasing activation to improve cognitive processing, and redistributes cognitive resources so that less capacity is allocated to less important processes (Schierl 2001, 85). Which stimuli count as relevant in a given situation depends on intrinsic factors, such as personal motives to satisfy needs like thirst, as well as external factors, such as characteristics of the stimuli (cf. Schierl 2001, 86).

> Die Selektionsprozesse bei der Wahrnehmung sind teils gattungs-spezifisch, teils individuell bedingt und werden durch frühere Erfahrungen, die aktuelle Wahrnehmungssituation, emotionale Vorlieben oder andere kognitive Vorgänge ausgelöst. [112]

> (Altleitner 2007, 46)

When advertisers design advertisements, i.e. when they encode the message, they can rely on certain conventions that are known to determine how receivers process the advertising message [113]. For example, the components of advertisements that are largest in size, or most salient because of their colour are perceived earlier than elements that are smaller or have less tonal contrast (Schierl 2001, 86). In addition to such physical stimuli, advertisers use cognitive stimuli caused by novelties (e.g. statistically unexpected or conflicting information) (Schierl 2001, 86). Moreover, advertisers rely on emotional stimuli to trigger our biological predisposition to react to inherent key stimuli (e.g. cuteness) (Schierl 2001, 86). It is a well-known fact that images, especially of animals or people, are attended to first and verbal text is only read later (Neumann 2003, 63) [114]. However, Janiszewski (2008, 403) points out that such conventions should not be regarded as perceptual universals, because "[p]eople are often blind to that which is irrelevant for current processing goals". Even strange and thus highly salient objects were found to remain unnoticed when

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[112] My translation: 'The selection processes of perception are partly generic, partly individual and result from previous experiences, the current processing situation, affective preferences or other cognitive processes.'

[113] In most cases advertisements will receive no more attention than a quick glance. Therefore, they are designed to accomplish whatever effect can be achieved without further engagement. At the same time advertisements need to be prepared for those few consumers who do get more involved (McQuarrie and Phillips 2012, 235).

[114] When verbal text functions as an attention-getter, this always involves a particularly creative choice of words and was found to often include the use of English (Schiemichen 2005, 86).

they were not useful to the task at hand [115]. Perception is goal directed and it follows that "the impact of ad size and other attention drawing factors is dependent on the goals of the viewer" (Janiszewski 2008, 404). Luna et al. (2005) found that the type of processing which was induced by the task posed to the participants in their experiments determines the influence of linguistic aspects.

> Data-driven processes (e.g., reading a list of words out loud or evaluating the aesthetic qualities of an ad) involve processing of perceptual cues. These processes are triggered directly by external stimuli and engage individuals in mostly bottom-up processing. In contrast, conceptually driven processes (e.g., generating associates or imagining the actions involved in an ad's narrative) involve semantic elaboration and are initiated by the respondent. This type of approach generally leads to top-down processing.
>
> (Luna et al. 2005, 418)

It is important to keep in mind that while in experiments the type of task determines the type of processing, both data-driven and conceptually driven processes occur when advertisements are processed in natural settings (cf. Bucher 2011, 145). Since linguistic factors (e.g. grammaticality of codeswitched slogans) were found to significantly influence the evaluation of advertisements in data-driven settings but not in conceptually driven settings (Luna et al. 2005, 421), it can be assumed that the effects of English elements will not achieve the same effect size in all tasks. In addition to the task at hand, personal factors determine the processing of advertisements, for example, involvement, a concept which has provided valuable insights and is briefly outlined in the following.

4.1.1. The role of involvement

Despite being acknowledged as a central explanatory concept in the context of perceiving and processing information, there is no consensus on the definition of involvement. In Zaichkowsky's definition (1985, 342), involvement is "a person's perceived relevance of the object based on inherent needs, values

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[115] Simons and Chabris (1999) demonstrated what is known as inattentional blindness in a well-known experiment. They showed a short video (75 seconds) of a basketball game with three players in each team to participants who were instructed to count the number of bounce and passes separately for one of the teams and to ignore those of the other. After 45 seconds a woman in a full body gorilla suit walks directly through the batch of basketball players. The astonishing result was that only 54% of the participants reported to have noticed the gorilla at the end of the task.

and interests" (cf. Kroeber-Riel et al. 2009, 342). Kroeber-Riel et al. (2009, 413) point out that involvement encompasses the emotional as well as cognitive level and attribute it to four causes in the context of advertising, namely, the product, personal factors, the situation and the medium of communication; theses are explained in the following [116].

1. Product involvement: Depending on the (financial or social) risk that accompanies the attaining of a product or service, the interest and time devoted to it will vary (e.g. buying a car vs buying a snack).

2. Personal involvement: Consumers have different subjective needs, values and goals; these individual motives determine the personal amount of involvement devoted to a specific matter (e.g. shopping for shoes).

3. Situational involvement: Generally low involvement can be temporarily increased by a special event or occasion (e.g. shortage of a commodity)

4. Media involvement: The channel of communication restricts the resources available to activate the consumer; while TV ads can use the auditive and visual mode to get to consumers, print is confined to the visual mode and therefore requires more involvement on the part of consumers to communicate its message.

The concept of involvement is used very differently in the literature: while Kroeber-Riel et al. categorise involvement on the basis of factors that determine engagement, involvement can also be classified on the basis of the objects that it is directed to, e.g. a brand, product or advertisements (cf. Mitchell 1981, 25). Even though there are many different types of involvement (cf. Rodger and Thorson 2012, 12), involvement is generally envisioned as a state of consumers [117] that encompasses the emotional and the cognitive level (cf. Kroeber-Riel et al. 2009, 413) and can be described according to its intensity as being either high or low (cf. Mitchell 1981, 25). Moreover, the different types of involvement stand in dynamic and reflexive relationships (Haley 2012, 125f.). For example, product and media involvement determine how an advertisement

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[116] These types of involvement had already been proposed by Kroeber-Riel in earlier publications and were cited in a similar form by Schierl 2001 (123f.). This short overview draws on both sources.

[117] This is in line with Mitchell (1981) who "defined involvement as an individual level, internal state variable whose motivational properties are evoked by a particular stimulus or situation" (Mitchell 1981, 25).

is going to be processed by consumers. Print advertisements in general-interest magazines [118] can be regarded as low-involvement advertising (Wetzler 2006, 51). Rodger and Thorson conclude that "[o]verall, there is clear evidence that the more involvement (or "engagement") there is in advertising, the greater the impact of the ad on memory, message believability, attitude toward the ad, and intention to purchase" (2012, 12).

A great deal of research has focussed on attitude changes and persuasion. The definition of attitudes has narrowed since Allport's times [119] and today an attitude is considered to concern only one particular object or entity. It results from a "person's expectations or beliefs concerning the attitude object" (Ajzen 2008, 531) and is "a predisposition to like or dislike that entity" which presumably goes hand in hand with approach or avoidance behaviour (Krosnick et al. 2005, 22). Like values, attitudes, too, are subject to social learning, but in contrast to values they can be changed more easily, for example, through (direct or reported) experiences and information (Schütte 1996, 81f.).

Even though attitude change is not central to the present study, research dealing with persuasive communication such as advertising should not fail to mention that especially the Elaboration Likelihood Model (ELM) proposed by Richard E. Petty (e.g. Petty and Cacioppo 1986) has contributed a powerful theoretical perspective to numerous empirical studies in the field (Krosnick et al. 2005; Schumann et al. 2012). The ELM "provides a fairly general framework for organizing, categorizing, and understanding the basic processes underlying the effectiveness of persuasive communications" (Petty and Cacioppo 1986, 125). According to this model "personal relevance of a message is an important determinant of the route to persuasion" (Petty et al. 1983, 161), which implies that the effectiveness of an advertisement relies on the involvement of the recipient (Crijns 2012, 327). The ELM introduces a central and a peripheral impact route. The central route to persuasion stresses an advertisement's rational informative content and the evaluation of this information, which requires high involvement. It follows that the content of the advertising message should be arguments and for this the preferred medium is

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[118] General interest magazines contrast with special interest magazines, where advertisements usually have a higher relevance to consumers as they are often perceived as an additional source of information and are therefore more often attended to.

[119] "An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport 1935, 784).

language (cf. Kroeber-Riel et al. 2009, 414; Janich 2013, 29f.). Concerning the structure of advertisements, Janich remarks that high-involvement ads often address a selected issue in the headline and contain longer texts with introductions and subheadings (Janich 2013, 29ff.).

The peripheral route suggests that also affective responses to the non-factual contents of advertisements (e.g. appealing pictures) can influence attitudes (cf. Morris 2012, 86). In the case of low involvement, this affective route to persuasion is advised, because receivers with, for example, little interest in the product will not pay attention to the factual contents of ads, thus making argumentative advertising ineffective. As low involvement is the rule, the advertising objective is to appeal and for this the preferred medium is the picture. In addition, in order to make the most of the limited time to communicate meaning, the content has to enable identification through names or logos (Kroeber-Riel et al. 2009, 414). Janich (2013, 29f.) additionally points out that low-involvement advertisements paraphrase visual content in the headline, use only short texts without structuring typographic elements and transport positive sensations. As typical low-involvement ads, print ads in general interest magazines have to rely primarily on their positive appeal to achieve brand preferences [120] (Wetzler 2006, 68). However, it has to be kept in mind that attitudes are weak signs of behaviour, no more and no less (cf. Schütte 1996, 83f.).

4.1.2. The role of emotions

Emotional responses are automatic, deeply rooted primal processes (Percy 2012, 82). As part of the limbic system, the amygdala links pre-attentive sensory processing to emotion in the fraction of a second (Percy 2012, 74). "Emotional associations are detected very fast, ahead of selective attention" (Percy 2012, 74). Pioneering research on the measurement of affective meaning was conducted by Osgood et. al. (1957), who made participants rate stimuli words on bipolar adjective scales (e.g. 'slow - fast').

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[120] Note that people can be highly involved in magazines, especially when they are interested enough in the content to have a subscription. The ratio of subscribers to buyers of single issues is considered in media planning, because planners assume that a high interest in the magazines' content' (e.g. fashion) will make readers more likely to view ads as additional sources of information and hence increase involvement (Haley 2012, 126f.).

Factor analysis showed that variance was due to three factors which were later proposed as a three-dimensional model of emotions: evaluation, activity and potency (cf. Morris 2012, 88). This model served as the starting point for the influential PAD (pleasure, arousal, dominance) model of Russell and Mehrabian (1977) (cf. Morris 2012, 89). Three dimensional models of this type proved to be applicable irrespective of culture [121].

Research has shown that informative and emotional advertising strategies lead to different decision processes depending on the consumers' level of involvement. The importance of emotional advertising messages for activation in low-involvement settings has already been pointed out, but this emphasis on emotions does not mean that cognition is irrelevant. In order for emotions to constitute an advertising message and to leave an impression, they have to be linked to cognitive content and, therefore, all information necessarily has a cognitive and an emotional aspect (Schierl 2001, 119). Percy states that the often made distinction between emotional and rational advertising is simply wrong, because emotions are always involved in the processing of advertising and form an integral aspect of rational decision-making and behaviour (Percy 2012, 74). Or, as Morris puts it "cognition has been shown to be rudderless without emotion" (Morris 2012, 93). Next to the fact that involvement includes emotional as well as rational aspects, it can vary on a thinking - feeling dimension. From this implications for advertisements in specific product domains can be deduced, for example, perfume is regarded as a high involvement/feeling purchase, whereas household detergents are positioned in the low involvement/thinking corner (Haley 2012, 123f.). Concerning the product categories tested in this study, the travel insurance is assumed to be thinking-dominated and the soft drink feeling dominated, with the web portal and the hotel chain lying in between and being more thinking and more feeling dominated respectively.

Emotions are central to advertising for another reason, they can satisfy consumers' higher needs for emotional experiences (Schierl 2001, 127f.). This constitutes the added (experiential) value of products which is especially important in saturated markets when objective differences between brands do

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[121] Sometimes, the least agreed upon dimension of dominance is excluded which results in a two dimensional model that depicts pleasure and arousal on two orthogonal bipolar axes (cf. Cohen et al. 2008, 304). Such a simplified model is only generally agreed upon for strong emotional states (Cohen et al. 2008, 305).

not exist (Kroeber-Riel et al. 2009, 149). Especially products that do not allow for a factual, informative argumentation strategy (e.g. soft drinks) are emotionally charged with promotionally effective characteristics. Such traits are remembered and give products or brands a stable personality in consumers' minds (cf. Schierl 2001, 128ff.). These emotional memories of products or brands that consumers hold are of extreme economic value, because they can influence how, for example, words and images in an advertisement are processed, i.e. they can frame processing to some extent (Percy 2012, 71). Affects, moods [122] and emotions contrast with "[o]ne's explicit or implicit "liking" for some object, person, or position [which] is viewed as an evaluative judgment rather than an internal feeling state" (Cohen et al. 2008, 297f.). Cohen et al. point out that in research such overall liking is not always clearly separated from "affective responses that are genuinely experienced and directly linked to the object of judgment or decision" and which they refer to as 'integral affects' (Cohen et al. 2008, 308). Emotions, on the other hand, are considered to be "much more differentiated and hence provide more attitude- and behavior-specific information" (Cohen et al. 2008, 299). They can be defined "around what is known as the "reaction triad": physiological arousal, motor expression, and subjective feeling" (Percy 2012, 69) [123].

A very important point made by Cohen et al. is that "integral affective responses to a target object - whether the object is a product, a person, or a company - are often incorporated into a summary evaluation of the object". In general, objects that evoke (un-)pleasant feelings lead to (un-)favourable evaluations (Cohen et al. 2008, 308f.). This relation is so strong that affect, evaluation and attitude were thought to be the same thing for a long time (Cohen et al. 2008, 309). However, consumers' general evaluation of products and their behaviour towards them are more strongly influenced by integral affects than by beliefs, stereotypes, previously formed attitudes or other more descriptive knowledge of the object (Cohen et al. 2008, 309). This direct influence on evaluations can take three different routes (Cohen et al. 2008, 310): 1. When a stimulus and an integral feeling co-occur, evaluative

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[122] Affect is defined by as "an internal feeling state" (Cohen et al. 2008, 297), while "[m]oods are usually thought of as low intensity and diffuse affective states that generally lack source identification" and which "have been shown to be easily manipulated through exposure to affectively charged stimuli such as music, videos and pictures" (Cohen et al. 2008, 298f.).

[123] Note that cognitive appraisals can lead to more complex affective states (i.e. mixed emotions), one can for example be glad in one respect, but still sad in another at the same time (Cohen et al. 2008, 306f.).

conditioning may result, i.e the positive evaluation of the affect is transferred onto the target object. 2. Experiencing an affect is assumed to go hand in hand with a tendency to avoid or approach the cause. Such "action tendencies" can than spontaneously be interpreted as intentions or evaluations. 3. When evaluating an object, people often rely on integral affects as sources of information by consciously reflecting upon their feelings in a so-called "how-do-I-feel-about-it?" heuristic (cf. Schwarz and Clore, 1988) [124] . As affective responses are keys to the processing of the advertisements, it is to be tested whether the use of English elements can influence such initial affective responses, as is suggested by Bratschi (2005, 185 my translation): 'in most cases knowledge about foreign entities is not neutral but linked to emotions; what is foreign is thus either regarded as positive or negative'. Some evidence pointing in this direction comes from Puntoni et al. (2009), who found that native language slogans are perceived as more emotional than their English translation equivalents.

> Language-specific traces of experiences should contain not only emotions, but also brand names, product attributes, product categories, and behaviors. This allows words in different languages to probe different brand names, product attributes, product categories, and behaviors, leading consumers to consider and choose different products.

> (Puntoni et al. 2009, 35)

The following research question addresses theses considerations:

▸ Does the use of English elements have an effect on consumers' evaluations of the advertisement's emotional appeal?

4.2. Evaluations and judgements

"People's judgments and decisions are typically based on only a small subset of the knowledge they could potentially apply" (Wyer 2008, 31). Moreover, what influences consumers' judgements, decisions and behaviours is

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[124] Moreover, a fourth indirect effect has been proposed: Integral affects can cause changes in beliefs and perceptions of objects which then lead to different evaluations. Cohen et al. conclude: "Consistent with this mechanism, some studies indicate that affective responses to an advertisement may also influence brand attitudes by changing brand beliefs" (2008, 310f.).

difficult to predict, because "[t]he concepts and knowledge they employ [...] are not necessarily either the most relevant or the most reliable, but rather, are the cognitions that come most easily to mind" (Wyer 2008, 31). Information processing that leads to a judgement relies on the activation of previously formed concepts and knowledge. Even affect and knowledge irrelevant to the decision at hand can become influential when they are (wrongly) attributed to the object of evaluation (Wyer 2008, 39). Moreover, one does not need to be aware of having received information to be influenced by it (Wyer 2008, 37).

When asking participants to evaluate an advertisement, judge a product, or estimate specific product attributes, it has to be kept in mind that consumer decision's are influenced by previous experiences in memory as well as by the stimulus (Mantonakis et al. 2008, 77).

> The central function of memory is *construction*: memory never simply registers or records the environment, but instead imposes selection, organization, and meaning on it. It is this experience of construction that will be encoded in memory, and that will control performance on subsequent interactions involving stimuli, tasks, and contexts that are similar on relevant dimensions.
>
> (Mantonakis et al. 2008, 81)

This constructivist nature of memory is also emphasised by Janiszewski who builds on a distributed memory system by stating that the goal of the perception system is to discriminate between stimuli in order to create and assign meaning (2008, 401f.). Meaning is thus created through "[t]he acts of discrimination, cognitive representation, and association formation between communication, emotion, and behavioral concepts" (Janiszewski 2008, 402).

Kardes et al. (2008) discuss the inferences consumers make when they base their judgements on limited information about entities such as products. Advertising only provides information on selected product characteristics, but conclusions on other attributes are formed by consumers using if-then chains of reasoning that follow a subjective logic (Kardes et al. 2008, 165). "Consumers often hold implicit theories that product quality is positively and strongly correlated with price, warranty, packaging, fit and finish, and other cues" (Kardes et al. 2008, 175). In this, "inference-drawing [...] may lead the consumer to believe things about a product that were never explicitly stated" (Harris et al. 1986, 6). According to accessibility-diagnostic theory, salient, vivid and easily accessible information and input that is believed to

correlate highly with missing information (i.e. which is relevant or "diagnostic") are most strongly relied on in consumers' judgements (Kardes et al. 2008, 177). It follows that to test the diagnostic potential of English element, they have to be visually salient to be able to affect participants' drawing of inferences. However, research has demonstrated that when consumers assume correlations between the accessible information and the required attribute to be low and when they also do not have accessible attitudes they consider relevant, their judgements will be moderate (cf. Kardes et al. 2008, 177). Recognising that there is only weak evidence for a judgement usually encourages consumers to adjust their inferences towards a more moderate level (Kardes et. al. 2008, 178). Nevertheless, "consumers often form extreme and confidently-held judgments on the basis of weak or limited evidence" (Kardes et al. 2008, 178). One aim of the empirical part of this thesis is to shed light on the following question:

- ▸ Which factors (i.e. level of education, attitudes towards the use of English, comprehension, English skills, contact with the English language, age, gender) influence participants' judgements?

The problem with assessing inferences is that asking consumers questions about their inferences is likely to produce inferences that would not have been formed otherwise (cf. Kardes et al. 2008, 166) [125].

4.2.1. The role of consumer categories

"The practice of advertising is predicated on the assumption that consumer choice behavior is at least partially determined by representations of the product or brand in memory" (Jones and Fazio 2008, 437). Consumers are assumed to "virtually always have some knowledge of the type or category of product in question and often about specific brands as well" (Jones and Fazio 2008, 437). These representations (or concepts) of products and brands are linked to other mental representations, such connections (also referred to as

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[125] While there are several methodologies to differentiate between spontaneously formed inferences and those induced by questioning during assessment, for example, analysis of response latencies, cued recall, recognition confidence, word stem completion and others (Kardes et al. 2008, 166), these can either not be applied to an online study or require multiple measurements. However, question induced inferences can usually be avoided by an appropriate study design.

associations) can be of different strengths. Jones and Fazio focus on two possible associations: attitudes (defined as "associations between an object and a summary evaluation of that object") and what they call "*category-exemplar* association", which describe the associations between an object or product and its superordinate category (Jones and Fazio 2008, 437, emphasis in original). Object-evaluation associations [126] are of less relevance to this study since participants cannot have attitudes towards the newly invented mock brands used in this study [127]. However, category-exemplar associations are likely sources for transfer. For example, attitudes associated with a product category (e.g. a soft drink) can be automatically activated by an exemplar of that category (Jones and Fazio 2008, 450).

Loken, Brasalou and Joiner (2008) state the importance of categorical representations for consumers' interpretations of new products or services. They "define a *consumer category* as a set of products, services, brands, or other entities, states, or events that appear, to the consumer, related in some way" and "define a *categorical representation* as information that becomes stored in the cognitive system for a consumer category, and that is later used to process it" (Loken et al. 2008, 133, emphasis in original). When a new stimulus shares a lot of similarity with an existing category and thus presents a typical instance, positive transfer it likely to occur, i.e. beliefs, evaluations and affects are extended to the new stimulus. This is especially likely when the two entities are easily comparable and more relevant information is not accessible. Assimilation effects occur at encoding when the object shares many attributes with the existing category (Loken et al. 2008, 146f.). Product categories are one specific example of the cognitive models that guide the encoding and retrieval of information, but obviously the processing of advertisements equally involves other knowledge structures (e.g. frames, scripts and other schemata) (cf. Harris et al. 1986, 5ff.).

Here, too, involvement plays a role. "When involvement is low, consumers attempt to assign a product to a category and category-based inference is likely.

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[126] The term is used as a synonym for attitudes (cf. Rodgers and Thorson 2012, 569).

[127] Such attitudes are the results of emotional reactions, previous behaviours, or beliefs in the object. Their strength is fostered by co-occurrence and rehearsal (cf. Jones and Fazio 2008, 448). Mock products and brands are used as stimuli in the study to decrease the chances that relevant representations are triggered. The possibility of transfer can never be completely eliminated because individual predisposition might cause some participants to perceive the mock products as known products and hence assimilate or ignore all discrepant information.

When involvement is high, effortful piecemeal or attribute-based judgement is likely" (Kardes et al. 2008, 179). In the context of this study it is to be assumed that participants' evaluations are strongly influenced by knowledge about specific categories and hence the influence of the stimuli advertisements' language use is going to be rather limited. It follows that large effect sizes for the differences between the two language versions should not be expected.

▸ Are there statistically significant differences in the evaluation of the product when it is advertised with English elements and when it is advertised in German?

The stimuli used in this study should not resemble existing products and brands in order to limit transfer of information. Another advantage of using specially designed stimuli ads is that they are not part of a wider marketing strategy, but rather constitute 'one-shot' ads without brand specific intertext on other channels (e.g. webpages, flyers, radio, TV) (cf. Janich 2013, 23f.). This ensures that the only channel of communication is the stimuli advertisement presented in the online-experiment and that participants' evaluations are all made on this basis. It has to be kept in mind, however, that along with product relevant knowledge and attitudes, also motives, personality and the current mood of recipients matter for the processing of the advertising message (Moser and Spörrle 2012, 432). Consequently, not all measured effects can be regarded as sole consequences of the stimuli advertisements presented to participants during the experiment.

4.2.2. The role of brands

"The brand can be any device such as a name, slogan, or symbol that is used to distinguish a product or service" (Krugman and Hayes 2012, 436). Brands are promises and aim to create trust between the producer and the consumer (Krugman and Hayes 2012, 439). Allen et al. advocate an alternative interpretation of branding and remark that in the Golden Age of Brands "[b]rands themselves have evolved to a new cultural platform where they serve not just as simplifying heuristics or risk reduction mechanisms for individual decision makers, but as sociopolitical ideology statements (O'Guinn & Muñiz, 2004)" (Allen et al. 2008, 782). In this paradigm brands are "[m]eaning rich

tools that help people live their lives" and that are positioned as complex and mutable (as opposed to consistent, constant and simple). Consumers contribute actively to the meaning of brands and marketers are only one of the makers of brand meaning (also cf. Krugman and Hayes 2012, 434f.). The central interest in branding has shifted from "[k]nowledge-based cognitions and attitudes" to "[e]xperiential and symbolic aspects of consumption" (Allen et al. 2008, 788, Table 31.1).

The image of a brand consists of the sum of all the associations that are perceived as being connected with a brand [128] (Mäder 2005, 7) and contains, for example, also associations about product features (cf. Waller et al. 2007, 6). Since in the empirical part of this thesis evaluations of the brand are analysed separately from product evaluations, the more precise concept of brand personality is employed.

▸ Is the perception of the brand (i.e. brand personality) influenced by English elements?

Drawing on Aaker (1997, 341) and Hieronimus (2003, 46) brand personality is defined by Waller et al. as the amount of human character traits associated with a brand (2007, 5).

> Jennifer Aaker (1997) found that brands have distinctive personality traits such as sincerity, excitement, competence, sophistication, and ruggedness. The personality trait most often associated with successful brands is sincerity. The influence of sincerity as an important element of success is highly consistent with the notions of trust and promise as it is much easier to have trust in a brand that is viewed as sincere.
>
> (Krugman and Hayes 2012, 439)

Hieronimus (2003, 203) tested whether Aaker's dimensions of brand personality were equally applicable to the German market. He concluded that the five-factorial structure of brand personality could not be confirmed for Germany, where a lack of discriminative validity resulted in a reduction to two factors, namely: "Vertrauen & Sicherheit" and "Temperament & Leidenschaft" (i.e. trust and safety, temperament and passion) (cf. Waller et al. 2005, 12). These two dimensions can be represented by only 10 items.

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[128] Original wording: "die Menge aller Assoziationen, die ein Konsument mit der Marke in Verbindung bringt".

Indicators for trust and security are "zuverlässig, unverfälscht, ehrlich, bodenständig, erfolgreich" [129] , and "temperamentvoll, leidenschaftlich, phantasievoll, fröhlich, wagemutig" [130] for temperament and passion (Hieronimus 2003, 204). Mäder (2005, 21) criticises Hieronimus for restricting his item pool to 19 personality traits that had originally been generated for other cultures (cf. Waller et al. 2007, 14).

In a holistic lexical approach Mäder starts out with 5160 German adjectives that describe personality [131] and reduces them with the help of experts to 144 items which he then tests in the evaluation of 45 brands (cf. Waller 2007, 14). An explorative factor analysis rendered the German brand personality inventory which is captured by 39 items and consists of five dimensions and the corresponding facets: "Attraktivität" ("Extravaganz","Ästhetik","Erotik"), "Verlässlichkeit" ("Kompetenz", "Integrität"), "Temperament" ("Dynamik", "Kreativität"), "Stabilität" and "Natürlichkeit" (Mäder 2005, 115) [132] . Out of these only the three most important dimensions attractiveness, reliability, and temperament strongly correlate with Aaker's dimensions, which proves that brand identities are shaped by culture (cf. Waller 2007, 15). Stöckl (2012, 246) suggests collecting information on the symbolic values of product categories, products and brands (e.g. 'youthful, technology leadership, secure, freshness, traditional') [133] which could then be used to study the lexical networks, pictures and typographies in the corresponding advertising texts to gain insights into the semiotic means that are used in constructing brand identities. Essentially, this is what was done in the second empirical part of this thesis, only that the symbolic values are not searched for in advertising texts; instead the advertising texts are designed by the researcher and then evaluated by consumers in a quantitative study to test for specific symbolic values of English elements.

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[129] My translation: 'reliable, genuine, honest, down-to-earth, successful'.

[130] My translation: 'vivacious, passionate, imaginative, cheerful, adventurous'.

[131] These adjectives were taken from a taxonomy of personality descriptors in German (5,160 Adjectives) by Angleitner and Ostendorf (1994).

[132] Please find the list of dimensions, facets and items in part A of the appendix.

[133] Original wording: "z.B. jugendlich, Technologieführerschaft, sicher, Frische, traditionell, etc.".

4.3. Processing of language vs processing of pictures

Written language is processed differently from pictures despite the fact that they are both perceived visually. While language is mostly processed sequentially according to logical analytical rules, the information in pictures is processed simultaneously and holistically, following a spatial logic (Stöckl 2012, 249) [134] . These two processes involve the hemispheres to different degrees. Pictures are mainly processed in the right hemisphere where activities are generally unconscious. In the processing of language, the left hemisphere, which is responsible for analytical rational thinking, dominates. In the state of low involvement the right hemisphere is more active, and therefore emotional communication strategies that involve pictures, positive impressions and moods, as well as figurative language, are best suited (cf. Lachmann 2002, 73 also cited in Kellerhals 2008, 27f.).

McQuarrie and Phillips, who propose a rhetorical theory of print ads which is based on some important propositions about cognitive processing, generally state: "The greater the processing demands imposed upon consumers, the less suitable that form is for advertisements" (2012, 237). Another basic assumption they make is that "words are more demanding than pictures" (2012, 238). For this reason, the dominance of pictures is generally accepted in advertising research (cf. Stöckl 2009, 3).

> Normalerweise wird der Text gar nicht gelesen, auch dann nicht, wenn er kurz ist. [...] Der Text einer Anzeige wird grundsätzlich erst nach dem Bild betrachtet. Auch wenn eine Anzeige länger als zwei Sekunden betrachtet wird, holt der Text relativ zum Bild nicht auf. Wenn eine Anzeigenwerbung gut wirkt, hat sie das kaum jemals ihrem Text zu verdanken. [135]

(Felser 2007, 408)

Van Meurs and Aristoff (2009, 83 drawing on Franzen 1994) emphasise that 90% of the readers of magazines first look at the pictures, 65% of them actually process the content and in those readers who move on to the text no more than 2% of the written content are processed.

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[134] Translated from the original words "ganzheitlich" and "einer räumlichen Logik".

[135] My translation: 'Normally the text is not read at all, not even when it is short. [...] In principle, the text of an advertisement is looked at after the picture. Even when an advertisement is viewed longer than two seconds, the text does not catch up with the picture. When an advertisement is affective, this is hardly ever due to the text.'

Benefits and limits of pictures

One huge advantage of pictures is that they communicate information much faster than text and are processed automatically with little cognitive effort (Stöckl 2009, 8; Schierl 2001, 228). To insure that the central message of a visual is communicated easily and quickly, images have to be concise. Concision ("Prägnanz") is best achieved by simplicity of form, appropriate size, and strong contrasts (cf. Schierl 2001, 187f.). The right pictures can even transmit information to consumers passing by (Janich 2013, 76) or flicking through a magazine and in this function as the most important attention-getters (Kellerhals 2008, 28; Neumann 2003, 63; Schierl 2001, 136). Kroeber-Riel et al. (2009, 308) note that when large pictures (half of the advertisement or more) are present they are always looked at. Moreover, there is compelling evidence that they are the first element to receive attention and this even holds true for pictures with little activating potential. Generally, pictures receive more attention than textual elements, i.e. more than 50% of the total time devoted to the advertisement is spent on visuals (Kroeber-Riel et al. 2009, 310).

Visuals are widely used for decorative purposes, because an aesthetic design is important, as it can create a positive feeling which can directly influence consumers' attitudes towards the advertisement (Schierl 2001, 248). This in turn can influence emotional responses to and cognition of brand perception (Morris 2012, 87) [136]. Pictures are generally better than texts at influencing the perceivers' emotional state or mood (cf. Stöckl 2009, 9). Andrew Mitchell found "that the visual component in advertisements may affect both the formation of product attribute beliefs and the attitude toward the advertisement" (1986, 23). Information communicated in pictures is more suggestive and more subtle, therefore receivers are less likely to remain unaffected by an emotional visual than by a strongly emotional catch phrase (Schierl 2001, 230). Visuals that depict the real world trigger associations and individual memories that increase activation and facilitate remembrance by linking the advertisement to existing knowledge structures (cf. Janich 2013, 76f.; Bratschi 2005, 44). Messages communicated via pictures are also more readily accepted, because they are perceived as more objective than textual elements (cf. Schierl 2001, 232). Not only do pictures increase the

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[136] A brief and comprehensible overview of the role of emotion in persuasion can be found in Morris 2012, 86ff. and for a case study on women's emotional reactions to different beauty types in ads refer to p. 93ff..

credibility of textual information, they also facilitate comprehension of the overall advertising message (Schierl 2001, 286).

Pictures are extensively involved in the creation of meaning, because they are strongly connected to the textual structures of advertisements (cf. Stöckl 2009, 6; Schiemichen 2005, 341). Verbal and visual components are linked by referential connections and complement each other in the transmission of meaning (Wetzler 2006, 60). These 'language-image-links' are becoming more diversified, and as a result, pictures can perform a variety of new functions, which in turn "shifts the status and role of language in multi-modal advertising texts" (Stöckl 2009, 6). In multilingual advertisements the central message is often communicated using verbal and visual aspects to ensure that meaning is transmitted successfully (cf. Störiko 1995, 453) [137] . "Bilingual creativity in advertising may also involve a technique I shall refer to as "visual glossing", whereby illustrations are used to gloss English elements that would likely be otherwise unintelligible" (Martin 2007, 184). Such benefits of pictures result from the fact that "[c]omprehending complex pictures is much more common and automatic in the contemporary developed world than carefully reasoning one's way through multiple arguments presented in words" (McQuarrie and Phillips 2012, 238). This superiority of pictures is especially important for the transmission of information in low involvement advertising (Kroeber-Riel et al. 2009, 309). The dominance of visuals can only be challenged by very prominent headlines (Kroeber-Riel et al. 2009, 308).

Visuals which strongly activate consumers are returned to several times after text fixations (cf. Kroeber-Riel et al. 2009, 308; Schierl 2001, 186) and can distract from textual elements and hinder their processing and remembrance (Schierl 2001, 247). It follows that complex images are not well suited for advertisements. More importantly, pictures cannot convey some of the most basic entities such as negation, modality and reference which are easily expressed in language (cf. Stöckl 2009, 8). In addition, pictures lack complex and logical syntax, which implies that pictures cannot denote, they can only depict (cf. Schierl 2001, 222; Stöckl 2012, 249f.). It is for this reason that pictures depend more on texts than texts depend on pictures, and Schierl concludes: "Das Bild sagt alleine nichts aus. Es muß, um eine Botschaft

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[137] For a detailed explanation of the interaction between verbal and non-verbal signs see Störiko 1995, 483-496.

übermitteln zu können, in einen Kommunikationszusammenhang gestellt werden" (Schierl 2001, 239). Therefore, one task of language is to set the context and limit the meaning of pictures in multimodal advertisements [138].

Benefits and limits of language

In 1992, Baumgart a little prematurely predicted the dominance of text over pictures in advertising by stating "Die Zukunft liegt im Wort" (Baumgart 1992, 320). However, she was right in emphasising the power of words to inspire imagination, which is due to their "unlimited semantic range" (Stöckl 2009, 8). These words serve as keys to a world of rich connotation, associations and emotions (Baumgart 1992, 315) [139]. In contrast to a picture's semantic openness, text can formulate a message much more explicitly and direct the reader to specific aspects advertisers wish to emphasise (Schierl 2001, 239; Stöckl 2012, 248). In addition to its possibility of addressing the reader directly, complex arguments and product characteristics are easily communicated with language (Schierl 2001, 236f.) that makes them appear more ordered and rational (2001, 286). On the contrary, language can only denote what can be named, whereas pictures principally do not face such semantic restrictions (Schierl 2001, 226) are however limited by space in print advertising. However, McQuarrie and Phillips point out that longer advertisements require more processing than shorter ones and that "words that form an argument are more demanding than words that form a narrative" (2012, 238). This explains why lengthy verbal arguments are slowly disappearing from print advertisements in the mass media (McQuarrie and Phillips 2012, 237; Schierl 2001, 124; Van Meurs and Aristoff 2009, 84). However, Piller remarks that a decreasing processing speed does not need to be negative: "A general advantage of the use of a foreign language is that it impedes automatic processing and thereby arrests the attention of recipients for a longer timespan than monolingual native-language advertisements would" (Piller 2001, 163).

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[138] It has to be noted that print advertisements rely minimally on language to communicate the brand name, but especially in the domain of fashion this is often the only textual element needed to set the appropriate context for interpretation. McQuarrie and Phillips demonstrate for a Jimmy Choo ad that grotesque ad images (which include more than one fourth of all fashion ads in 2011) are very well suited to achieve a favourable outcome for the brand when they narrate a story and engage the consumer in completing this narrative (2012, 238f.).

[139] Bohmann (1996, 206) even concludes that the ultimate purpose of language in advertising is not to inform the reader rationally, but to carry emotional meaning.

In fact, the impact of affective values of the English language on consumers' evaluations of advertisements can be summarised using Cohen and Areni's three phase model (1991) as described in Cohen et al. (2008, 302). When a mental concept is activated (e.g. identification of the company name *SECURE*) it "produces a largely unconscious and very rapid, sensory-level affective response" (Cohen et al. 2008, 302), which can interrupt other cognitive processes and cause cognitive resources to focus on the stimulus. In the second phase, associations are made between readily available stimulus information and experienced pleasantness (or unpleasantness) as well as the degree of arousal. While in this process evaluative meaning is automatically attributed to the stimulus, stage three involves reasoning (i.e. cognitive elaboration), and thus affects are the result of prior experience and context. Such cognitive appraisal theories stress the importance of assessing the source of causation and responsibilities (internal vs external) as well as the aspect of time in addition to purely evaluative meaning. Now that it has been presented how stimuli are processed, the creation of word meaning will be explored in the next chapter.

5. Meaning in multilingual advertisements

In the following the origin of the meaning of lexical elements in advertisements is explored [140]. Meaning is a mental construct that results from individuals' experiences with the environment and is saved in long term memory. The meaning of a linguistic sign does not result from an objective perception of reality, but from the link to a mental representation which was formed previously and integrated with other meaning structures. Since meaning has a cognitive, subjective base, successful communication is only possible when individual mental constructs are adjusted in the interactions of language users, i.e. when meanings are conventionalised (cf. Altleitner 2007, 17). This implies that the meaning of Anglicisms develops over time and has to be learned. English elements usually undergo a change in meaning when they are borrowed into German, i.e. their meaning can be extended, narrowed or shifted (Bohmann 1996, 229), while a specialisation of meaning is most common (Viereck 1980, 9; Yang 1990, 167; Bohmann 1996, 226). It follows that foreign words always have a slightly different meaning than their closest German translation equivalent (Altleitner, 2007, 15) [141]. What this means in terms of language processing is explained in the following.

5.1. Lexico-semantic representations in bilinguals: DFM

It is generally agreed that compared to lexical representations, semantic representations are fairly similar across languages (Pavlenko 2009, 125). Therefore, it used to be assumed that bilinguals have only one shared store for concepts, which would be more economical than having two separate stores i.e. one for each language. Building on new research findings that suggested that the architecture of concept organisation is more complex than previously

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[140] The following paragraph is based on a summary of the basic principles of cognitive linguistics presented in Altleitner (2007, 17) when not indicated otherwise. As Altleitner's dissertation *Der Wellness-Effekt. Die Bedeutung von Anglizismen aus der Perspektive der kognitiven Linguistik* (2007) touches on all general cognitive processes in the creation of meaning, the present chapter is generally restricted to the specific issue of structural differences between the meanings of English and German elements, and the resulting functional differences in advertising texts. In this light, the topic of comprehension is also discussed.

[141] This explains why English elements are borrowed even when German synonyms with different connotations exist (e.g. 'Getränk' vs 'Drink') (Bohmann 1996, 251, her example).

believed, De Groot and colleagues (e.g. De Groot 1992) developed the Distributed Feature Model (DFM) (cf. Pavlenko 2009, 126).

The two key assumptions of the DFM are, for one, a word's meaning is considered to be distributed among a set of meaning components, wherein each stores one essential aspect of a word's meaning (De Groot 2011, 133). Secondly, it is assumed that the conceptual representations of translation pairs for concrete words have more similar meanings than the conceptual representations of translation pairs for abstract words (De Groot 1992, 1002). "It is a well-known fact that complete meaning equivalence of the two terms in a translation pair is a rare phenomenon" (De Groot 2011, 132). While the words in a translation pair share many common features, each has some unique aspect of meaning (De Groot 2011, 132) [142]. In addition to incomplete mappings, the DFM can account for changes in meaning and for individuals' differences in conceptualisation (De Groot 2001, 132). A further noteworthy achievement of the DFM is that it acknowledges the importance of context for meaning, especially with abstract words. "If the context in which words are processed differs across languages and cultures, then the meaning of abstract words will depend more on the context in which their sense is instantiated than the meaning of concrete words" (Kroll and Tokowicz 2005, 538). It follows that the degree to which concepts of two languages overlap will depend on the context of acquisition. Altleitner found in her questionnaire study that even for lexemes that denote concrete objects (e.g. *house* and 'Haus') connotations and associations differ (2007, 93). She asked English and German speakers to indicate their thoughts on people moving in to a bigger house in the same area by choosing one of four answering categories. While 40,7 % of the English speakers (but only 14,4% of the German speakers) reported that this was what many people did, 28,8% of the Germans (but only 4,7% of the English speakers) wondered whether they had bought or rented the house.

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[142] However, this lack of complete translation equivalents does not mean that there are two separate conceptual stores, rather, all features of meaning are believed to be contained in the same store while the links to word forms can be influenced by the structure of a language or the context of acquisition (cf. Kroll et al. 2010).

> Aus diesen Antworten lässt sich schließen, dass die unterschiedlichen Erfahrungen mit der Wohnsituation und den damit zusammenhängenden sozialen Gepflogenheiten in Deutschland und in angelsächsisch geprägten Ländern zu Bedeutungsunterschieden für die Lexeme „Haus" und *house* in Hinblick auf Konnotation und Assoziation führen. [143]

> (Altleitner 2007, 93)

Moreover, memory representations were found to depend on the type of bilingualism, as De Groot (2011, 134) remarks: "In general, the less balanced their bilingualism, the larger the discrepancy between the number of senses mastered in their stronger and weaker language will be." The DFM can account for research findings that demonstrate such asymmetries between L1 to L2 and L2 to L1 semantic priming and translation priming as depicted in Figure 4. Figure 4 is based on a model depicted in Brysbaert and Duyck (2010, 368), but uses a different translation pair than the original [144].

> L1 words have richer semantic representations than L2 words (i.e., they activate more semantic features). As a result, L1 primes activate a large percentage of the semantic nodes connected to L2 targets, where as L2 primes only activate a small section of the semantic nodes connected to L1 targets.

> (Brysbaert and Duyck 2010, 368)

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[143] My translation: 'It can be concluded from these answers that the different experiences of the housing situation, and the usual practices associated with it in Germany and Anglo-Americanised countries, lead to differences of meaning concerning the connotations and associations of the lexemes Haus and 'house'.'

[144] Brysbaert and Duyck use the English-Dutch pair 'taste' and 'smaak' which has the meanings of [taste] and [smell]. This is replaced with the English-German pair 'earth' and 'Erde' which has the meanings of [earth] and [soil] and features similar semantic structures.
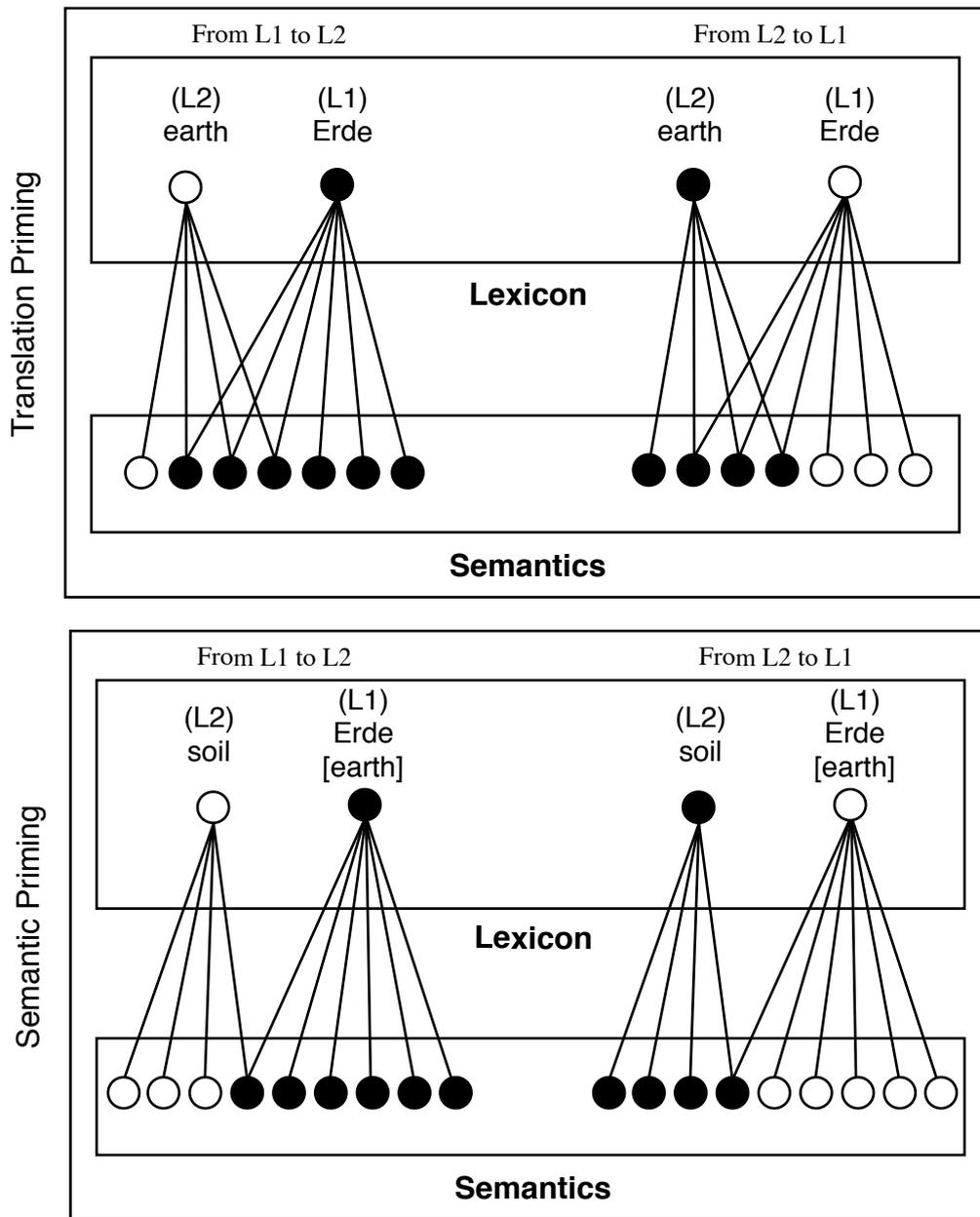
Figure 4. Model with distributed features to explain asymmetries in L1 to L2 and L2 to L1 priming, adapted from Brysbaert & Duyck (2010, 368).

5.2. Denotative and connotative meaning of English elements

A clear distinction between denotation and connotation [145], as it is made in semantics, does not represent cognitive reality (Altleitner 2007, 178). Nevertheless, the functions of English elements in German advertisements are best described with reference to their denotative and connotative meaning respectively. The denotation of a word is its literal, factional meaning as found in a dictionary (Goddard 2002, 125), which according to Bußmann (1990, 166), exists independently of context and situation, and is the constant conceptual basic meaning of a linguistic expression [146]. While denotation is the primary meaning, connotation is "the extended or secondary meaning of a sign; the symbolic or mythic meaning of a certain signifier (word, image, etc.)" (Beasley and Densi 2002, 168). In contrast to commonly shared denotations, connotations are subjective and differ interindividually, because they rely on the speakers' experiences (cf. Altleitner 2007, 179). "The connotations of a word are the association it creates. [...] Because associations are powerful, fluid (and often covert) aspects of meaning, advertisers pay particular attention to this aspect of language" (Goddard 2002, 125).

The boundaries between connotations and associations are controversial, and in an English speaking context this distinction is often not made, as Goddard's definition demonstrates (cf. also Cook 2001). Through common social and cultural experiences connotations and associations can become stable meaning components that are collectively shared in a speech community and can be relied upon by advertisers (Altleitner 2007, 179; Bratschi 2005, 153; Kellerhals 2008, 35). Such meaning conventions are based on a shared value system established in advertising discourse (Fairclough 2001, 202).

Connotations include emotional impressions (Janich 2013, 147; Bohmann 1996, 226) and value judgements (Altleitner 2007, 179) that are linked to meaning content. In addition, Janich also includes stylistic usage restrictions that apply to the linguistic expression under the term connotation (Janich

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[145] In the following, in addition to 'connotation' the term 'association' will be used in analogy to German 'Assoziation' to differentiate between what is often subsumed under the English term 'connotation'.

[146] Original wording: "kontext- und situationsunabhängige, konstante begriffliche Grundbedeutung eines sprachlichen Ausdrucks" (Bußmann 1990, 166).

2013, 147). While connotations are bound to the linguistic sign itself, i.e. the corresponding concept, associations constitute links to complex mental representations of knowledge (e.g. other linguistic signs, personal, cultural or social experiences, situations or processes) (cf. Altleitner 2007, 179; Bratschi 2005, 153; Janich 2013, 148; Kellerhals 2008, 35). Despite their subjective nature, immediate associations to single words follow certain association laws based on relations such as contiguity, similarity or contrast (Blumenthal 1983, 6; cf. Janich 2013, 148). Even though advertisers can rely on such psychological processes, associations can shift when words are embedded in context. In unusual contexts associations become increasingly subjective (Janich 2013, 148) and are no longer in control of the advertiser. An important point made by Altleitner is that even for terms which denote concrete objects connotations and associations are not necessarily identical in two languages since they may represent different experiences and social realities (Altleitner 2007, 93).

In advertising, the connotative/associative function of language is just as important as the denotative function. It is in the implicit meanings that emotions are evoked and where the power of an advertisement lies (Myers 1994, 76). Cook (2001, 51) writes "What matters is connotation, a vague and indeterminate world of associations quite alien to any description with pretensions to scientific rigour." A key methodological problem when analysing the effects of English in ads is that participants' responses are elicited by connotative as well as denotative meanings of the advertising text which cannot be separated from each other (cf. Fink 1977, 400; Kellerhals 2008, 37). In an experiment Hornikx et al. (2007) analysed the associations Dutch respondents had to advertisements that were identical except for the foreign language [147] they were written in and found that only the valence (positive, neutral, negative), not the number of associations influences respondents' appreciation of the advertisement. However, a major difficulty when comparing connotative meanings between words of different languages is the lack of true translation equivalents. Zenner et al. remark that the meaning of close synonyms can differ

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[147] They tested the associations of French, German and Spanish on Dutch respondents.

on several levels and, following Edmonds and Hirst (2002), they adapt the ides of 'granularity' of meaning (Zenner et al. 2013a, 262) [148].

> At the conceptual, coarse-grained level, near-synonyms have the same meaning, and are hence clustered under one shared concept. At the sub-conceptual, stylistic level, the four different types of semantic variation (denotational, stylistic, expressive and structural) come into play, serving as the basis for lexical choice.

> (Zenner et al. 2013a, 263)

This stylistic variation is, for example, acknowledged by Bohmann (1996), who concludes from her non-representative survey among 29 women and 29 men that the associational characteristics of Anglicisms differ from those of their German translations which often have the connotation of "antiquiert", i.e. dated, or "neutral" (1996, 214). However, most of her test items fill lexical gaps in German and, therefore, either denote more specific entities or have a different connotative value then their closest semantic neighbours (1996, 215). It therefore follows that the precise origin of the different affectional value of English elements remains unclear. For this reason, the advertising study in this thesis included one mock advertisement which uses only cognate pairs in its two versions. As was already explained, cognate pairs are envisioned as sharing one conceptual representation (De Groot 2011, 203). It is therefore assumed that the meaning of, for example *FRISCH* and *FRESH,* overlap to a larger degree than in regular translation pairs with very different word forms. This enables testing for effects of the English language that occur independently of word meaning.

There are different levels of meaning and understanding in an advertisement, one is the comprehension of individual words and phrases, another is the comprehension of the general advertising message. Onysko describes the reasons for using English elements on two levels (Onysko 2007, 321). On the macro-level, English is increasingly used as a lingua franca and "[o]n the micro-level, communicative needs are basically fuelled by denotative needs (e.g. anglicisms as specific denotata lacking German equivalents) and connotative needs (e.g. emotional implications entailed in the use of anglicisms)" (Onysko 2007, 321). Denotative and connotative motivations

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[148] Granularity of meaning refers to "the level of detail used to describe or represent the meanings of a word. A fine-grained representation can encode subtle distinctions, whereas a coarse-grained representation is crude and glosses over variation" (Edmonds and Hirst 2002, 116).

for use interact and the same Anglicisms can be used for different reasons depending on the communicative aim of the language use. In advertisements the English language is particularly well suited to achieve general positive associations because of its semantic openness.

> Die Besonderheit anglo-amerikanischer Begriffe liegt in ihrer eigenen Manipulierbarkeit. Sie bedeuten stets das, was derjenige, der sie verwendet, damit sagen will. Das heißt, daß das Fremdwort nur mit den Konnotationen ausgestattet wird, die den Absichten des Werbetexters entsprechen. [149]
>
> (Bohmann 1996, 186)

This semantic openness of foreign elements is a result of their comparatively few links to existing meaning structures and wider knowledge. A foreign element "aktiviert keine altbekannten Konzepte, Situationen oder Abläufe, sonder steht außerhalb dieser Strukturen und lässt deshalb viel Spielraum für die Bedeutungszuordnung" [150]   (Altleitner 2007, 167). This vagueness in the denotative as well as connotative meaning of English terms allows for the projection of personal wishful thinking into the advertising message (cf. Bohmann 1996, 185; Kellerhals 2008, 86). English is, for example, used in the form of amorphous plastic words ("Plastikwörter" [151]). This term was coined by Pörksen (1988) to refer to (pseudo-)scientific terms that are perceived as prestigious and have become popular in everyday language. This means, terms like *Management* have lost their concrete denotation and acquired vague meanings, while being connoted with scientificity, reliability and profoundness (Janich 2013, 170f.). Such "fuzzy meanings" (Cook 2001, 42) [152] increase the possibility of appealing to readers by being associated with language specific values such as internationalism, modernity and youthfulness (Kellerhals 2008, 80) and "education, modernity [...], invention, cosmo-

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[149] My translation: 'The special characteristic of Anglo-American terms is their own ability to be manipulated. They always mean what their user wants them to express. This implies that the foreign word is only furnished with connotations that are in line with the copy writer's aims.'

[150] My translation: 'A foreign element does not activate well-known concepts, situations or procedures, but exists outside of these structures and therefore leaves a lot of leeway for assigning meaning.'

[151] For more information on the similar concepts of "Hochwertwörter" (i.e. high-value words) and "Schlüsselwörter" (i.e. key words) which date back to Ruth Römer (1980, 99) and have been used since to describe two sets of lexical items that occur frequently in advertisements, the reader is referred to Janich (2013, 169ff.).

[152] It has to be pointed out that in contrast to classic categories, cognitive categories always have fuzzy edges, because they are not defined by a set of distinct features but are organised according to similarity, which can be interpreted as the degree of overlap to a prototypical category member (cf. Altleitner 2007, 50).

politanism, wealth, and power" (Onysko 2007, 321). These affective meanings correspond to the preference for using Anglicisms in discourse on "current lifestyle, trends, (modern) sports, economics, and computer and communication technology" (Onysko 2007, 321), areas which include many Anglicisms for denotative reasons.

Since semantic openness does not impede comprehension, vague English elements do not elicit negative responses due to a lack of understanding (Kellerhals 2008, 176). However, in advertising, language can lose its informational content to such an extent that words become empty husks (called "Worthülsen" by Bohmann 1996, 215). Nevertheless, such terms, which Bohmann found to be particularly common in ads for cosmetics and beauty products, can still function as vehicles for affective meaning (Bohmann 1996, 215). Whether these terms elicit only positive reactions is open for debate, however. Elsen, for example, assumes that such meaningless English elements can confuse and put off potential consumers (Elsen 2008, 92).

5.3. Comprehension of English elements in advertisements

> In advertising research, objective comprehension is normally conceptualized as the grasping or extracting of prespecifiable meanings from the message; typically these meanings are considered given (i.e., intrinsic to or directly implied by the message) and intended by the advertiser.

> (Mick 1992, 411)

It thus follows that comprehension is perceived as unidirectional, and meaning is viewed as being correctly derived from the message that is decoded by the reader (cf. Mick 1992, 411). Such a view starkly contrasts with the prevalent view in semiotics that emphasises the role of readers in the creation of meaning. In multimodal advertisements, the process of 'making-sense', concerns several modes that have been established as interacting to form meaning. The interactive aspect of comprehension results from the principal of relevance, according to which only those meaning-carrying aspects (i.e. signs) that are relevant to the current state of processing are drawn on (Bucher 2011, 149ff.) [153]. Hence, meanings are not simply added but systematically

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[153] Bucher proposes a structure of multimodal action which he bases on the results obtained by eye-tracking studies (2011).

linked in a non-linear fashion so that the individual elements are contextualised (2011, 149).

> Die interaktionale Struktur multimodalen Verstehens besteht darin, dass für jedes der einzelnen Elemente in einem Kommunikationsraum die jeweils spezifischen Ebenen der Erschließung durchlaufen werden um so schrittweise das Verständnis systematisch zu erweitern. Eine Systematisierung der einzelnen Deutungsschritte kann dabei aus den modusspezifischen Aspekten des Verstehens der einzelnen sinntragenden Einheiten eines multimodalen Angebotes abgeleitet werden. [154]

> (Bucher 2011, 150)

A model of this systematic understanding of multimodal offers (i.e. print ads) has to account for the mode-specific aspects involved in the comprehension of every single meaning-carrying unit in each individual step of interpretation. In order for the information of different modes to be linked, certain "edit points" (Leeuwen 2005, 219-247) need to exist. "Diese Kodeverknüpfungen sind aber nicht allein inhaltlicher-konzeptueller Natur, die Kodes müssen sich auch in formal-syntaktischer und funktional-pragmatischer Hinsicht sinnvoll ineinanderfügen" (Stöckl 2012, 252) [155].

There are different levels of meaning and understanding in multimodal advertisements, comprehension of individual (linguistic, pictorial, typographic/ concerning layout) signs on the micro-level, and comprehension of the general advertising message on the macro-level constitute the two extremes. Since the focus here is not on how the different modes interact to form meaning, but on the meaning differences that result from the use of English elements, it has to suffice to note that comprehension is a multi-level process that involves the comprehension of text as well as context (cf. Bucher 2011, 150). In the following, the comprehension of textual elements is the focus.

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[154] My translation: 'The interactive structure of multimodal comprehension consists of every single element in a communicative sphere having to undergo its own specific stages of deduction in order to extend comprehension step by step systematically. Mode-specific aspects in the understanding of single meaning-carrying units in a multimodal offer can serve as a basis for deducing a systematisation of the individual steps of interpretation.'

[155] Note that Stöckl uses the term "Kode" to refer to modes, and *not* linguistic codes, i.e. languages. My translation: 'These links between [modes] are not only of a denotative-conceptual nature; the modes also have to be meaningfully interrelated as to formal-syntactic and functional-pragmatic aspects.'

Comprehensibility [156] and comprehension of advertising texts depend on the recipient and the advertising message respectively. Concerning semantic aspects of advertising texts, comprehensibility is increased when words are frequently used and well-known, belong to the recipients' mother tongue, form part of common speech, denote concrete entities and are short (Schierl 2001, 169). Since these prerequisites for comprehensibility are well known by advertisers and vague meaning was previously described as a favourable feature of English elements, it remains unclear whether advertisers intend English elements to be understood by readers or not. The factors that determine readers' comprehension of English elements in advertisements are outlined in the following discussion.

5.3.1. Comprehension - intended by advertisers or not?

Störiko (1995, 451) argues that it is not necessary to comprehend the actual denotative content of foreign elements to understand the advertising message. Instead, foreign elements in advertising always lie between two extremes, intended unintelligibility and comprehensibility, whereby comprehensibility allows for the impact of denotation, and unintelligibility promotes connotations. Between the two extreme poles there is always the realm of half or partial understanding (Störiko 1995, 453) [157]. Further, she remarks that as advertisements do not depend on foreign elements, their comprehension cannot be the main reason for their use. Bratschi concludes that comprehensibility is not a condition for the use of foreign elements in advertising, because their actual function can sometimes consist of intended incomprehensibility (Bratschi 2005, 143). From a pragmatic perspective, foreign elements can be regarded as comprehended when they are recognised as a signal of foreignness. Therefore, the connotative meaning of foreignness is the actual message and the conceptual contents become secondary (Bratschi

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[156] Readability and comprehensibility of advertising texts are not of immediate relevance to the aims of this thesis. Therefore, the reader is directed to chapter 5 "Verstehbarkeit" in Schierl 2001 (p. 160-188) for a detailed description of the factors influencing an advertising message's comprehensibility. It suffices to note here that along with the aspects of context, cohesion and coherence, the structure or design of a text and its syntax determine how easy or difficult it is to understand a text (cf. Schierl 2001, 175ff.; Kupper 2007, 279).

[157] Original wording: "Fremdsprachiges in der Werbung bewegt sich ständig in der Polarität zwischen angestrebter Unverständlichkeit und Verständlichkeit. Unverständliches fördert die Konnotationen, Verständliches wirkt als Denotation. Dazwischen befindet sich immer ein Bereich des Halb- oder Teilverständlichen."

2005, 52). In this case, the affective value of a lexeme outweighs its informational value, and therefore the need for comprehension (Kupper 2007, 286) [158]. Altleitner points out that partial understanding leaves room for connotations and is deliberately employed in advertising (2007, 15).

> Der Werbeeffekt basiert zum Teil darauf, dass ein dem Sprach-gebrauch des Empfängers fremdes Wort von diesem nicht genau verstanden wird und somit viel Raum für Konnotationen und Assoziationen lässt. [159]

(Altleitner, 2007, 15).

A positive effect of English in advertising, whether it is easy or difficult to comprehend is widely taken for granted (cf. Hornikx 2010, 174). Many researchers believe in a higher efficacy of foreign words for upvaluing products, but the actual effect of English elements on recipients remains unconsidered (cf. Altleitner, 2007, 16), just like the consequences of a lack of understanding. Hornikx et al. (2010) found that Dutch consumers preferred English slogans over their Dutch equivalents when they were easy to comprehend, however, when the English slogans were difficult to understand there was no preference for either Dutch or English (2010, 181). This challenges a purely symbolic take on English elements. Moreover, their findings suggest that "the perception people have of the difficulty of an English slogan may be more important for their appreciation of the English slogan than their actual ability to paraphrase the slogan" (Hornikx et al. 2010, 183). Hsu (2008, 180) finds that English mixing is immensely popular in Taiwan even with monolingual Chinese speakers, while Gerritsen et al. find that appreciation of the use of English increased with better comprehension, even though "[t]he subjects' attitudes toward the use of English are certainly not very positive, not even among the young subjects, who appreciate it considerably more than the older subjects" (2008, 28). These findings led to the following research questions:

- ▸ What role does the comprehension of English elements play in evaluations?
- ▸ Do attitudes towards the use of English influence evaluations?

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[158] It is sometimes argued (especially by those who oppose the use of Anglicisms) that the comprehension of each word in the advertising message is essential for a positive impact of the ad. However, advertising psychologists know of the low chances of print advertisements being attended to long enough to be processed on a deeper level (i.e. read). Therefore, comprehension of textual aspects should be considered secondary to primary emotional responses.

[159] My translation: 'The advertising effect depends partly on the fact that a word which is foreign in the language use of the receiver is not exactly understood and thus leaves a lot of room for connotations and associations.'

In interviews with advertisement copy writers and professional advertisers, Wetzler studies their motivation for using Anglicisms in ads and found that the comprehensibility of the advertising message is a very important criterion in addition to generally having to sound good ("guten Klang") (Wetzler 2006, 296f.). When deciding on whether comprehension is essential, advertisers consider the communicative aim of the ad, which can for example be: selling a product, achieving a positive brand image, emphasising attractiveness or uniqueness, but also creating confusion instead of informing in order to attract attention and increase recall. In addition to the type of product, the most important aspect that determines the need for comprehension is the target group (Wetzler 2006, 297). Wetzler finds a striking discrepancy between believing and knowing. Advertisers usually rely on what they believe to be common knowledge and assume the target group understands English elements, but they hardly ever test their assumptions on the target group (Wetzler 2006, 303f.). Moreover, Stöckl (2011, 6) finds that advertisers rely on experience-based knowledge, intuition and creativity, but hardly ever consult empirically derived theory. Marinel Gerritsen and her colleagues analyse country-specific differences in the quantitative use of English in product advertisements featured in the glossy magazine *ELLE* in Germany and four other European countries (Gerritsen et al. 2007a). They argue that English "is intended to be comprehended by the readers of ads", because "if advertisers believe that their potential target group will have difficulty in understanding a message presented to them in English, then they will be unlikely to use it" (Gerritsen et al. 2007a, 294). This assumption seems to be supported by the results, which indicate that the percentage of unassimilated English words used in advertisements is rather low and that advertiser seem to have a preference for using borrowings (Gerritsen et al. 2007a, 308).

Despite advertiser's stated aim to ensure comprehension, the first decade of the millennium was characterised by an extreme use of English slogans in Germany. Studies conducted by the market researcher institute Endmark in 2003, 2006, 2009 have demonstrated that German consumers have difficulties understanding English slogans. For example, *SHIFT_expectations* (Nissan) was only interpreted correctly by 15% of the participants and generated translations like "Schalte deine Erwartungen einen Gang runter" (Endmark AG 2013). When a corporate claim is believed to tell the consumers to 'dial their expectations down a notch', the communicative aim of the advertisement has utterly failed. It

was found that a lack of comprehension leads to a more negative evaluation of English elements in regards to their informational content as well as their appreciation (cf. Kellerhals 2008, 176; Wetzler 2006, 321). 'Whereas for example an easily comprehensible anglicism like *Handy* [mobile phone] or *Internet* is rated as simple ["*einfach*"] and "*informativ*" in addition to natural ["*natürlich*"] or even as necessary ["*notwendig*"], borrowings that are difficult to comprehend are considered complicated ["*kompliziert*"] or confusing ["*verwirrend*"], as well as artificial ["*künstlich*"] exaggerated ["*übertrieben*"] or even redundant ["*überflüssig*"]' (Wetzler 2006, 321, my translation, italics in original). Such research results have possibly been acknowledged by advertisers, too, a study conducted by Slogans.de (i.e. Hahn and Wermuth 2011) observed a trend towards more English slogans which goes hand in hand with a trend towards shorter and more easily comprehensible slogans.

> Bereits etablierte internationale Slogans wie „Just do it" (Nike), „Connecting people" (Nokia) oder „Think different" (Apple) zeigen, dass sich insbesondere durch den Einsatz allgemein gebräuchlicher Wörter und Wendungen das Risiko einer Fehlinterpretation minimieren lässt. Ebenso ist die Beschränkung auf möglichst wenige Wörter [...] oft hilfreich, um die globale Verständlichkeit eines Slogans zu erhöhen. [160]

(Hahn and Wermuth 2011, 8).

5.3.2. Predictors of comprehension

Factors that influence a reader's comprehension of advertising texts can be of a psychological as well as a socio-cultural nature. The former consists of two classes, namely cognitive and affective-emotional aspects, and the latter can be subdivided into intercultural aspects that result from the surrounding (national) culture and intracultural aspects that differ between social classes, groups, and situations in life (Schierl 2001, 161ff.). Affective-emotional aspects include attitudes (to the medium, author, or advertising communication as such), interest, the level of activation, assumptions about the degree of difficulty, and situational aspects such as time (Schierl 2001, 166). Cognitive psychological aspects include the recipients' intellectual capacity, level of education, prior

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[160] My translation: 'Already established international slogans like „Just do it" (Nike), „Connecting people" (Nokia) or „Think different" (Apple) demonstrate that especially by employing commonly used words and phrases the risk of a misinterpretation can be reduced. Likewise, it is often helpful to restrict the use of English to as few words as possible in order to increase the global comprehensibility of a slogan.'

knowledge and linguistic abilities (2001, 165). These cognitive features have been of most interest to linguists analysing the comprehension of foreign elements.

Fink (1975) was among the first to analyse the reception and comprehension of Anglicisms in Germany. He found that in addition to the level of education, age also determined comprehension, with an increase in age coinciding with a decrease in understanding. In 1980 Viereck concluded that there is a considerable difference between knowing, understanding and using Anglicisms. "Es besteht ein deutlicher Unterschied zwischen Kenntnis, Verständnis und Gebrauch der ausgewählten Anglizismen" (Viereck 1980, 278). Advertisers seemed to be aware of this discrepancy, because Störiko (1995) finds what she calls the use of "Basis-Englisch" (i.e. basic English) in advertisements. Basic English includes loans, simple words and phrases learned abroad on business or vacation trips, formulae used in ritual situations, and forms that are remembered from English language teaching in school (Störiko 1995, 94). Referring to Viereck, Bohmann reasons that by 1996 the foreign language skills of Germans had improved, but the discrepancy between knowing and using foreign languages still existed (Bohmann 1996, 259). In a more recent study on the use of English elements in advertisements of the Deutsche Telekom conducted by Wetzler in 2006, on average 68% of all tested Anglicisms were understood correctly. However, she finds large discrepancies between Anglicisms used in everyday language and Anglicisms that form part of the technical language of telecommunication [161]   (Wetzler 2006, 321). Regression analysis revealed that the best predictor for comprehension of English elements is the duration of English education (years of attending English classes in school), followed by gender, age, and education. Generally, participants who: had attended English lessons for more than three years, were male (i.e. men were found to have a better understanding of technology and technical terms), and were between 26 and 45 years of age were better at comprehending the English terms analysed in that study. While participants with a low level of education (Hauptschule) comprehended significantly less Anglicisms (Wetzler 2006, 322f.). In addition to these predicting variables, Kupper discovered a significant influence of English skills, place of residence, dialect (i.e. regiolect), and media intake (i.e. TV, magazines) (Kupper

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[161] While the pseudo-anglicism *Handy* was understood correctly by all participants, *by call* was only comprehended by very few (Wetzler 2006, 321).

2007, 369). In general, results indicate a twofold nature of English elements, which is summarised by Bohmann as follows: "Der Anglizismus kann ein Verständigungs-träger im Hinblick auf Fachsprachen und Internationalismen sein. Ebenso kann er eine Verständigungsbarriere im bildungsspezifischen und sozialkulturellen Umfeld des Englischunkundigen hervorrufen" [162] (Bohmann 1996, 269).

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[162] My translation: 'An anglicism can support comprehension with respect to technical languages and international terms. Likewise, it can create a comprehension barrier in the specific educational and socio-cultural context of the English-illiterate.'

6. Functions of English in advertising

6.1. Range of functions

The functions of English differ between product types or services, target groups, communicational intent, and advertising strategy and might thus appear to be too divers to allow for generalisations on the effects of English. Nevertheless, researchers have found considerable similarities in the functional range of certain linguistic features in advertisements. The functions of English were first studied in the context of the German press (Galinsky 1963; Pfitzner 1978; Yang 1990), where especially Pfitzner repeatedly noted similarities between the language of the press and advertising. Notably, the early work of Galinsky has served as a point of reference for many researchers. In "Stylistic Aspects of Linguistic Borrowing" Galinsky focused on stylistic reasons for what he referred to as "*occasional* borrowings of language-conscious *individuals*" (Galinsky 1963, 72, emphasis in original), and what corresponds to the definition of language mixing applied in this paper. He summarised the following functions:

> (1) providing national American color of settings, actions, and characters, (2) establishing or enhancing precision, (3) offering or facilitating intentional disguise, (4) effecting brevity to the point of terseness, (5) producing vividness, often by way of metaphor, (6) conveying tone, its gamut ranging from humorous playfulness to sneering parody on America and 'Americanized' Germany, (7) creating or increasing variation of expression.
>
> (Galinsky 1963,71)

44 years later, Kupper finds in her comparison of 60 publications on the reasons for using Anglicisms (2007, 137-142) that Galinsky's seven stylistic reasons are among the most cited (2007, 142f.). The following general functions of Anglicisms are mentioned repeatedly (in order of the most to the least frequently named): language economy, expressiveness, linguistic disguise, denotation of new entities and terms, increased power of expression, advertising effectiveness, creating culture-specific colour, prestige, greater precision, internationality, language as a means of social identification, linguistic snobbism, creation of a specific tone, scientific/academic and technical languages, linguistic vividness, reasons of sound, involuntary

interference, fashionable language, and other reasons [163] . Kupper then distinguishes between non-stylistic economic-pragmatic motives and stylistic-pragmatic motives that are intended to have an effect (Kupper 2007, 146), but remarks herself that English elements can rarely be said to fulfil purely stylistic functions [164]. Instead, English elements (especially technical terms) often fill a lexical gap, or are used for precision (cf. Bohmann 1996, 196; Wetzler 2006, 324; Altleitner 2007, 158; Elsen 2008, 91). Very importantly, they tend to be shorter than their German equivalents and can thus achieve maximum linguistic efficiency with minimal verbal effort (Yang 1990, 123), i.e. language economy (cf. Bohmann 1996, 190; Wetzler 2006, 324; Altleitner 2007, 155; Elsen 2008, 91). Nevertheless, English elements are often used despite the existence of German equivalents for reasons of variation in expression (cf. Bohmann 1996, 200; Altleitner 2007, 159; Onysko 2007, 321; Elsen 2008, 92). In addition, they are employed for literary and psycholinguistic functions such as intertextual references (Onysko 2007, 321), bilingual puns (Onysko 2007, 321; Bhatia and Ritchie 2006, 538; Chen 2006, 468), rhyming, reduplication, and humour, which are powerful tools for improving product recall (Bhatia and Ritchie 2006, 538). Moreover, English elements can also fulfil the psychological function of attention-getting when they are positioned in visually exposed structural components like headers (cf. Bhatia 1992, 206; Bratschi 2005, 142; Bhatia and Ritchie 2006, 528; Onsyko 2007, 321). This effect is, however, best achieved through creative language use (cf. Schiemichen 2005, 86; Elsen 2008, 92; Bohmann 1996, 200f.), because English is too widely used to function as an eye-catcher, or as Bratschi points out: "Je bekannter eine fremde Sprache oder Kultur ist, desto schwächer ist in der Regel ihre aufmerksamkeitssteuernde Wirkung" [165] (Bratschi 2005, 173).

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[163] Original terms in Kupper (2007, 137-142): "Sprachökonomie", "Expressivität", "sprachliche Verhüllung und Verschleierung", "Benennung neuer Sachen und Begriffe", "Ausdruckserweiterung", "Werbewirksamkeit", "Erzeugung kulturspezifischen Kolorits", "Prestige", "größere Präzision", "Internationalität", "Sprache als soziales Erkennungs-zeichen", "sprachlicher Snobismus", "Erzeugung eines bestimmten Tons", "Wissenschafts- und Fachsprachen", "sprachliche Lebendigkeit", "klangliche Gründe", "unwillkürliche Interferenz", "Modesprache", "sonstige Gründe".

[164] In 2001 only 12% of all Anglicisms in German advertisements printed in the magazine *Spiegel* could be categorised as primarily stylistically motivated. For the large majority of 88%, (language) economical or pragmatic reasons for use (i.e. standardisation of product names/slogans/ads in international companies, integral part of German lexicon, neologism on its way to integration) cannot be ruled out (Kupper 2007, 353).

[165] My translation: 'The more familiar a foreign language or culture is, the weaker its attention-directing effect is in general.'

As a rule, several functions are at work at the same time and can hardly be separated from each other (cf. Bohmann 1996, 203; Kelly-Holmes 2005, 25; Elsen 2008, 92). Nevertheless, only one set of functions is relevant for the effects of English on German consumers, namely, 'affective-ideological' functions. Affective-ideological functions are assumed to be of three types: ethno-cultural, socio-indexical and socio-psychological. These correspond to what others have for example termed stylistic-pragmatic (Kupper 2007) or material (Elsen 2008) functions, "ideeller Zusatznutzen" (Schiemichen 2005, 395), or simply connotations (Onysko 2007). In this thesis the term 'connotation' has been reserved for the affective value of a single word and shall not be extended to refer to the affective value of the English language as a whole. The following subchapter explains how connotations and the general affective-ideological value of the English language are linked, i.e. how English elements have come to mean more than the sum of their denotations, connotations and associations.

6.2. From connotations of English elements to language effects

Störiko relies on Barthes (1972, 107ff.) secondary semiotic system of the myth to explain the indexical character of foreign elements in advertising (Störiko 1995, 495). Every semiological system consists of the signifier, the signified and the sign. When the sign, i.e. the associative whole of a concept and an image, becomes reduced to the function of a signifier, a myth is created. This is incredibly helpful in understanding how the meaning of an English element can be more than the sum of its denotation, connotations and associations. In the first order semiological system, English elements can be seen as signs that correspond to meanings (i.e. they relate to concepts which are linked to wider knowledge structures). In the second order semiological system (depicted in Figure 5), the English elements and their meanings become the signifier (i.e. form) and therefore the mythological sign. This sign then comprises all situationally plausible functions of the English language in advertisements (Störiko 1995, 496). What counts as plausible depends on the context, for example, on the product on offer, the target group addressed, the communicative aim of the advertisement and is thus a result of intertextuality

(i.e. the previous use and functions of English in advertisements and the German language in general).


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                ┌─────────────┬─────────────┐
    Language  ┌ │ 1. Signifier │ 2. Signified │
           ┌  │ ├─────────────┴─────────────┤──────────────────┐
    MYTH   ┤  │ │        3. Sign            │                  │
           └  │ │      I. SIGNIFIER         │   II. SIGNIFIED   │
                ├───────────────────────────┴──────────────────┤
                │              III. SIGN                        │
                └───────────────────────────────────────────────┘
```
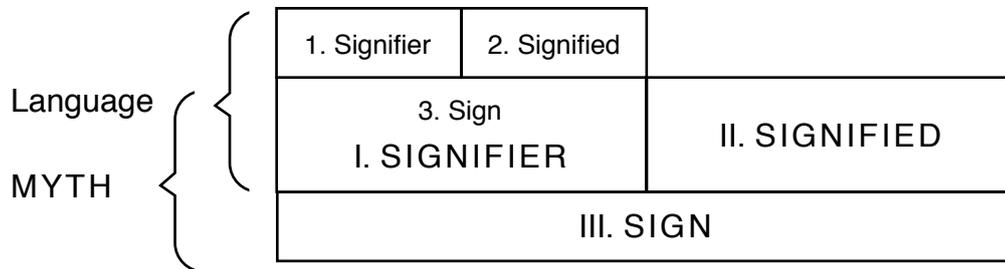
Figure 5. Second-order semiological system as depicted in Barthes (1972, 113).

This can explain why very different English elements with their very different meanings can have the same functions and effects in ads [166]. Such effects can concern specific aspects (i.e. product quality) or the general 'tonality' of an advertisement. "Ein wichtiger Begriff in der Beurteilung konkreter Werbung ist ‚Tonalität'. Damit bezeichnet man den komplexen Stileindruck oder die ganzheitliche Anmutung und Ansprache eines Werbekommunikats" [167] (Stöckl 2011, 16). The first aim of the advertising effect study is to test whether English elements affect the tonality, i.e. the appeal, of an advertisement.

6.3. Ethno-cultural stereotypes vs effects of international English

How a specific language acquires a symbolic value can be explained using the concept of ethno-cultural stereotyping presented by Haarmann (1989, 4-21). Ethno-cultural stereotypes are the images that an ethnic group holds about other ethnic groups, their culture (including their language) and their country. "Stereotyping seems to be one of the basic techniques of

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[166] For an overview of how the study of advertising has profited from semiology, the reader is referred to Leiss et al. (1990, 198-205).

[167] My translation: 'In analysing specific advertisements, an important term is 'tonality', which denotes the complex stylistic impression or the holistic appeal and address of an advertising text.'

commercial settings, and it is in commercials where ethno-cultural as well as social stereotypes find their strongest backing" (Haarmann 1989, 12) [168]. It has to be pointed out that foreignness does not have any objective reality but is solely a socially mediated category of interpretation (Bratschi 2005, 178; cf. also Kelly-Holmes 2005, 18). Foreignness is always perceived from one's own perspective and constructed as oppositional to the self, through this the self and the other (i.e. the foreign) determine each other (Bratschi 2005, 178). For this reason, stereotypes form an integral part of a group's identity. Ingrid Piller summarises the reasons for using another language in advertising as follows, "the point of using a foreign language is more often to associate the product with the ethno-cultural stereotype about the country where the language is spoken, and whether such a relationship exists in actual fact [...] is of minor importance" (Piller 2003, 175). Identity construction on the part of the sender as well as the receiver is a central feature of multilingual texts that address an imagined public (Sebba 2012b, 11). Or, as Mahootian puts it more generally: "In short, language constructs, indexes and reveals identity" (2012, 193).

However, English constitutes a special case, as "its use in multilingual advertising is, not exclusively but very often, *not* motivated by a desire to allude to the perceived stereotypical characteristics of countries with which the language is associated" (Kelly-Holmes 2005, 67, emphasis added; also cf. Schiemichen 2005, 395ff.). Rather, English functions as a non-national, international, global language and can allude to much more than national stereotypes of English speaking countries. It is in this prestige function that English plays the special role of indicating modernity and is thus unique compared to other languages (cf. Haarmann 1989, 15ff.). This is not to imply that English is not suitable for fulfilling ethno-cultural functions when it is used to indicate a product's country of origin (cf. Störiko 1995, 454f.). English alludes to values associated with the American way of life which have become fundamental values of consumer cultures around the globe [169] through similarities in consumers' lifestyles and corresponding value systems (cf. Piller 2001, 163). It is therefore impossible to draw a line between the effects of English as a national (i.e. American) and non-national (i.e. international) language. Piller (2001, 164) points out that "[t]here is a tradition in German

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[168] For a more detailed discussion of stereotypes used in advertising the reader is referred to Schiemichen (2005, 36ff.).

[169] This especially applies to the western world.

though that sees American as the prototypical nonnational country [...]". Affective values like the belief in progress, activism and individualism, juvenileness and the appreciation of materialistic goods (which are all traditional American values) as well as the newer primary motif of hedonism can thus be viewed as part of the national stereotype of American English that has long attained international status (cf. Schütte 1996, 100).

6.4. Socio-indexical functions

> [I]ndexicality emphasis that English is selected as a hint (a pointer, or index) to the linguistic practices of certain groups or places that are deemed important for the interpretation of the on-going discourse. The power of 'English on top' to cue frames of interpretation is therefore not just an outcome of conventional associations of English, but results from a link to specific social contexts and practices established by (a particular style of) English [...]
>
> (Androutsopoulos 2011, 24)

On the one hand English elements' cultural foreignness is supposed to draw attention and entertain (ethno-cultural stereotype), while on the other hand English elements can evoke a sense of belonging and being one of the crowd (socio-cultural stereotypes) (Störiko 1995, 458). Such ethno- and socio-cultural values are not always easy to separate, and it has to be mentioned that not all instances of English language use are ethno- or socio-culturally relevant (cf. Kellerhals 2008, 55). "English as *the* code for international communication carries prestige, and code-alternations between German and English signals that the user is not only capable of choosing his national code, but also the international code" (Koll-Stobbe 1994, 206, emphasis in original). In the same vein, Piller argues that English is used to index a social rather than an ethno-cultural stereotype in communicating values associated with a social group. "The implied reader of bilingual advertisements is not a national citizen but a transnational consumer [...] characterized by internationalism, future orientation, success, elitism, as well as youth and a proclivity to enjoy the good things in life" (Piller 2001, 180). Gerritsen et al. (2007a, 309) found that in their corpus of advertisements from ELLE magazines in Spain, France, Belgium, the Netherlands and Germany as little as 0.9 % of advertisements used English elements to allude to British or American ethno-cultural aspects.

Linguistic fashions are essentially created by the psychological motivation of groups or individuals in an attempt to explicitly set themselves apart from others (social differentiation), and because of the human tendency to imitate the behaviour of other group members (social acceptance) (Bohmann 1996, 220 and 224). Within groups, norms of (linguistic) behaviour, attitudes, appearance and consumption apply. Social groups define themselves through sanctioning these norms and rewarding members with prestige for the consumption of accepted status symbols (Bohmann 1996, 221). In resorting to a prestigious code, language users can show that they identify with the related values [170] and through this a foreign language receives a socio-symbolic value (Bratschi 2005, 91 and 172; Pfitzner 1978, 33f.). It is the declared aim of advertising to attribute prestige value to products by suggesting that through their consumption the desired social status can be obtained. Once the ideal of a certain target group is known (e.g young, educated, successful and cosmopolitan) English elements can be used to convey the feeling of having cracked the secret code (cf. Bohmann 1996, 222; Störiko 1995, 457). It does not matter whether such proclaimed prestige groups actually exist, advertising has the power to construct idealistic (i.e. unrealistic) prestige groups that then often become role models for consumers (cf. Bohmann 1996, 224).

> Die sprachliche Identifikation des Produktes mit der Bezuggruppe ist ein wichtiger Aspekt einer durchdachten Werbekampage. Ist diese Gruppe "jung", "erfolgreich", und "schön", ist sie "international", "cosmopolisitsch", "weltoffen" und "gebildet", dann darf auch der Anglizismus, sei es als Fachsprache, Geheimcode oder Imageträger nicht fehlen. [171]

(Bohmann 1996, 225)

Especially the age of a target group was found to determine the use of English elements. Bohmann concludes that in magazines for target groups under the age of 35 advertisements with English elements occur more frequently than in magazines for older or more divers target groups (1996, 267). In advertisements for diet products (advertised with *light* in German) English is positioned as the language of sports, development and youth (Störiko 1995, 524). Baumgart finds that the English language is the most

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[170] The use of foreign linguistic elements to impress other members of one's social group is referred to as *language display* by Eastman and Stein (1993) (cf. Kellerhals 2008, 33).

[171] My translation: 'The linguistic identification of a product with the target group is an important aspect of a well conceived advertising campaign. If this group is young, successful, and beautiful, or if it is international, cosmopolitan, open-minded and educated, an Anglicism should not be missing, whether as part of a technical language, a secret code or an image carrier.'

frequent language resorted to in product names, especially for cigarettes and cosmetics or products aimed at young adults and teenagers (1992, 116f.). For younger target groups English can be used to increase the acceptance of the advertising message simply because it is popular; this also holds true for sports ads (Kellerhals 2008, 85). Kellerhals further concludes that English is either used to index a successful, dynamic business elite or a young, attractive hedonistic society. Piller finds that the implied readers of bilingual advertisements in Germany are often constructed as "someone who wants to shape the future" (Piller 2001, 165). Next to future orientation and international orientation, also success orientation, sophistication and fun orientation are common values promoted through English (Piller 2001, 163-171).

From these socio-symbolic functions of English corresponding socio-indexical effects on the perception, appeal and evaluation of the implied target group can be derived and tested. In the advertising effectiveness study of this paper participants are asked to rate how much they believe the following adjectives or descriptions apply to the target group of the advertisement: dynamic, educated, successful, earns good money, multilingual, open-minded, has a wide range of interests, sociable, fun-oriented, humorous, trendy, cool, and sporty. While these traits concern the perception of the target group, some underlying domains such as future-orientation, cosmopolitanism and hedonism can be equally applied to the evaluation of the advertisement, product, company or brand.

6.5. Socio-psychological functions

Bhatia (2001) analysed advertisements around the globe and identified seven unique dimensions that only the English language is able to allude to and which he calls 'threshold triggers'. These represent the core concepts English is associated with before numerous corresponding 'proximity zones' which describe the symbolic value in specific advertisements become available (Bhatia and Ritchie 2006, 537). Table 1 presents these socio-psychological functions of English.

Table 1

Socio-psychological Functions of English in Advertising Around the World

Threshold Trigger	Proximity Zones
Future and innovation	vision, foresightedness, advancement, betterment
American or English culture	limited Westernisation, Christianity, values such as independence, freedom, modernisation
Internationalism and standardisation	certification, standards of measure, authenticity
Rationality and objectivity	scientific appeal, problem solving
Competence	efficiency, organisation, quality, safety, protection, functionality, pragmatism
Sophistication	elegance, style, rarity
Physical fitness	self-improvement

Note. This table was adapted from Bhatia and Ritchie (2006, 537). Changes concern BrE orthography only (italics in original).

As these functions are summarised from countries of the outer and expanding circles all over the world not all of them (e.g. Westernisation [172], Christianity) are relevant to Germany. Social values and a common cultural ground are keys for successful advertising communication, so the question arises of whether the functions of English can be compared internationally and interculturally (cf. Bhatia 1992, 213). In general, advertising aims to address highly segmented target groups individually, therefore generalisation seems to be counterintuitive for all but the most standardised target group (Janich 2013, 285), the so-called "Global Kids" (Janich 2013, 28). Nevertheless, it has been shown that the functions of English elements are very similar across advertisements in different national markets. Even if associations of individual English elements differ, the overall connotations of the international, global English language are essentially the same, because advertisers can increasingly rely on similar worlds of experience (Janich 2013, 285). Therefore, the functions of English are compared and summarised from studies conducted on print advertising all over the world, e.g. Germany (Fink 1977; Störiko 1995; Bohmann 1996; Schütte 1996; Piller 2001; 2006; Bratschi 2005; Kelly-Holmes

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[172] This is a central function of English in Russia (cf. Ustinova 2008, 97).

2005; Schiemichen 2005; Wetzler 2006; Altleitner 2007; Kupper 2007; Elsen 2008; Androutsopoulos 2011), German-speaking Switzerland (Kellerhals 2008), the Netherlands (Van Meurs et al. 2007), France (Martin 1998; 2007), Sweden (Garcia-Yeste 2013), Russia (Ustinova 2006; 2008), Japan (Haarmann 1989; Takashi 1990), and Taiwan (Chen 2006; Hsu 2008). However, only those functions that correspond to the effects tested in this thesis are outlined in the following. These are symbolic values that were found to occur across many product domains and for different types of language contact phenomena: internationalism, modernity and innovation, hedonism, trendiness, quality and prestige, and integrity. As the effects of English are strongly linked, these values cannot be treated completely separately. Socio-psychological effects concern the perception, appeal and evaluation of the advertisement, product, brand and company. The following research question summarises the central aim of this thesis:

▸ Does the use of English mixing in German advertisements have an effect on consumers?

6.5.1. Internationalism, cosmopolitanism

When internationally operating brands advertise in Germany, they can adapt advertisements to the German market or advertise in the world language English (cf. Hornikx and O'Keefe 2011, 154f.). Advertisers should be interested in using advertisements internationally for economic reasons (even Störiko notes this in 1995, 455), yet, the priorities in the value systems of societies differ, and so many advertisements are localised (Hornikx and O'Keefe 2011, 155). Even though most advertisements are designed for the German market, many use English elements through product names and slogans which often remain in English to communicate that the company is engaged in global commerce (cf. Kelly-Holmes 2005, 77). Since English is the language of international communication, companies can position themselves as international through the use of English elements regardless of their actual country of origin and their sales areas (Störiko 1995, 456). For example, the German TV channel ProSieben uses the slogan *WE LOVE TO ENTERTAIN YOU* which is often spoken by international stars in the advertisements. This

international appeal is typically achieved through English slogans, sentences or body copies rather than through English mixing in one component (cf. Hsu 2008, 160). However, national German companies which use English elements to achieve the air of a global player may lose their credibility (Kupper 2007, 386). As a global language English has acquired the affective value of cosmopolitanism (cf. Haarmann 1989), because it counts as the "language needed for economic success" (Kelly-Holmes 2005, 95). Since cosmopolitan appeal and international orientation serve as indicators of quality, products can be up-valued by using English elements (cf. Störiko 1995, 458; Bratschi 2005, 168). Nevertheless, this comes at the price of authenticity as brands become more and more exchangeable (Friedrichsen 2010, 621). Augustyn describes the prestigious cosmopolitan value of English in a disillusioning tone:

> It is in the hope of participating in an imaginary community outside of our limited territory that we wish to make *global connections* instead of *Auslandsgespräche*, or buy tickets at the *ticket counter* rather than a *Fahrkartenschalter*. While the English in phone bills and at train stations expresses where we *could go*, the German only reminds us of where *we are*.
>
> (Augustyn 2004, 310, emphasis in original)

6.5.2. Modernity

Together with internationalism modernity is one of the most widely acknowledged unique functions of the English language (cf. Haarmann 1989; Cheshire and Moser 1994; Störiko 1995; Schütte 1996; Schiemichen 2005; Chen 2006, 476; Kellerhals 2008; Ustinova 2008). It is best viewed as a result of the present dominance of English in the world and is thus closely linked to cosmopolitanism, innovation and future orientation. Kellerhals notes that some English slogans do not evoke more connotations than a general modernity (Kellerhals 2008, 58). Wetzler found that individual Anglicisms were indeed perceived as modern, especially those that pose comprehension difficulty (Wetzler 2006, 322). However, younger participants, who are familiar with English elements and regard many Anglicisms as an integral part of the German language, perceived certain loans as out-dated (Wetzler 2006, 323). English technical terms that are widely used in everyday language (e.g. *online*) were evaluated as necessary and positive, but other well-comprehended pseudo-anglicisms (e.g. *Handy*, *E-mailen*) were reported by participants to have no

effect at all (Wetzler 2006, 322). Achieving modernity is second to advertisers, who believe that it is more important for the target group to understand the message and be addressed appropriately. Therefore, modernity was not the primary motivation for using Anglicisms (Wetzler 2006, 300f.). Even though English is able to render the connotations of modernity and trendiness (cf. Störiko 1995, 458), German terms can sound much more contemporary than overly used English elements (cf. Wetzler 2006, 300f.).

6.5.3. Hedonism

Generally, foreign languages in advertisements appear to be entertaining (cf. Störiko 1995, 458). English elements frequently occur in advertisements that convey freedom and individuality or humour and irony (cf. Schiemichen 2005, 395), and that relate to hedonistic values and corresponding target group traits (Schütte 1996, 361). Schütte reports an increasing pluralism of values from 1960 to 1996, with hedonistic values (e.g. individuality, enjoying leisure time, high standards, modernity, success, life style and trend consciousness) [173] gaining in importance and traditional values (i.e. family and frugality) being less frequently mentioned (Schütte 1996, 357). Leiss et al. already noted an increasing emphasis on leisure values in 1990 (1990, 271). The American way of life is closely linked to leisure-time enjoyment, individuality, and progress, and thus bundles the key values of a large and well-funded target group (Schütte 1996, 358). Hedonistic values are advertised using English elements with little integration into the German language system (Schütte 1996, 357). This corresponds to Hsu's finding for Taiwan that intra-sentential English mixing corresponds to a "young people's culture trend of 'mix and match'", having fun and taking things easy (Hsu 2008, 159). Such connotations of English elements in advertising appears to be a universal as it applies to Russia, too, where Ustinova demonstrated that advertisers promote corresponding values such as love, sexuality, romance and popularity (Ustinova 2008, 96f.). Altleitner concludes that English elements have the connotations of entertaining, easy, attractive, pleasant, young and enjoyment and pleasure ("Vergnügen und Genuss") (2007, 175). Garcia-Yeste mentions that the second

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[173]   The original wording is "'Individualität', 'Freizeitgenuß', 'gehobene Ansprüche', 'Modernität', 'Erfolg', 'Lifestyle', und 'Trendbewussstsein'".

most common semantic field activated by English elements is adventure and the sense of the "*untamed*" (2013, 76f., emphasis in the original).

6.5.4. English as 'cool', 'trendy' and 'hip'

The linguistic fetish of 'coolness' is linked to the cosmopolitan fetish through associations with popular culture, which is strongly influenced by the Anglophone world (Kelly-Holmes 2005, 73). This use of English addresses a somehow self-selecting target group that has a more than basic proficiency in English and is able to understand wordplays and bilingual puns (Kelly-Holmes 2005, 73f.). Yet, Haarmann remarks that "it is the optical effect alone which evokes the impression of fashionable speech behavior" in advertising (1989, 17). Especially when their are no obvious advantages of buying a product and there is no unique selling proposition to convince consumers, the positive emotional appeal of an advertisement, in this case coolness, is the key element (Schiemichen 2005, 468). German names seem to be considered less likely to promote the connotation of cool, trendy, or hip than English ones, as for example the name *stylefruits* for a German online fashion portal indicates. Ustinova (2008, 83) remarks for Russia: "Though English used in advertisements is targeted at representatives of different social groups and genders, a vivid tendency exists to increase English usage in the advertisements for the youth" Examples for messages that advertisers implicitly convey to the young generation are: "Be Risky, Change Your Life, Expect the Unexpected", "Make Yourself Unique", "Have [a] Zest for Life" (2008, 94ff.), which relate to values like individualism, high self-esteem, and success in the public arena (2008, 97).

6.5.5. General attractiveness

Connected to this function of English is the attractiveness associated with health and fitness (cf. Schiemichen 2005, 395) so that English has attained the affective values of "having a sexy body" (Hsu 2008, 174), self-improvement (cf. Bhatia and Ritchie 2006, 537; Hsu 2008, 174) and beauty (cf. Elsen 2008, 92). These again are concepts linked to juvenility (cf. Schütte 1996, 326ff.),

dynamics, liveliness (cf. Hsu 2008, 174) and effectiveness (cf. Garcia-Yeste 2013, 77). A general attractiveness of foreign languages ascribes them the connotations of being elegant, having lifestyle, showing taste, radiating fascination, (Störiko 1995, 458), and seeming promising (Fink 1977). Garcia-Yeste finds that effectiveness, which describes a 'more' of some positive attribute (i.e. taste, sound, etc.) is the most common value that is attributed to products through English (2013, 77). Thus English gives products the air of expensiveness, selectiveness, high prestige (Ustinova 2008, 97) and distinctiveness (Garcia-Yeste 2013, 77) and target groups the appeal of elitism, sophistication and success (Piller 2001, 163 and 180).

In addition to appearing more cosmopolitan, exclusive, emotional, interesting and dynamic, advertisements with English elements have a strong experiential profile (Schütte 1996, 360). This means that experience-oriented, lifestyle-based advertising evokes positive emotions in alluding to higher (in contrast to basic) needs such as health, aesthetics and luxury, thus charging the product with an additional value. Especially advertisements for indulgence and leisure-time related offers are ascribed such experiential values (cf. Schütte 1996, 140). The aim of advertising is to associated product and brands with a unique image and to tie consumers to a corresponding specific emotion experience, this is the essence of what is known as emotional product differentiation (cf. Schütte 1996, 143).

6.6. Interdependencies of functions and advertisement content

"Generally speaking, researchers agree that English in advertising is interpreted as a symbol of modernization, efficiency, and/or reliability" (Martin 1998, 163). Especially advertisements for business and educational services rely on English to convey competence and integrity (Bhatia 1992, 206). However, these functions of English do not seem to apply to Germany, as Altleitner (2007, 141) finds that English is not the language of choice for advertising to the elderly. While products for a teenage target group and the domains of fashion, body care, drink and tobacco, and technology are advertised with many English elements, products for older people like pain killers, tonics, coffee, spectacles, coin collections and folk music are advertised

in German. Interestingly, also products that promote safety and security, such as building loan contracts and electricity, were found to be advertised mainly in German (Altleitner 2007, 141)[174]. These findings are supported by Elsen, who also observes that hardly any English elements occur in advertisements that target older consumers, promote finance products (2008, 93), or address traditional values like, for example, family and safety (Elsen 2008, 105). Consequently, the English language does not seem to be suited for expressing security and credibility in Germany.

However, Kellerhals argues that in the case of slogans credibility is largely irrelevant, because in the state of low involvement the right hemisphere which is responsible for processing pictures and emotions is more active, and therefore, most slogans are processed on a level where rational factors, such as comprehension of English elements or credibility are not important (cf. Kellerhals 2008, 27f.). Whether the credibility of an advertisement and the reliability of a brand are affected by English elements is analysed in the second study of this thesis. What is also tested by including a mock advertisement for a travel insurance, is whether the use of English elements has a negative effects on the evaluation of products that rely on trustworthiness.

The effects of English vary with product types (Cheshire und Moser 1994, 459; Haarmann 1989, 99ff; Janich 2013, 161; Kellerhals 2008, 29; Störiko 1995, 434), because different industries rely on different values in their advertisements (cf. Schütte 1996, 59; Elsen 2008, 91; Kellerhals 2008, 43). Kellerhals analyses the connotative functions of English in print ads for each product family. In her corpus of 274 different slogans, she finds the following percentages of English slogans for each category: In the product category of financial institutions, i.e. banks and insurances, the number of English slogans was found to be only 13%, which is less than the average of 32% (Kellerhals 2008, 59). Those institutions generally use fewer slogans in their highly professionally designed ads, which exhibit a clear separation of visual and textual elements, use mainly cold colours and aesthetic pictures. The values transported by images of water and mountains are freedom, outdoor activity

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[174] Paraphrased from the original wording: "Dabei werden Produkte, die eher für ältere Menschen gedacht sind, wie z.B. Schmerzmittel, Stärkungsmittel, Kaffee, Brillen, Münzsammlungen und Volksmusik, sowie Produkte, die auf Sicherheit und Seriosität setzen, wie z.B. Bausparverträge und Strom, auf Deutsch beworben, während Hersteller, die sich vor allem an Jugendliche wenden oder Produkte aus den Bereichen Mode und Körperpflege, Genussmittel und Technik anbieten, dies mit sehr viel Anglizismen tun"(Altleitner 2007, 141).

and being in touch with nature, health and adventure, but also being well-off and enjoying time off from a successful, demanding professional life (Kellerhals 2008, 63f.). The use of English is in general restricted to single terms and names, as banks attempt to distance themselves from the hedonistic values of the 'fun society' (i.e. "Spaßwelt") (Kellerhals 2008, 83). The tourism industry is another relevant sector of the advertising study in this thesis. According to Kellerhals, advertisements in this domain also employ comparatively few English slogans (22%), and use English as a marker of quality and exclusiveness (Kellerhals 2008, 71). Whether the use of English elements has an impact on the perceived quality of a hotel chain is included in the testing. It is also of interest whether the effects of English elements can be witnessed across different product categories and styles of advertisements:

▸ Is there evidence for general effects of English elements that apply to different product types and styles of advertisements?

Now that the theoretical framework of the following empirical studies has been laid out, the guiding research questions are concisely listed in the next chapter. While the theory-based questions have already been stated, some additional questions are added to gain insights into whether and how some frequent characteristics of the survey's participants, i.e. a linguistic education (question 8.), frequent contact with the English language (18.) or socio-demographic variables (9.) relate to their answers.

7. Research questions

7.1. Research questions on perception of English items

1. Is a *Duden* entry a good predictor of how English words are perceived?

2. Can frequency of occurrence in a German corpus predict how English words are perceived?

3. Does neighbourhood size have an effect on language decisions?

4. Do graphemic cues play a role in the perception of words?

5. Does the level of English skills influence language decisions?

6. Does it matter for language decisions if German is not a mother tongue?

7. Does contact with the English language influence language decisions?

8. Does linguistic training influence language decisions?

9. Do variables like a) sex, b) age and c) education play a role?

10. Which variables are best suited for predicting the perception of words of English origin?

7.2. Research questions on effects of English elements in ads

11. Does the use of English mixing in German advertisements have an effect on consumers?

12. Does the use of English elements have an effect on consumers' evaluations of the advertisement's emotional appeal?

13. Are there statistically significant differences in the evaluation of the product when it is advertised with English elements and when it is advertised in German?

14. Is the perception of the brand (i.e. brand personality) influenced by English elements?

15. Do participants' judgements of the advertisement's implied target group differ between the language versions of the same advertisement?

16. What role does the comprehension of English elements play in evaluations?

17. Do attitudes towards the use of English influence evaluations?

18. Does contact with the English language have an influence on evaluations?

19. Which factors (i.e. level of education, attitudes towards the use of English, comprehension, English skills, contact with the English language, age, gender) influence participants' judgements?

20. Is there evidence for general effects of English elements that apply to different product types and styles of advertisements?

III. Empirical part

In order to learn about the factors that can best predict the perception of a visually presented word as English (or German), a quantitative empirical study on language decision was conducted. The findings of this pre-study were then used to design mock advertisements for the second study, which analysed the advertising effects of English mixing.

8. Study on language decision in visual word recognition

8.1. Research design

8.1.1. Stimuli

To ensure that the stimuli words used in this study are relevant to the topic of advertising, a list of more than 300 single words of English origin that appeared in any structural component of German print advertisements was compiled. This list was supplemented with all the words of English origin that appeared in the Slogometer® ranking of the 100 most frequent words in German advertising [175]. These words were analysed and sorted according to their frequency in German, their number of (cross-linguistic) orthographic neighbours in German, the presence of graphemic language cues, word length measured in graphemes, morphological complexity, and presence in the German *Duden* dictionary. Frequency was determined in the German COSMAS II corpus [176]. COSMAS II frequency classes, which sort all words into categories starting with class 0 for the most frequent German word *der* and a reducing frequency of $1/2^N$ for each higher class, were used to indicate the relative

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[175] Slogometer® word lists of all the years since the beginning of measurement, of 2011/12, and since 2000 were considered in this study, whereby all the words which could not be categorised as either being of German or of English origin (e.g. internationalisms like *GEN-ERATION*) were excluded.

[176] Thereby only three word forms were included in the search query: 1) all capitals (e.g. *TREND*), 2) capital letter in initial position (e.g. *Trend*) and 3) all in small letters (e.g. *trend*). This was necessary to exclude acronyms (usually trade names) and to gain a more accurate measure of the frequency with which individual items of English origin occur in a German corpus.

frequency of a word [177]. As this computation indicates how often a word with an English origin occurs in a corpus of German texts, frequency is generally low compared to genuinely German words. Frequency was not equally distributed for the list of words collected from print advertisements, with class 13 containing the most words and classes 6 containing only one word. The stimuli words were categorised into three groups: words in frequency classes 8 to 11 were coded as high frequency words (with on average 20 occurrences per one million words [178]), words in class 12 to 14 as medium frequency words (5,3 pmw), and words in classes 15 to 18 as low frequency words (0.8 pmw), all words in other classes were excluded from further analysis. An additional measure was to check whether words had an entry in the *Duden*. For a word to be included in the German dictionary *Duden Universalwörterbuch*, it has to reoccur in different text types over a certain amount of time and be evaluated as important by a committee. The *Duden* entry combines frequency of occurrence, persistence and relevance. In the next step, neighbourhood size was measured using the Cross-Linguistic Easy-Access Resource for Phonological and Orthographic Neighborhood Densities (CLEARPOND) [179]. The search was conducted using the EnglishPOND and specified the neighbourhood type as orthographic cross-linguistic neighbours in German, whereby neighbours of all frequencies reached through the substitution, addition or deletion of one letter were counted. Stimuli words were further sorted into three neighbourhood sizes: words without neighbours, words with few (2 to 6) neighbours, and words with many (8 to 13) neighbours. All other words were excluded. Word length was restricted to a minimum of four graphemes and a maximum of seven graphemes, even though this meant excluding several words that are very frequently used in German advertisements (e.g. *YOU*, *WE*, *BE*, *NEW*). This was necessary to ensure that a word could not be categorised as German or English on the basis of its orthographic length, based on the knowledge that English has more short words than German [180]. Moreover, all

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[177] This means that class 1 consists of words which occur 1/2 as frequently as words in class 0, class 2 contains words which occur 1/4 as frequently as words in class 0, and so on.

[178] Per million words is abbreviated as pmw in the following. These frequency measures are approximated mean values based on COSMAS II frequency counts for stimuli words in the respective categories.

[179] CLEARPOND uses SUBTLEX frequency measures for English and German. For more information on SUBTLEX-DE please see Brysbaert et al. (2011) and for additional information on SUBTLEX-US see Brysbaert and New (2009).

[180] While the German language contains many multi-syllabic words, English consists of many short lexemes with one or two syllables only (cf. Yang 1990, 123-124).

words were sorted into categories on the basis of graphemic language cues. Words without graphemic language cues do not include graphemes or grapheme clusters which are more frequent or exclusive in words of English origin. Words with strong cues contain graphemes or grapheme clusters in positions, where German words cannot feature them, e.g. *-W*, *-Y*, *-GH* in a final position, *SH-*, *SN-*, *WH-* in an initial position. Words with vague cues contain graphemes and grapheme clusters, which are more frequent in English but not impossible in German, such as *C-* and *WR-* in word initial position, or *-GH-*, *-OO-*, *-EA-*, *-OA-*, *-OU-*, which can only occur in compounds in German, but do not indicate syllable or lexemes borders in English. It is assumed that these graphemic cues are used to categorise words as English or German even before word recognition is completed. As some combinations of variable attributions are very rare, the word list was supplemented by stimuli from a non-advertising context. However, as this study uses real words as stimuli, certain limitations apply. For example, English words with strong cues rarely have many German neighbours. The downside of compiling context relevant word lists from scratch is that such gaps are hard to fill. For the final data collection a total of 90 stimulus words was used, 66 of which were words of English origin and 24 were of German origin [181]. Table A1 (in the appendix) gives an overview of the test words and provides information on graphemic cues, frequency in COSMAS II, neighbourhood size, and whether words have a *Duden* entry.

Including German words as fillers is necessary to ensure that both languages remain activated throughout the experiment. Fillers were selected on the basis of their similarity to English words. Some fillers contained German graphemic cues that occur more frequently in German than in English words, like *-SCH*, *-CK-*, *-EI-*,*-H-*, and *-Z-*. Others contained misleading graphemic cues, like *-EE-* and *-OO-* which occur in German and English alike. These items were included to avoid that all words with grapheme clusters consisting of two equal vowels could be categorised as English. In addition, the fillers *CREMIG* and *LINEAL* were included to test whether participants could be misled into judging the words as English when English cues occurred in a German word of non-English origin. Next to cues, the number of cross-linguistic neighbours in English was analysed for all fillers. Here, the fillers were grouped into different categories than the test words, whereby one to five neighbours was considered

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[181] All words which were not of English origin formed part of the German lexicon and were included in the *Duden*, yet they were not necessarily of genuinely German origin (e.g. *LINEAL*).

to be a small neighbourhood and six to fifteen a large one. Table A2 (in the appendix) lists all German fillers and gives information on their cues and neighbourhood sizes.

8.1.2. Procedure

The 90 stimuli were presented in five blocks of 18 words and had to be judged as either German or English by the participants. Following the language decision task, participants answered a number of sociodemographic questions (concerning gender, age, education, occupation) and questions on their language use (concerning mother tongue, German skills, English skills, and contact with English). To test whether the duration of stimulus presentation had an influence on language decision, two designs were chosen:

1. Participants were shown a keynote-presentation, which showed each stimulus word for 100 ms and gave participants 4 seconds to indicate their language choice on a questionnaire before the next stimulus word followed [182]. Between each block of 18 words there was a 20 second break indicated by a count down.
2. Participants took part in an online survey[183] which asked them to indicate their language choice by pressing a key and did not limit the presentation time of the stimuli.

Measuring reaction times in an online survey is technically possible but the obtained data are not valid for empirical studies, because such measurements are always distorted by other processes [184]. For this reason setting 1) included a time-restriction of stimulus presentation that tests the influence of formal similarity in word form under time pressure. This time pressure for word

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[182] As this data collection did not take place in a laboratory setting and the stimuli were presented using a projector in a lecture hall, presentation times may deviate slightly from 100 ms for technical reasons. Since all data were collected in one run to ensure the same conditions for all participants, this confounding variable was kept constant.

[183] The online-study was conducted in June 2013 using SoSci Survey (Leiner, 2013).

[184] Eichstaedt (2002), for example, discusses methods for obtaining reliable reaction times in web-based experiments which demand multiple simultaneous measurements. This is not feasible without considerable technical and programming effort and therefore not cost-efficient, especially, because what matters for visual word recognition in advertising is not the time it takes to make a language decision, but the result of that decision (i.e. is a presented item perceived as English?).

recognition is believed to best reflect the natural situation of encountering an advertisement when flicking through or reading a magazine.

8.2. Sample

14 participants whose primary residence was not in Germany were excluded from further analysis [185]. In the first condition (group 1) 51 people participated, 38 (74.5%) women and 13 (25.5%) men. The online survey (group 2) generated 282 participants, 192 (68.1%) women and 90 (31.9%) men. Of all 333 participants 69.1% ($N = 230$) were female and 30.9% ($N = 103$) male. The age of the participants is summarised in categories and presented in Figure 6.
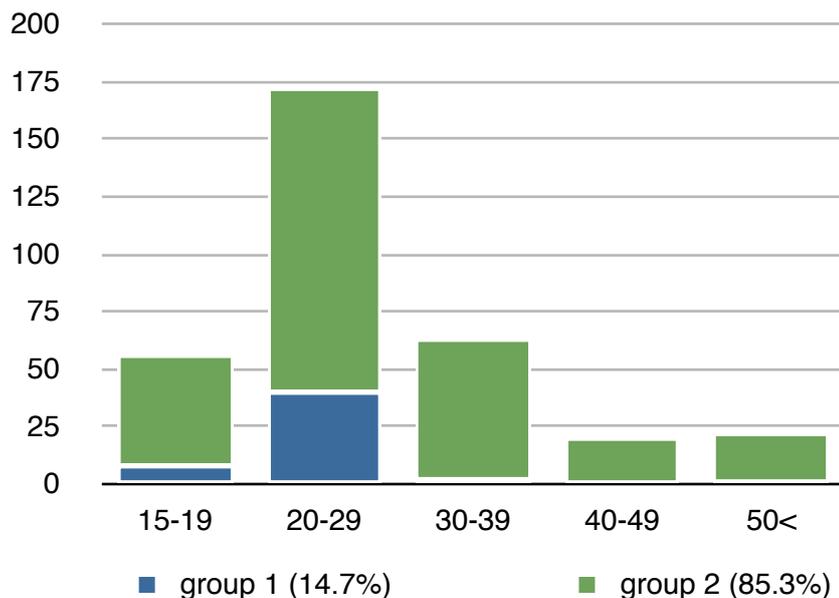
Figure 6. Age of participants in the two groups.

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[185] This was done because of the advertising effectiveness study and requires a short digression: The German speech community consists of at least three national cultures. While English serves similar functions all over the world, a foreign culture is always perceived in contrast to one's own national culture, it follows that some differences in the (social and cultural) stereotypes are to be expected within these three national cultures. Moreover, these cultures differ in their affinity to foreign languages and it is possible that unequally occurring additional languages in Swiss advertising (i.e. Italian and French) and neighbouring national languages in Austrian advertising (Hungarian) influence the expectations and hence evaluations of advertisements (cf. Bratschi 2005, 179 & 183).

The sample is obviously biased, because the group of 20 to 29 year-olds is overrepresented, especially in group 1. Regarding the educational level, three categories were established, the first category 'no Abitur' summarises all degrees of comparatively lower educational levels. The second category ('(Fach-)Abitur') also includes the large group of university students, and the third group contains participants with a university degree. Table 2 gives an overview of the educational level in the two groups.

Table 2

Educational Level of Participants

	Group 1		Group 2	
Educational Level	Frequency	Percent	Frequency	Percent
No Abitur	0	0	48	17%
(Fach-)Abitur	49	96.1%	93	33%
University degree	2	3.9%	141	50%
Total	51	100%	282	100%

Note. Educational level: The category 'no Abitur' includes all participants without A-levels or a high school diploma, i.e. pupils, participants with 'Hauptschulabschluss' or 'Volksschulabschluss', 'Realschulabschluss' or 'Mittlere Reife', and those with 'Abschluss Polytechnische Oberschule 10. Klasse (8. Klasse vor 1965)'.

The fact that all data for group 1 were collected in a university lecture explains why all except two participants belong to the same educational level, they are all university students. In the second group the highest educational level is the most frequent, which is by no means representative for the general public and has to be kept in mind when interpreting the data. Another demographic variable that was measured is occupation. While this was initially done to get a general idea of who the participants recruited via these channels were, it turned out that 32.4% of all participants had been linguistically trained [186]. German and English skills as well as contact with English are believed to be crucial to the language decision task in this study and are therefore measured by a set of variables. Participants were asked for their mother tongue(s), whereby German and English are of special interest. Table 3 summarises the results for both groups in three categories.

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[186] It seems likely that linguistic training, which one receives when becoming a language teacher, increases linguistic awareness. This could influence the way language decisions are made.

Table 3

Mother Tongue(s) of Participants

	Group 1		Group 2	
Mother Tongue German	Frequency	Percent	Frequency	Percent
German is not a MT	7	13.7%	22	7.8%
German is the only MT	38	74.5%	243	86.2%
German is one MT	6	11.8%	17	6.0%
Total	51	100%	282	100%
Mother Tongue English	Frequency	Percent	Frequency	Percent
English is not a MT	45	88.2%	268	95.0%
English is the only MT	3	5.9%	5	1.8%
English is one MT	3	5.9%	9	3.2%
Total	51	1	282	100%

Note. Mother tongues other than German and English are not represented in this table, but were assessed in the questionnaire.

In both groups the majority speaks German as a mother tongue and English is only rarely a first language. This percentage is larger in group 1, but in absolute numbers only 20 participant in the whole sample speak English as a mother tongue. Collecting information on English skills in a survey is always prone to be inaccurate, especially when it is based on self-report. For a more accurate measurement, the survey contained three questions on English skills. At first, participants evaluated their language skills on a four point scale from no skills, basic skills, good skills to very good skills [187]. Then, they were asked for how many years they had received English instruction or taken English classes. Here, three clear categories emerged from the collected data, 0-9 years, 10-15, and more than 15 years. Moreover, participants were asked to check which of seven descriptions best represented their proficiency in English. These descriptions were based on the global scale common reference levels of the Common European Framework of Reference for Languages (CEFR) (Council

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[187] The paper and pencil version of the questionnaire used in group 1 included the option "English is my mother tongue". In the online survey for group 2 this question was skipped by a filter for participants, who had reported English to be their only mother tongue. In those five cases the highest proficiency level was assumed.

of Europe, 24) and served as guidelines for self evaluation in this study [188]. The years of English instruction proved to correlate very poorly with the other two variables and therefore this variable was excluded from further analysis. The remaining two variables featured a high convergent validity and were used to calculate the final index variable for English skills [189] . Table 4 presents the results for each group.

Table 4

English Skills of Participants

	Group 1		Group 2	
English Skills	Frequency	Percent	Frequency	Percent
No skills	0	0%	0	0
Basic skills	0	0%	19	6.7%
Good skills	15	29.4%	82	29.1%
Very good skills	30	58.8%	167	59.2%
Mother tongue	6	11.8%	14	5.0%
Total	51	100%	282	100%

Note. English skills were calculated from two variables of self-reported English proficiency.

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[188] Original wording of items:

0: *Sie können englische Ausdrücke verstehen, wenn diese auch im Deutschen geläufig sind.*

A1: *Sie können alltägliche Ausdrücke und ganz einfache Sätze verstehen und verwenden. Sie können sagen wie Sie heißen und wo Sie wohnen.*

A2: *Sie können sich in einfachen, routinemäßigen Situationen (z.B. beim Einkaufen) mit einfachen Worten verständigen.*

B1: *Sie können im privaten und beruflichen Bereich über Themen des Alltags sprechen und sich über persönliche Erfahrungen und Ereignisse austauschen.*

B2: *Sie können sich beruflich und privat problemlos mit englischen Muttersprachler/innen in der Standardsprache verständigen.*

C1: *Sie können sich spontan, sehr fließend und differenziert ausdrücken und nahezu alles, was Sie hören oder lesen, mühelos verstehen.*

C2: *Sie können sich fließend im gesellschaftlichen und privaten Leben verständigen und sich strukturiert zu komplexen Sachverhalten äußern.*

The first description which translates as "You are able to comprehend English expressions, if they are also commonly used in the German language" does not represent a proficiency level of the CEFR, but was included as an option for participants without English language skills.

[189] For all participants without English as their only mother tongue, the remaining six CEFR-based descriptions were categorised into three categories according to the underlying proficiency levels (A1 & A2 = 2, B1 & B2 = 3, C1 & C2 = 4). Then the rounded mean of both self-report variables was calculated.

None of the participants reported to have no English skills and only 19 people in group 2 have basic English skills. 29% of the participants in both groups report having good English skills and the most common category is very good English skills with 59% in both groups. This means that the sample is biased towards high and very high proficiency levels and cannot be regarded as representative of the German population. German skills were measured by the same five point self-report scale as English skills, ranging from no skills to mother tongue, as Table 5 shows.

Table 5

German Skills of Participants

	Group 1		Group 2	
German Skills	Frequency	Percent	Frequency	Percent
No skills	0	0	0	0
Basic skills	1	2.0%	1	4.0%
Good skills	2	3.9%	3	1.1%
Very good skills	4	7.8%	17	6.0%
Mother tongue	44	86.3%	261	92.6%
Total	51	100%	282	100%

Note. German skills were self-reported by participants.

Not surprisingly, nobody without German language skills participated in the survey and only two people had no more than basic skills. The number of participants with good German skills was also very low in both groups and no more than 21 people in total reported having very good skills. All the remaining participants spoke German as a mother tongue. Another language-related variable is contact with English, which was operationalised by six types of contact situations. The situations included having English lessons, reading English texts, having a conversation in English, watching English films or videos, writing in English, and travelling to English-speaking countries. They were measured on a five point scale ranging from never to very often. As the variable 'having English lessons' proved to be an unreliable measure of contact

with English, it was excluded from the index [190]. Table 6 summarises the general amount of contact with the English language (for reasons of brevity called "English contact" in the following) for both groups.

Table 6

Participants' Overall Contact with English

	Group 1		Group 2	
English Contact	Frequency	Percent	Frequency	Percent
Never	0	0	9	3.2%
Rarely	3	5.9%	46	16.3%
Occasionally	20	39.2%	88	31.2%
Often	19	37.3%	98	34.8%
Very often	9	17.6%	41	14.5%
Total	51	100%	282	100%

Note. English contact is an index calculated for different variables assessed in the questionnaire.

In group 2 the amount of contact with English is fairly evenly distributed, group 1 includes less participants with little contact to English. The mean values of the variable English contact also indicate this difference: for group 1 the mean is 3.67, for group 2 it is a little lower with 3.41. For visual word recognition the type of contact with English is important, too. Therefore, two further indices were computed to account for primarily visual contact on the one hand, as in reading and writing, and primarily auditive contact on the other, as in watching videos or films, having conversations and travelling to English speaking countries. Table 7 summarises the mean values of these index variables for each group.

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[190] This item correlated poorly with the English contact scale (corrected item-scale correlation of 0.274). Testing the internal consistence of the scale/question with Cronbach's alpha showed that excluding this item would give the highest value (Cronbach's alpha of 0.878). Of all other items a rounded mean value was computed to form the index variable.

Table 7

Mean Values of Participants' Visual and Auditive English Contact

	Group 1	Group 2
Type of English Contact	Mean	Mean
Reading and Writing	4.04	3.70
Videos, Conversation, Travel	3.31	3.11
Mean of Total English Contact	3.675	3.405

Note. English contact through reading and writing is regarded as primarily visual and English contact through watching videos or films, having conversations, and travelling is treated as primarily auditive.

Figure 7 shows that visual English contact is highest in both groups where most participants report to have this type of contact with the English language often or very often.
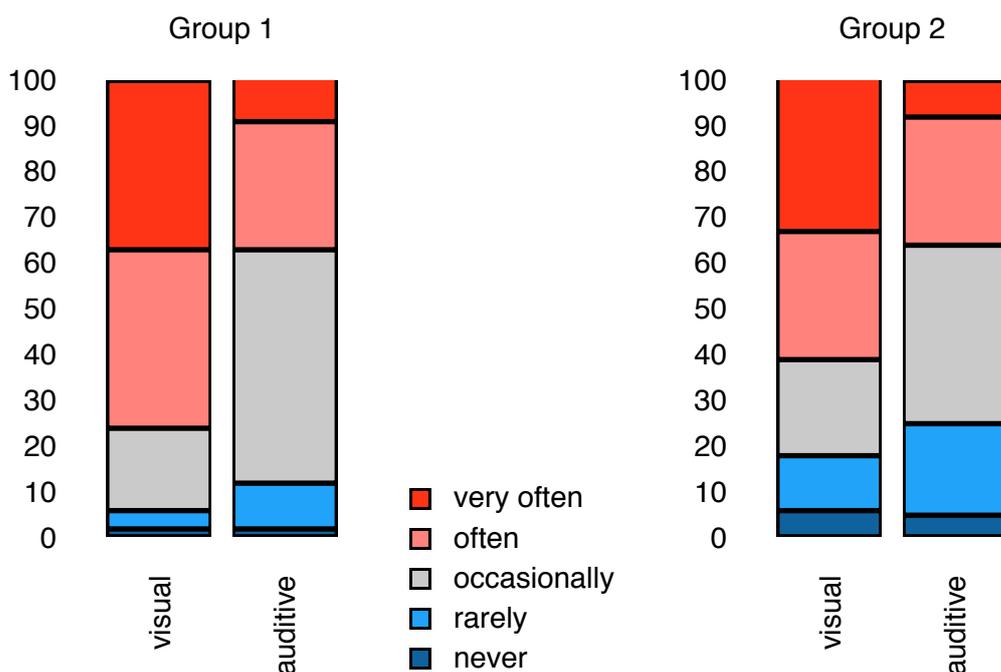
Figure 7. English contact for two groups on dimensions visual and auditive.

The two groups do not only differ with respect to the time of exposure to the stimuli. Especially the participants' age and educational level are differently distributed among the categories. Moreover, they are also of a very different sample size, therefore group one is compared to selected cases of group two in

the following. This subset of group 2 has a similar distribution of the previously described variables to make comparisons easier. Matching a subset of group 2 to the personal variables of group 1 eliminates variation in personal factors and enables focusing on word-related variables only [191]. The subset was carefully selected to achieve an equal [192] distribution of all assessed personal characteristics across the two groups as can be seen in Table 8 and Table 9.

Table 8

Distribution of Participants' Characteristics

	Group 1 (total of participants)	Subset of group 2 (total of participants)
Sex (male)	13	13
Sex (female)	38	38
Age (15-19 years)	8	5
Age (20-29 years)	40	43
Age (30-39 years)	2	3
Age (60-74 years)	1	0
Mother Tongue German (yes)	44	44
Mother Tongue German (no)	7	7
Mother Tongue English (yes)	6	5
Mother Tongue English (no)	45	46
German Skills (basic)	1	0
German Skills (good)	2	2
German Skills (very good)	4	5
German Skills (native-like)	44	44
English Skills (basic)	0	1
English Skills (good)	15	12
English Skills (very good)	30	34
English Skills (native-like)	6	4
Linguistically Trained (yes)	43	26

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[191] Whenever group 1 is compared to selected cases of group 2 in the following, the two groups are referred to as group 1 and subset of group 2, to remind the reader that not the whole sample of group 2 is used for analysis.

[192] Since this selection of participants occurred only after the collection of data, totally equal distributions of personal variables was not possible. However, a close match of independent variables related to the participants could be achieved.

Table 8

Distribution of Participants' Characteristics

	Group 1 (total of participants)	Subset of group 2 (total of participants)
Linguistically Trained (no)	8	25
Education (no Abitur)	0	0
Education ((Fach-)Abitur)	49	43
Education (University degree)	2	8

Note. Total numbers are reported, not percentages, because both sets contain 51 cases which enables an effortless comparison.

Table 9

Mean Values of Participants' English Contact

	Group 1	Subset of group 2
Mean of Total English Contact	3.67	3.61
Mean Visual English Contact	4.04	3.86
Mean Auditive English Contact	3.31	3.20

Note. English contact through reading and writing is regarded as primarily visual and English contact through watching videos or films, having conversations, and travelling is treated as primarily auditive.

8.3. Analysis, results and interpretation

To give a brief overview of the data the total number of German and English evaluations for each stimulus are presented with respect to the two groups in Table A3 (in the appendix). Group 1 and the subset of group 2 do not differ much in their language choices. Even without further analysis it is readily noticeable that in general words of English origin are evaluated as English and words of German origin are evaluated as German. Out of all 9,180 word evaluations (90 stimuli x 102 participants) in the two groups only 3.17% (291 language choices) do not coincide with the language of origin. These are not equally distributed among the two groups, however. In the subset of group 2 twice as many deviant decisions (154 + 39 = 193) were made than in group 1 (69 + 29 = 98). Table 10 presents these results.

Table 10

Overview of Language Choices for Stimuli

Language Decision	Group 1		Subset of group 2	
	German Stimuli	English Stimuli	German Stimuli	English Stimuli
German	1195	69	1185	154
English	29	3297	39	3212
Total	1224	3366	1224	3366

Note. Classifying a stimulus word as German does make further claims about its etymology, but it is used to indicate that the word is not of English origin.

It seems that in the subset of group 2 borrowings from English are more often evaluated as German than in group 1, where decisions are almost exclusively based on the origin of a word, regardless of its frequency in German (e.g. *TREND, TICKET, SNOB, PARTY*). Whether this first impression holds true, is examined with regression models which reveal the influence of different variables on language decision. Since the large majority of language decisions are based on the language from which a word originates, only deviant cases, where language decisions are not based on origin (i.e. when an English word is evaluated as German, or a German word is evaluated as English) are analysed in the following.

8.3.1. Predicting German Evaluations of Words of English Origin [193]

In the following analysis, only English stimuli words are examined (n = 3366 for each group). The dependant variable, language choice, is dichotomous and its categories are constructed to be mutually exclusive, i.e. stimuli were either evaluated as German or English. All independent variables are either categorical or continuous [194]. Independence of observations is assumed [195]. A binary logistic regression was performed to ascertain the effects of graphemic cues [196], frequency, orthographic neighbourhood size and *Duden* entry, on the likelihood that participants evaluate a stimulus word of English origin as German. The influence of neighbourhood size is of special interest here, because the two experimental groups only differ in the time the stimuli were presented to them. Group 1, which represents the time-restricted condition, had to make a language decision after seeing the stimulus for less than 1 second, and group 2 was allowed as much time as was needed to make a language choice. It is to be expected that time-restriction increases the number of decisions made on the basis of the total activation in each language node. Language nodes collect the activation of all individual words of one language which were activated because they share similarities in the (orthographic) word form with the stimulus. Similarity in word form is operationalised by orthographic neighbourhood size. Here, only cross-linguistic neighbours are of interest, because these could increase the chances of a 'wrong' language decision. Under time restrictions (as in group 1) the influence of neighbourhood size is hypothesised to be larger than in group 2, where it should not have any effect. For this reason the regression model was performed on group 1 and the subset of group 2 separately.

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[193] The statistical analyses follow the guidelines of Laerd Statistics (Lund and Lund 2013) and were partly advised by the StaBLab LMU.

[194] All continuous independent variables need to be in a linear relationship with the logit transformation of the dependent variable. If this assumption is not met, they have to be treated as categorical.

[195] It has to be assumed, however, that previous language decisions do influence successive ones. This cannot be avoided, but to counteract systematic sequence effects, the stimuli's order of appearance was partially randomised.

[196] Please note that in the final data set the variable 'cues' was constructed as binary and only differentiates between stimuli without English cues (i.e. those with no cues and those with German cues), and stimuli with English cues.

Table 11

Logistic Regression Analysis of German Evaluations in Group 1

Variable	B	*SD*	Wald	df	*p*	Exp(B)
(Intercept)	3.366	.272	153.345	1	< .001***	28.960
Frequency			10.026	2	.007**	
Frequency medium	-.602	.378	2.538	1	.111	0.548
Frequency high	.470	.285	2.724	1	.099	1.600
Neighbourhood			5.065	2	.079	
Neighbourhood small	-0.387	.250	2.399	1	.121	0.679
Neighbourhood large	-1.847	1.030	3.215	1	.073	0.158
With Duden entry	1.700	.405	17.624	1	< .001***	5.473
With Cues	-.290	.258	1.267	1	.260	.748

Note: Reference categories are words of English origin with a low frequency in the German COSMAS II corpus, words with no neighbours, no *Duden* entry, and without English orthographic cues. 95% Wald confidence intervals are reported in the text.

In the remainder of this thesis, statistical significance is indicated by the following significance codes: '*' means a significance level of .05 is reached, '**' indicates a significance level of .01 was obtained, and '***' is used to mark significance levels of .001 or lower. For group 1 the logistic regression model was statistically significant ($\chi2(6) = 51.757$, $p < .001***$). The Hosmer and Lemeshow Test is not statistically significant ($\chi2(8) = 8.249$, $p = .410$), indicating that the model is not a poor fit to the data. The model explained 8.4% (Nagelkerke R^2) [197] of the variance in language choice and correctly classified 98% of the cases [198]. Of the four predictor variables only two were statistically significant, namely frequency and *Duden* entry. Table 11 presents the results and lists the regression parameters, standard deviation, Wald-coefficient, degrees of freedom, and p-value. Moreover, the estimated multiplicative effect (Exp (B)) on the number of words of English origin that are evaluated as German is reported. Frequency in a German corpus indicated an overall significant effect (Wald $\chi2(2) = 10.026$, $p = .007**$). Yet, the direction of effect

[197] Nagelkerke's R-squared is a measure used to evaluate the amount of variance in the independent variable that can be explained by the predictors in the model.

[198] Please note, that the addition of the independent variables does not improve the overall prediction of cases into their observed categories of the dependent variable. It follows that the percentage accuracy in classification (PAC) is poor, sensitivity is 100 %, specificity 0%, positive predictive value 98.0%, and negative predictive value 0%.

is not uniform. Although not on the level of statistical significance set for this paper, stimuli of English origin with a medium frequency appear to be less likely to be evaluated as German than low frequency stimuli. However, as would be expected, highly frequent stimuli of English origin seem more likely to be rated German. The variable neighbourhood size just fails to reach the significance level of .05 (Wald $\chi 2$(2) = 5.065, p = .079). However, there appears to be a tendency for stimuli with more German neighbours to be less likely to be evaluated as German. Words of English origin which have a *Duden* entry were 5.473 times more likely to be evaluated as German than words which are not listed in the *Duden* (Wald $\chi 2$(1) = 17.624, $p <$ .005**, 95% CI 2.475 to 12.104). The model contains no evidence for an influence of orthographic cues on language decision.

For the subset of group 2 the logistic regression model was also statistically significant ($\chi 2$(6) = 94.649, p < .001***) [199]. The model explained 8.9% (Nagelkerke R^2) of the variance in language choice and correctly classified 95.4% of the cases [200]. Table 12 presents the results. Of the four predictor variables only one was statistically significant, namely *Duden* entry. It was found that the variable frequency just failed to reach statistical significance (Wald $\chi 2$(2) = 5.432, p = .066). Again not to the level of statistical significance, stimuli of English origin with a high frequency appear to be more likely to be judged German. Words of English origin which have a *Duden* entry were 7.460 times more likely to be evaluated as German than words which are not listed in the *Duden* (Wald $\chi 2$(1) = 46.398, $p <$ .005**, 95% CI 4.184 to 13.299). Neighbourhood size and orthographic cues do not seem to have any predictive power for language choices in this group.

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[199] However, the Hosmer-Lemeshow-Test indicated that the model had a poor fit ($\chi 2$(8) = 24.386, p = .002**).

[200] Again the addition of the independent variables does not improve the overall prediction of cases into their observed categories of the dependent variable. It follows that the percentage accuracy in classification (PAC) is poor.

Table 12

Logistic Regression Analysis of German Evaluations in Group 2

Variable	B	*SD*	Wald	df	*p*	Exp(B)
(Intercept)	2.756	.196	196.807	1	< .001***	15.739
Frequency			5.432	2	.066	
Frequency medium	-0.095	.229	.171	1	.679	0.909
Frequency high	0.343	.202	2.887	1	.089	1.409
Neighbourhood			1.974	2	.373	
Neighbourhood medium	0.002	.175	0.000	1	.989	1.002
Neighbourhood large	-0.618	.452	1.872	1	.171	0.539
With Duden entry	2.010	.295	46.398	1	< .001***	7.460
With Cues	-0.237	.178	1.770	1	.183	0.789

Note: Reference categories are words of English origin with a low frequency in the German COSMAS II corpus, words with no neighbours, words without *Duden* entry, and words without English orthographic cues. 95% Wald confidence intervals are reported in the text.

The only common significant influential variable in both groups is whether stimuli words have a *Duden* entry or not. In group 1 the estimated number of English words to be evaluated as German is 5.473 times as high when the word can be found in the *Duden* than when the word of English origin does not form part of the German lexicon (Wald $\chi 2(1)$ = 17.624, p < .005**, 95% CI 2.475 to 12.104). This effect is even larger in the subset of group 2, where the estimated number of words to be perceived as German is 7.460 times as high, for words in the *Duden* (Wald $\chi 2(1)$ = 46.398, p < .005**, 95% CI 4.184 to 13.299). Integration into the German lexicon appears to play a major role in this language decision task. Frequency alone cannot account for this effect, as it does not reach significance in all categories, however, highly frequent words of English origin seem to be more likely to be evaluated as German than words of low frequency. The influence of cues is not substantiated by this model. Neighbourhood size just fails to reach statistical significance in group 1, but does not come close to it in any category for the subset of group 2. When regarding the direction of influence in group 1 an interesting tendency becomes visible: when English stimuli have a small German neighbourhood (2 to 6 cross-linguistic orthographic neighbours) they are 1.473 times as likely to be evaluated as English than stimuli without German neighbours (Wald $\chi 2(1)$ = 2.399, p = .121, 95% CI 0.902 to 2.405). If English stimuli have many

German neighbours (8-13 cross-linguistic orthographic neighbours) the expected number of English evaluations is even 6.339 times that of the expected number for English evaluations for words without any German neighbours (Wald $\chi2(1)$ = 3.215, p < .073, 95% CI 0.842 to 47.722) [201]. This direction of the effect is contrary to what had to be expected from literature on visual word recognition, which implies that a large cross-linguistic neighbourhood can evoke a fast guess on the basis of word form and hence may result in an 'incorrect' language decision. One possible explanation is that participants deliberately avoided fast guesses, as they were fully concentrated on the task of word recognition and language decision and were eager not to make mistakes. In general, participants seem to have taken as little risk as possible by making safe decisions, based on the language of origin. While it is always correct to say that *VOTING* is an English word, it is disputable whether it is (or has become) a part of the German lexicon. Hence, evaluating it as English is the safer option which is always correct even if the participant feels that it might have become a German word, too. This interpretation is supported by the fact that in both groups the most deviant evaluations occur for the same words and only the total numbers differ. In general, participants in the subset of group 2 were less restrictive in their language decisions, i.e. they evaluated more words of English origin as German. It can be concluded that in both groups a *Duden* entry is a good predictor of language decisions.

8.3.2. Predicting English Evaluations of Words of German Origin

While the evaluation of an English word as German is assumed to be based on its integration into the German lexicon and can only be rated as more or less likely, the evaluation of a German word as English has to be counted as a wrong language choice in this study [202]. These mistakes are nevertheless interesting, because they can provide an insight into the role of word form and orthographic cues for language decision. In the following, all language decisions for German stimuli (n = 1,224) are analysed with regression models for both groups separately. Table 13 follows the same logic as the previous tables did.

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[201] These tendencies have to be treated with caution, because the number of stimuli with a large neighbourhood amounts to six only and so the results for this category should not be compared without qualification to the other categories.

[202] For example, the evaluation of *OFFER* as German by two participants is likely to be motivated by the visual similarity of the word form to German neighbours such as *Opfer*.

Table 13

Logistic Regression Analysis of English Evaluations in Group 1

Variable	B	SD	Wald	df	p	Exp(B)
(Intercept)	-5.074	.553	84.294	1	< .001***	.006
Neighbourhood			.207	2	.902	
Neighbourhood small	.093	.487	.037	1	.848	1.098
Neighbourhood large	-.114	.515	.049	1	.825	.892
With Cues	2.193	.517	18.004	1	< .001***	8.959

Note: Reference categories are: words of German origin with no cross-linguistic neighbours in the English language, and words without English orthographic cues. 95% Wald confidence intervals are reported in the text.

A logistic regression was performed to ascertain the effects of neighbourhood size and orthographic cues, on the chance that participants evaluate a German word which is not of English origin as English. For group 1 the logistic regression model was statistically significant ($\chi2(3) = 25.942$, $p < .001$***). The model explained 10.4% (Nagelkerke R^2) of the variance in language decision and correctly classified 97.6% of cases. Of the two predictor variables only one was statistically significant: cues (as shown in Table 13). German words with English orthographic cues had 8.959 times higher odds to be wrongly evaluated English than German stimuli without English cues (Wald $\chi2(1) = 18.004$, $p < .005$**, 95% CI 3.254 to 24.666). No evidence for a neighbourhood effect was found for words of German origin in group 1.

Table 14

Logistic Regression Analysis of English Evaluations in Group 2

Variable	B	SD	Wald	df	p	Exp(B)
(Intercept)	-4.197	.414	102.699	1	< .001***	.015
Neighbourhood			3.078	2	.215	
Neighbourhood small	-.678	.438	2.393	1	.122	.508
Neighbourhood large	-.013	.409	.001	1	.975	.987
With Cues	1.764	.430	16.847	1	< .001***	5.833

Note: Only German stimuli are analysed here. Reference categories are: words of German origin with no cross-linguistic neighbours in the English language, and words without English orthographic cues. 95% Wald confidence intervals are reported in the text.

For the subset of group 2 the logistic regression model was also statistically significant ($\chi2(3) = 33.055$, $p < .001$***). The model explained 10.8% (Nagelkerke R^2) of the variance in language decision and correctly classified 96.8% of cases. Again only one of the two predictor variables was statistically significant: cues (as shown in Table 14). German stimuli with English orthographic cues had 5.833 times higher odds to be wrongly evaluated English than German stimuli without English cues (Wald $\chi2(1) = 16.847$, $p < .005$**, 95% CI 2.513 to 13.540). No evidence for a neighbourhood effect was found for German stimuli in group 2 either. The estimated number of English evaluations is much higher when German stimuli contain English cues, this effect is highly significant in both groups. This shows that word form, and cues in particular, do play a role in language decisions. There is also a small difference between the two groups, in group 1 the estimated number of English evaluations is 9 times as high for stimuli with English cues as for stimuli without English cues, in the subset of group 2 it is 5.8 times as high. One possible interpretation is that the restricted presentation time of the words in group 1 lead to more conscious word form based language decisions. However, the different estimations obtained by the models for the two groups should not be overestimated. It can be concluded, that language decisions are best explained by the same variables in both groups, namely a *Duden* entry for stimuli of English origin and the presence of English cues in German stimuli. Since the presentation time of the stimulus did not change the general impact of these factors, the influence of personal variables on language decisions is examined in a collective sample in the following.

8.3.3. Influence of personal factors on language decisions

The complete sample ($N = 333$) includes group 1 ($n = 51$) and all data collected online for group 2 ($n = 282$) and consists of 29970 language decisions in total [203]. These include 21,978 evaluations of English stimuli words, out of which 1,036 are German evaluations. It follows that German decisions for stimuli of English origin amount to 4.7%. That implies that 95.3% of all language decisions for words of English origin were English. A logistic regression was performed to ascertain the effects of personal factors such as

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[203] For descriptive statistics please consult the description of the sample where all data are presented.

mother tongue (English or German), linguistic training (i.e. presumably increased awareness), age, and the frequency of contact with English through reading and writing (visual English contact) on the likelihood that participants evaluated a word that is of English origin as English [204]. Interaction effects were not considered.

The logistic regression model was statistically significant ($\chi2$(5) = 184.173, p < .001***). The model explained 2.6% (Nagelkerke R^2) of the variance in language decision and correctly classified 95.3% of cases [205]. All of the five predictor variables were statistically significant. Participants who spoke English as a mother tongue had 2.777 times higher odds to evaluate English stimuli as English than participants whose mother tongue was not English (Wald $\chi2$(1) = 14.244, p < .005**, 95% CI 1.634 to 4.719). Put differently: The chances for English stimuli to be evaluated as German are only roughly 1/3 (0.360 times), when a language decision is made by a native speaker of English compared to a non-native speaker. English skills alone do not have a significant influence on language decision and were not included in the model. The same holds true for German skills. But, whether German is a mother tongue of the participant or not, does have a significant effect. The chance for English stimuli to be evaluated as German more than doubles (times 2.242) when the person deciding is a German native speaker (Wald $\chi2$(1) = 17.989, p < .005**, 95% CI 1.544 to 3.256). When participants were linguistically trained they were 2.194 times as likely to evaluate English stimuli as English than participants without linguistic training (Wald $\chi2$(1) = 88.479, p < .005**, 95% CI 1.862 to 2.584). Table 15 summarises the results of the binary logit regression model with stepwise integration of predictors for the model with the lowest AIC (AIC: 394.994).

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[204] The variables English skills and general English contact did not contribute to the fit of this model and are not included in the final model. English language skills are of central interest in this study, therefore their complex influence is analysed separately in the following.

[205] The Hosmer-Lemeshow-Test indicates that the model is a poor fit to the data, so results should be handled with care ($\chi2$(8) = 20.465, p = .009**).

Table 15

Logistic Regression Analysis of English Evaluations: Personal Factors

Variable	B	*SD*	Wald	df	*p*	Exp(B)
(Intercept)	2.884	.142	414.897	1	< .001***	17.894
Mother Tongue is English	1.021	.271	14.244	1	< .001***	2.777
Mother Tongue is not German	.807	.190	17.989	1	< .001***	2.242
Linguistically Trained	.786	.084	88.479	1	< .001***	2.194
Age	.092	.030	9.409	1	.002**	1.096
English Contact Visual	-.099	.031	10.514	1	.001***	.906

Note: Only stimuli of English origin are analysed here. Reference categories are: English is not a mother tongue, German is a mother tongue, no linguistic training, and the lowest categories of age and visual English contact. For the predictors age and visual English contact the estimate represents an increase by one category. 95% Wald confidence intervals are reported in the text.

Even though age (in categories [206]) and the frequency of contact with English through reading or writing (visual English contact) do have a significant influence on language decisions in this model, their impact is fairly weak. An increase in age by one category was associated with a slightly higher (1.096 times) chance to evaluate a word of English origin as English (Wald $\chi2(1) = 9.409$, $p = .002**$, 95% CI 1.034 to 1.162), that is, it slightly lowers the chance for English stimuli to be evaluated as German (0.912). On the contrary, as visual contact with English increases, participants become less likely to evaluate English stimuli as English (Wald $\chi2(1) = 10.514$, $p = .001**$, 95% CI 0.853 to 0.962). All other personal predictor variables (gender, education, German skills, English skills, and auditive English contact) did not contribute to a better fit of the model. However, personal factors alone can obviously not account for language decisions of German native speakers [207].

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[206] The predictors age, English contact through reading and writing (visual), and German skills were treated as covariates. The researcher believes the fact that an ordinal structure with an interpretable increase for every higher category is given, justifies this, even though the mentioned predictors are not metric.

[207] Here, only 2.6% of variance in the independent variable can be explained by personal predictors.

8.3.4. Best predictors of language decisions

Therefore, models which combine both the most influential personal variables and word-internal predictors are examined in the following. Predictor variables were included stepwise to find the best model, interaction effects were not considered. Table 16 lists the predictor variables and their influence on language decision [208]. The logistic regression model was statistically significant ($\chi2(9) = 687.930$ p < .001***). The model explained 9.7% (Nagelkerke R^2) of the variance in language decisions for English stimuli and correctly classified 95.3% of all cases. As the Hosmer-Lemeshow-Test turned out to be significant ($\chi2(8) = 31.371$ p < .005**), it can be assumed that the model is generally a poor fit to the data. The predictor variables gender, education, English skills, German skills, Neighbourhood size, and auditive English contact were not influential enough to be included in the model for these data.

Table 16

Logistic Regression Analysis of English Evaluations: All Factors

Variable	B	*SD*	Wald	df	*p*	Exp(B)
(Intercept)	4.849	.259	349.467	1	< .001***	127.653
Mother Tongue is English	1.033	.272	14.471	1	< .001***	2.809
Mother Tongue is not German	.819	.191	18.342	1	< .001***	2.269
Linguistically Trained	.801	.084	90.461	1	< .001***	2.228
Age	.094	.030	9.629	1	.002**	1.099
English Contact Visual	-.101	.031	10.733	1	.001***	0.904
With Duden entry	-1.758	.100	307.432	1	< .001***	0.172
With Cues	.257	.067	14.812	1	< .001***	1.293
Frequency			25.276	2	< .001***	
Frequency medium	.272	.087	9.829	1	.002**	1.312
Frequency high	-.136	.077	3.139	1	.076	0.873

Note: Only stimuli of English origin are analysed here. Reference categories of personal factors are: English is not a mother tongue, German is a mother tongue, no linguistic training, and the lowest categories of age and visual English contact. Reference categories of word internal factors are: No *Duden* entry, no English cues and low frequency. For the predictors age and visual English contact the estimate represents an increase by one category. 95% Wald confidence intervals are reported in the text.

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[208] To make interpretation easier, the most common category was chosen as a category of reference for each predictor, even if this meant that the odds rations had to be inverted.

The mother tongue of most participants was German, but when it was not, the chances for English stimuli to be perceived as English were more than double (times 2.269) compared to German native speakers (Wald $\chi2(1)$ = 18.342, p < .005**, 95% CI 1.559 to 3.300). One possible explanation is that the participants encountered such English stimuli primarily in a non-German (i.e. English) context, and therefore English loans would be marked as English in their mental lexicons. On the contrary, German native speakers would more frequently encounter such English loans in a German context and could integrate it into their German lexicons more easily. This would make L2-learners of German more reluctant than German native speakers to evaluate English loan words as German. The same appears to hold true for English native speakers, who are likely to have acquired the English loans through their mother tongue first [209], and who are far less likely (times 0.356) to evaluate English stimuli as German (Wald $\chi2(1)$ = 14.471, p < .005**, 95% CI 1.650 to 4.783). Since this sample contains a considerable number of people who have received some sort of linguistic education, to what extent this circumstance affected language decisions was analysed. When participants are linguistically trained, they are 2.228 times more likely to evaluate English stimuli as English (Wald $\chi2(1)$ = 90.461, p < .005**, 95% CI 1.889 to 2.629). This could be due to a greater awareness of language boundaries and contact phenomena, and might be increased by a wish to communicate this awareness through evaluating on the basis of language of origin. Age significantly influences language decisions. A switch to the next higher age category leads to a slight increase (multiplicatively by 1.099) in the odds ratio for evaluating English stimuli as English (Wald $\chi2(1)$ = 9.629, p = .002**, 95% CI 1.035 to 1.166). When contact with English through reading or writing increases by one category, the chances for English stimuli to be evaluated as English decrease multiplicatively by 0.904 (Wald $\chi2(1)$ = 10.733, p = .001**, 95% CI 0.851 to 0.960). This result is not in line with expectations. It can be assumed that higher English contact leads to more input and increases the chances of English stimuli being encountered in an English context, even if they are also loan words in German. The predictor frequency stands for the frequency of an English stimuli in a German corpus and has a statistically significant effect on language decision (Wald $\chi2(2)$ = 25.276, p < .001***). When this frequency

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[209] The type of bilingualism, i.e. the circumstances and time of acquisition, is known to influence the structure of the mental lexicon. This could impact language decisions just like language attitudes do. The scope of this thesis does not allow for a detailed discussion of such factors.

increases from low to medium, the likeliness of English stimuli being evaluated as English increases by a multiplicative factor of 1.312 (Wald $\chi2$(1) = 9.829, p = .002**, 95% CI 1.107 to 1.555). Yet, when the frequency increases from low to high, the odds of perceiving an English word as English appear to decrease by a multiplicative factor of 0.873 (Wald $\chi2$(1) = 3.139, p = .076, 95% CI 0.750 to 1.015) [210] . These findings are only partly consistent with the expected influence of frequency. While an increase in frequency would be expected to decrease the odds of an English evaluation, this seems only true for words of a high frequency. English words with a medium frequency in German have higher chances of being perceived as English. Another effect was found for stimuli with English graphemic cues. When words contain such cues which readily identify them as being of English origin, they are 1.293 times more likely to be evaluated as English than stimuli without such cues (Wald $\chi2$(1) = 14.812, p < .001***, 95% CI 1.1341 to 1.473). The strongest predictor for language decision is whether an English word can be found in the *Duden* or not (Wald $\chi2$(1) = 307.423, p < .001,*** 95% CI 0.142 to 0.210). For stimuli with a *Duden* entry the odds of being evaluated as English are only 1/7 (0.142 times) that of stimuli without a *Duden* entry (which are correspondingly 5.801 times more likely to be perceived as German).

8.3.5. Influence of English skills on language decisions

The influence of English skills on the evaluation of stimuli words has not been targeted up to now, because this variable posed some problems during analysis. As the descriptive statistics have shown, the sample is biased towards people with very good English skills and participants without English skills are strongly underrepresented. This unequal distribution of participants throughout the categories of English skills may lead to distorted calculations, which become evident when the variable was treated as a categorical variable in the analysis. The number of variables, especially categorical variables, which can be included in a regression model, is limited; and including English skills as an ordinal variable in a regression model together with other predictors yielded no significant results. Therefore, this important predictor is analysed separately as a categorical variable, in order to reveal useful information about its influence on language decisions for words of English and German origin respectively.

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[210] Please note, that here the significance level is just not reached.

At first, a logistic regression was performed to ascertain the effect of English skills on the likelihood that participants would evaluate a word of English origin as English. The logistic regression model was statistically significant ($\chi2(3) = 53.676$, $p < .001{***}$). However, the model explained only 0.8% (Nagelkerke R^2) of the variance in language decisions for English stimuli and correctly classified 95.3% of all cases. Participants with good English skills had 1.557 times higher odds for evaluating an English stimuli as English than participants with basic English skills (Wald $\chi2(1) = 12.186$, $p < .005{**}$, 95% CI 1.214 to 1.997). Similarly, participants with very good English skills had 1.420 times higher odds for evaluating an English stimuli as English than participants with basic English skills (Wald $\chi2(1) = 8.701$, $p = .003{**}$, 95% CI 1.125 to 1.792) [211]. When participants had native-like English skills, their chances to rate a word of English origin as English were 4.786 times higher than those of participants with basic English skills (Wald $\chi2(1) = 38.755$, $p < .001{***}$, 95% CI 2.923 to 7.835). Table 17 summarises the results of the binary logit regression model.

Table 17

Logistic Regression Model: English Skills as Predictor of Language Decision for Stimuli of English Origin

Variable	B	SD	Wald	df	p	Exp(B)
(Intercept)	2.609	.112	545.120	1	< .001***	13.581
English Skills			40.823	3	< .001***	
Good skills	.443	.127	12.186	1	< .001***	1.557
Very good skills	.351	.119	8.701	1	.003**	1.420
Mother tongue	1.566	.252	38.755	1	< .001***	4.786

Note: The reference category is basic English skills, because the sample does not contain participants without any English language skills. 95% Wald confidence intervals are reported in the text.

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[211] The difference between good skills (1.557 times higher odds) and very good skills (1.420 times higher odds) should not be overestimated here.

When participants with basic English skills recognised a presented word of English origin (i.e. retrieved a mental representation of it) they were more likely to conclude that the word forms part of the German lexicon [212]. Participants with good or very good English skills are more likely to have acquired the word in an English context and are therefore more likely to have integrated it into their English lexicon. Their decisions could thus be based on other factors, such as subjectively perceived frequency of the word in either language. English native speakers are again more likely to have acquired stimuli of English origin in their mother tongue and to have encountered them in an English context more often than in a German context. This would decrease their likelihood of evaluating stimuli of English origin as German.

A second logistic regression was calculated to analyse the effect of English skills on the likelihood of participants evaluating a word of German origin as English. The logistic regression model was statistically significant ($\chi2(3) = 21.994$ $p < .001***$). However, the predictive power of the model was very low, as it explained no more than 1.1% (Nagelkerke R^2) of the variance in language decisions for English stimuli. It correctly classified 96.9% of all cases. While the overall influence of English skills was significant, the influence of good English skills was not statistically significantly different from that of basic skills. However, the finding that participants with very good English skills were only half as likely (0.503 times) to evaluate German stimuli as English than participants with basic English skills was significant (Wald $\chi2(1) = 8.013$, $p = .005**$, 95% CI 0.312 to 0.809). There was no significant influence of native-like English skills [213]. Table 18 summarises the results of the binary logit regression model.

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[212] This is either a result of a much smaller and less developed English mental lexicon, which is primarily accessed via representations in the German mental lexicon (as the Revised Hierarchical Model suggests), or it is due to the integration of English loan words into the German mental lexicon.

[213] The very low number of cases in this category does not allow for statistical calculations.

Table 18

Logistic Regression Model: English Skills as Predictor of Language Decision for German Stimuli

Variable	B	SD	Wald	df	p	Exp(B)
(Intercept)	-3.031	.223	184.020	1	< .001***	0.048
English Skills			21.975	3	< .001***	
Good skills	-.126	.247	0.262	1	.608	0.881
Very good skills	-.688	.243	8.013	1	.005**	0.503
Mother tongue	-.005	.312	.000	1	.987	.995

Note: The reference category is basic English skills, because the sample does not contain participants without any English language skills. 95% Wald confidence intervals are reported in the text.

These results are in line with the expectations. Better English language skills lower the chances of evaluating a word of German origin as English. Very good English skills considerably lower (by half) the chances of mistaking a German word which does not have an English origin for an English one. It has to be kept in mind, however, that the variance in language decisions explained by the predictor English skills is very low.

8.4. Summary of results

In the following, the results are summarised to show how these findings can contribute to an analysis of the effects of English in German advertisements by answering the research questions.

1) Is a *Duden* entry a good predictor of how English words are perceived?

Yes. The findings of this study suggest that checking whether an English word can be found in a German lexicon (e.g. the *Duden*) is a good predictor of how it is going to be perceived. Frequency of use in German texts is one of the most important factors for an English word to be included in the *Duden*, therefore it was necessary to test whether frequency in a large German corpus has any explanatory potential.

2) Can frequency of occurrence in a German corpus predict how English words are perceived?

No. The findings were only partly consistent with the expected direction of influence. While an increase in frequency would be expected to increase the chances for a German evaluation, this appears to hold true for words of a high frequency only. English words with a medium frequency in German were found to have lower chances of being perceived as German than low frequency words. It can be concluded that the frequency of an English word in a German corpus is not a good predictor for its perception as German.

3) Does neighbourhood size have an effect on language decisions?

No. There is no evidence for the influence of cross-linguistic neighbourhood size in this study. In the time-restricted condition the variable came close to reaching the significance level, but the direction of effect was not uniform and ran contrary to the expectations. Yet, the data suggest that word form does influence language decisions, as the influence of cues demonstrates.

4) Do graphemic cues play a role in the perception of words?

Yes. In general, the results suggest that the presence of English graphemic cues can increase the chances of any word (and presumably also non-word), whether it is of German or English origin [214], to be perceived and evaluated as English.

5) Does the level of English skills influence language decisions?

Yes. Better English language skills lower the chances of evaluating a word of English origin as German. Participants with basic English skills were more likely to evaluate a word of English origin as German than participants with good or very good English skills.

6) Does it matter for language decisions if German is not a mother tongue?

Yes. L2-learners of German were found to be less likely than German native speakers to evaluate words of English origin as German. This result is substantiated by the finding that English native speakers were even less likely to evaluate stimuli of English origin as German. Non-native speakers of German are likely to have acquired the English stimuli in a non-German (i.e. English) context. Therefore, words of English origin are likely to be marked as English (i.e. have more connections to other English words) in their mental lexicons, even if they are loan words in German. On the contrary, German native speakers would encounter such English loans more frequently in a German context and would have integrated them into their German lexicons. It was therefore tested whether contact with English could explain these results, too.

7) Does contact with the English language influence language decisions?

Yes, but the direction of effect is contrary to the expectations. An increase of contact with English through reading or writing by one category is associated with an increase in the odds for a German evaluation of words with an English origin. This shows that the effects found for English skills and

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[214] The effects of graphemic cues on German evaluations of genuinely English words did not reach statistical significance when the two groups were analysed separately, but the numbers point in the same direction as the results of the regression model in determining the best predictors of language decisions, where cues were found to be a significant variable.

mother tongue cannot be explained merely on the basis of how frequently participants had visual contact with English. It therefore appears likely that other factors (e.g. age of acquisition) contribute to the observed effects of English skills.

8) Does linguistic training influence language decisions?

Yes. Participants who were linguistically educated were half as likely to evaluate English stimuli as German than participants without linguistic training. This has to be kept in mind when assessing the representativeness of the results for demographically similar groups of the general public.

9) Do variables like a) sex, b) age and c) education play a role?

a) No. The variable sex did not contribute to the fit of any regression model.

b) Yes. An increase in age by one category was found to slightly, but significantly, decrease the chances for an English word to being perceived as German.

c) No. The level of education was not found to be an influential variable in this study. However, this is likely to be due to the generally high level of education which resulted in little variance in the sample.

10) Which variables are best suited for predicting the perception of words of English origin?

It can be concluded that roughly 95% of all language decisions were based on the language of origin. Deviant decisions were best explained by a *Duden* entry. English words which are included in the *Duden* were most likely to be evaluated as German. Another predictor which had considerably less power was the variable graphemic cues. Words of English origin which did not feature typical English graphemic cues were slightly more likely to be perceived as German in the large sample. The chances for a German perception of English elements were also increased when the participant was a young German native speaker, had basic English skills, and no special linguistic knowledge.

Now that these questions on the visual recognition of English elements have been answered, their effects in German print ads are studied.

9. Study on effects of English in German ads

9.1. Perception-based approach: implications for study design

The problem with studying the effects of English elements in print advertisements is that advertisements are viewed as a whole. As text is only one component of print ads, its effect cannot be easily separated from the effect of other parts, like layout and pictures [215]. Researchers have tried to overcome this problem by isolating single structural elements, usually slogans (e.g. Kellerhals 2008), from existing advertisements and testing their effects on consumers [216]. In this study a different methodological approach that sheds light on the actual effect size, due entirely to language use, is applied by manipulating the text of mock advertisements for the use of English elements.

Despite these difficulties, designing new advertisements for fake products and manipulating the use of English outweighs isolated linguistic material, because it enables the testing of language effects in a more natural context and gives insights into the relative importance of English language use. Using existing advertisements is not an option, because the previously formed knowledge structures would confound the language effects. Therefore, five mock advertisements for fake products or services with two language versions (English-German mixed, German only) were designed for this online-study. The following factors determined the choice of products or services in the stimuli advertisements. Product categories which demand the use of technical English terms had to be avoided for lack of equally frequent translation equivalents in German. As the aim of this study is to test for general effects of English elements in German ads, the product categories have to include services and tangible products, as well as free or cheap and expensive products, because low and high prices usually correspond to low and high involvement products respectively. To test whether English elements have the same effects in advertisements for all product categories, the stimuli have to include products

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[215] See Crijns 2012, 322-327 for a discussion of the empirical methods used to study the language of advertising.

[216] Kellerhals (2008) tries to account for this deficient methodology by presenting the whole advertisement to her participants at some point of the interview. However, she found that the responses were strongly influenced by the corporate identity of the brands and therefore does not include these data in her statistical analysis.

associated with hedonistic values as well as products associated with security and integrity. The products and services chosen are a soft drink, an online fashion store, a web portal, a travel insurance agency and a hotel chain. In the following, the factors determining the design of the stimuli advertisements are described.

Most importantly, the advertisements have to appear authentic enough to not be a priori rejected by participants. Consumers have expectations about what the language of advertising is supposed to be like. This also applies to product or sector specific advertising, because consumers are aware of typical advertisements, for example, regarding detergents, banks, or cars (cf. Kellerhals 2008, 29). As the use of English elements was found to depend on the advertised product category it has to be assumed that consumers are sensitive to this, too. Therefore, textual elements have to follow the typical patterns of advertising language, e.g. the use of imperatives in slogans (Störiko 1995, 170-180). General layout styles and the colours of the stimuli advertisements were inspired by real advertisements of the respective product categories to ensure a fairly 'authentic' appeal [217]. Different advertising strategies demand different amounts of (product) information and for this reason the amount of text varies for typical ads of the product categories at hand, a fact that has to be accounted for. Moreover, German texts are usually longer than English texts, and it has to be ensured that the two language versions do not differ notably in the amount of text. Importantly, the readability ("äußerer Lesewiderstand" see Bidmon 2008, 11-18) of both versions must not differ, as it would affect the advertisement's appeal.

As one of the key roles of advertising is brand leadership, each advertisement has to include a distinct brand, therefore, brand names, logos or a combination of both were designed for each product. Usually advertisements form part of what is known as 'integrated marketing communications', a strategy to communicate a unique brand ideology across different channels. For this reason, participants should expect to have encountered the stimuli brands in different media before. Yet, designing the advertisements as introductory campaigns would have restricted the communicative intent and determined copy design (cf. Janich 2013, 25). Since the aim of the advertisements should

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[217] All sources of inspiration were recorded and can be obtained from the author upon request.

not be perceived as special, they were designed as maintenance ads used to increase or sustain brand awareness. Importantly, the advertisements are intended to be perceived as fairly neutral on all tested dimensions to avoid ceiling effects and allow room for language effects. This also means that extremely distracting elements, like humour, pictures with sexual content, overly creative language use and everything that could lead to a vampire effect had to be avoided. Moreover, as consumers are known to preferably base their judgements on attributes like price and quality seals, as little key information as possible, without too strongly challenging the advertisement's realistic appeal, was to be included.

In additions to these general requirements, the most attention has to be devoted to the use of English elements. As has been argued, a key to the effects of English is that English elements are used in salient positions. Thus, the fact has to be accounted for that some structural components are not as easily accessible for mixing with English as others, as is proposed in the structural domain dependency model by Bhatia (2001). To insure that English elements are easily recognised as such, graphemic cues are included whenever possible to visually enhance their Englishness. Since advertisements with one English mixed version and one German version were designed and the language versions then evaluated by two different groups and compared for statistically significant differences, the denotations of the English elements and their German equivalents were meant to differ as little as possible. Especially for loan words, which fill a lexical gap and at least have different connotations than their closest German semantic neighbours, this still means that the two versions cannot be regarded as having identical meanings. Therefore, cognates are used when they are not homographs and can be identified as either English or German [218]. To obtain an idea of how important meaning differences are for the effects of English, one advertisement is designed which entirely uses English-German cognates. The results of the word recognition study have indicated that English elements found in the *Duden* are more likely to be perceived as German, therefore, they had to be avoided in salient positions. Instead, words that contain graphemic markers of Englishness were chosen whenever possible.

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[218] However, this does not solve the problem that even cognates have different collocations in German and English. This is an unavoidable fact and cannot be ruled out completely.

9.2. Research design

The aim of this study is to shed light on the actual extent of the effect that English elements in German advertisements have on consumers. This can be achieved by manipulating advertising texts for the use of English elements. Most importantly, participants should be unconscious of the fact that language is the object of study when processing the advertising message. Therefore, a between subject design was chosen in which one group evaluated a language mixed version of an advertisement and another a German version of the same advertisement. Comparing two versions of advertisements which are identical except for the use of English elements allowed for the isolation of English language effects from non-linguistic influences on advertisement evaluation. Newly invented brands, and product and company names were used to counteract the activation of brand specific representations [219]. This study design was chosen to prevent measurements from being distorted by participants' priorly formed mental representations of the stimuli. Yet, influences from product category specific knowledge or attitudes, which result from participants' experiences as consumers, cannot be avoided.

The questions asked in this online study are based on the results of previously conducted personal interviews in which participants compared an English mixed version of an advertisement to a German version of the same advertisement. Hence, spontaneous and largely unprompted reactions of participants were used to derive items for the questionnaire. This increases the external validity of the individual items. Moreover, in the quantitative online study only one version of the advertisement was used as a stimulus. It can therefore be assumed that participants rated the plausibility of statements that are of some relevance to consumer decisions and that these evaluations are not consciously based on the use (or lack) of English elements in the advertisements.

During the designing process, the draft advertisements were pre-tested and discussed in personal interviews to ensure they were accepted as realistic

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[219] While the mock advertisements were designed to resemble real advertisements of the respective product category, the products themselves were deliberately designed to differ from prototypical exemplars of the corresponding product category in order to discourage transfer.

designs [220]. Semi-structured interviews in which both versions of the draft advertisements were simultaneously shown to the participants were conducted to test if the two versions were perceived differently. By presenting both language versions the focus was undoubtedly drawn to language differences (i.e. the use of English in one version but not in the other). This perceived difference is likely to have encouraged participants to attribute further meaning to it and to assume disparities in product characteristics and target groups. Therefore, it has to be noted that the influence of using English is overestimated in such a setting and can therefore not be accepted as evidence for the existence of language effects in advertising. Nevertheless, following a grounded theory approach (Corbin and Strauss 2014; Glaser and Strauss 1967), the effects reported by the interviewees led to new, product-specific hypotheses being formulated, which were tested in addition to the more general functions and effects described in literature in the online survey.

In the final data collection four advertisements with two language versions each were used. The products or services were a soft drink, a hotel chain, a travel insurance, and a web portal. The interviews revealed, for example, that product characteristics were perceived differently in the two language versions. The soft drink was assumed to contain more sugar in the English mixed version than in the purely German version, in which it was perceived to be healthier. The hotel chain was believed to be of higher standards and more expensive in the English mixed version. Likewise, the hotels in the English mixed version were thought to be in travel destinations that require a long-distance trip. On the contrary, the hotels in the German version were thought to be in European counties close by, and even associated with holidays in the Bavarian Forest. In addition to these associations, the following well-known effects were mentioned repeatedly: English seems modern, addresses young people, has that 'special something', makes a product seem upmarket, makes a brand appear more competent, and is used for a bilingual target group. However, English is not always viewed positively, and interviewees mentioned that it may seem witless or crude, be hard to understand, and even annoying. German, on the contrary, was perceived as old-fashioned, conservative ('bieder'), down-to-earth ('bodenständig'), and boring. It was believed to lack promotional character, to be easier to comprehend, and to seem more trustworthy and sound ('solide').

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[220] Preliminary designs of the mock advertisements and transcripts of the interviews are included on the CD in the appendix. The most important results are presented in the following.

Some interviewees believed that the German versions address families and elderly people, and others evaluated them as more attractive and appealing than the English versions. As these are general effects of English, which express a common opinion in Germany, they should not be regarded as entirely evoked by the language use in the stimuli ads. Instead, these effects should be interpreted as knowledge about general attitudes towards the use of English in the German media. Nevertheless, this knowledge or attitude might well influence the perception of English elements in the form of connotations or associations and, in this case, affect the evaluation of English mixed advertisements. Not only did these interviews help to generate more specific hypotheses on the effects of English for each advertisement, they also led to numerous revisions and improvements of the stimuli material. The final versions of the advertisements can be found in section C of the appendix, their linguistic features are subsequently described.

9.2.1. Stimuli: mock advertisements

The textual differences between the language versions of the mock advertisements are listed for each structural element in the following tables (Table 19 to Table 22). Structural elements are listed in the order of appearance starting from top to bottom to facilitate comparison.

Table 19

Summary of Textual Differences for ZISCH'S

Structural element	German version	English mixed version
Brand name	*ZISCH'S*	*ZISCH'S*
Slogan	*fruchtige Erfrischung*	*fruity refreshment*
Textual element	*überraschend saftiger!*	*überraschend saftiger!*
Product name	*ZISCH'S APFEL-MANGO*	*ZISCH'S APPLE-MANGO*
Web address	*www.zischs.de*	*www.zischs.de*

Note. All advertisement versions are included in the appendix.

Table 20

Summary of Textual Differences for CITY SCENE/STADTSZENE

Structural element	German version	English mixed version
Brand/product name	*STADTSZENE*	*CITY SCENE*
Textual element (body)	*... im Netz...*	*...im Web...*
Textual element (list)	*...Kennertipps...* *...Neues...* *...KartenVVK...*	*...Insidertipps..* *...News...* *...TicketVVK...*
Web address	*www.stadtszene.de*	*www.cityscene.de*

Note. Three dots (...) indicate that the wording was taken out of immediate context and the structural element contains more text before or after it.

Table 21

Summary of Textual Differences for LUXELIA

Structural element	German version	English mixed version
Header	*SOMMERANGEBOT...*	*SUMMER OFFER...*
Slogan	*Tauche ein in die Welt.*	*Dive into the world.*
Textual element (body)	*Stadtbesichtigung, Einkaufsbummel und aufregendes Nachtleben...* *...Städteliebhaber...* *...Erholungsangebot*	*City Sightseeing, Shoppingtour und aufregendes Nightlife...* *...Cityliebhaber...* *...Relaxangebot*

Note. Three dots (...) indicate that the wording was taken out of immediate context and the structural element contains more text before or after it.

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Table 22

Summary of Textual Differences for SECURE/SEKUR

Structural element	German version	English mixed version
Product name	*SEKUR*	*SECURE*
Slogan	*VERSICHERT ENTSPAN-NUNG.*	*INSURES RELAXATION.*
Body, list 1	*Stornieren...*	*Canceln...*
Body, list 2	*Notfallbehandlungen*	*Emergency Treatments*
Brand name	*SekurReiseAssekuranz*	*SecureTravelInsurance*
Web address	*www.sekur-reise-assekuranz.com*	*www.secure-travel-insurance.com*

Note. Three dots (...) indicate that the wording was taken out of immediate context and the structural element contains more text before or after it.

The *ZISCH'S* advertisement was designed to use only cognates as translation equivalents. Cognates are believed to share the largest semantic overlap, therefore it is assumed that the two versions of this advertisement differ as little as possible in their denotative and connotative meanings. When effects of English mixing are found in this advertisement, they are unlikely to result from meaning difference of individual translation pairs. Therefore, they can indicate that other sources of meaning are at work on a different level than the individual linguistic units. In the advertisements for a web portal *CITY SCENE/STADTSZENE*, a hotel chain *LUXELIA*, and a travel insurance *SECURE/SEKUR* translation pairs were not primarily selected on the basis of word form or common etymology.

9.2.2. Procedure [221]

The online-study was conducted in October/November 2013 using SoSci Survey (Leiner, 2013). In each questionnaire three different

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[221] Before the actual online-study was conducted, a trial was run. This pre-test was done online by all participants. While highly computer literate participants either gave simultaneous feedback on the phone or jotted down notes for later discussion, five participants without experience with online-surveys attended a personal pre-test. Watching those participants do the online-survey additionally helped to optimise technical operability.

advertisements were tested, whereby each questionnaire contained at least one English mixed and one German advertisement version. No questionnaire contained both language versions of the same ad. This ensured that participants' evaluations were not influenced by a comparison of the two language versions. It is, however, possible, that advertisements for different products were compared with regard to their use of English. For this reason, the linguistic aim of the study was disguised for as long as possible. Additionally, to eliminate systematic sequence effects, eight different questionnaires were constructed. These were randomly assigned to participants and individual weights were continuously adjusted during data collection to ensure that each questionnaire was approximately filled out the same number of times. Table 23 shows the sequences of the advertisement versions in each of the eight questionnaires and the total number of questionnaires finally used for statistical analysis.

Table 23

Sequence of Stimuli Advertisements in Questionnaires

Id-nr.	Ad version in first position	Ad version in second position	Ad version in third position	*n* =
1	*CITY SCENE*	*SECURE*	*ZISCH'S_G*	36
2	*SECURE*	*LUXELIA_G*	*STADTSZENE*	35
3	*LUXELIA_E*	*SEKUR*	*ZISCH'S_E*	39
4	*ZISCH'S_E*	*STADTSZENE*	*LUXELIA_G*	38
5	*LUXELIA_G*	*CITY SCENE*	*SECURE*	38
6	*STADTSZENE*	*ZISCH'S_G*	*LUXELIA_E*	36
7	*SEKUR*	*ZISCH'S_E*	*CITY SCENE*	37
8	*ZISCH'S_G*	*LUXELIA_E*	*SEKUR*	38
			N =	297

Note. Whenever the name does not indicate the language version, *_E* and *_G* are used to mark the advertisement version as English mixed or German respectively. *CITY SCENE* and *SECURE* are English mixed versions of the German *STADTSZENE* and *SEKUR* advertisements.

In the final sample, each ad version was evaluated by 109 to 114 participants [222] according to the emotional appeal of the advertisement, brand personality, product characteristics, and the assumed target group. Whenever an English slogan was used, comprehension was tested. After all three ad versions had been assessed, attitudes toward the use of English in German advertising were evaluated. Then, questions on sociodemographic factors, English skills, and type of English contact followed.

9.3. Sample

Invitations to participate in the online study (www.soscisurvey.de) were distributed via private and university mailing lists and social media, which makes this a convenience sample. Only participants with a primary residence in Germany were included in the final sample [223]. Out of the 297 participants, who fulfilled the requirements 75% (n = 223) were female and 25% (n = 74) male. Young people between 16 and 25 years of age are overrepresented in the sample, while some age groups were not represented at all. Therefore, the continuous variable age was converted into three categories, 16 to 25 years, 26 to 35 years, and older than 35 years. While in the youngest age group women were strongly overrepresented, the gender ratio was more balanced in the other age groups, as Figure 8 shows. The variables level of education and English skills were grouped into three categories. Table 24 indicates the absolute and relative frequencies in each category. It has to be concluded that the sample is biased, because the majority of participants had at least an Abitur (91%) and good or very good English skills (83%).

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[222] Considerably more people participated in the survey. More than 455 participants completed the evaluation of at least one advertisement, but not all continued until the page on which sociodemographic data were collected. Incomplete questionnaires were excluded from final analysis, because they were of no use when the influence of personal factors on advertisement evaluation was analysed. It was however tested whether including them in the comparison of language versions would lead to different results. There were only very few changes in the statistical significance of the effects when using the larger sample in which each advertisement was evaluated approximately 150 times instead of the smaller sample used in the final analysis. For reasons of consistency the smaller sample was in the end used for both, the detection of language effects through comparison of ad versions and the analysis of factors that influenced the evaluation of advertisements.

[223] Moreover, participants who reported that German was not their mother tongue were excluded in the final sample. While such cases are probably among the most interesting ones in a qualitative research design, these very few cases presented outliers on many variables and had unique combinations of characteristics (e.g. level of education and English skills), which cannot be adequately dealt with in regression analysis. Twenty-five people reported German to be one of their mother tongues, these were included in the final sample.
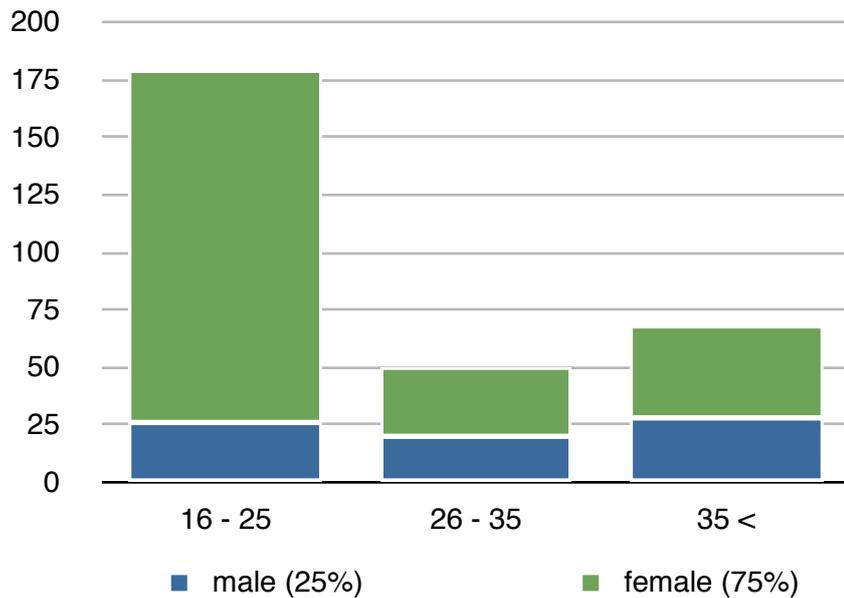
Figure 8. Age and gender of participants.

Table 24

Educational Level and English Skills of Participants

Educational Level	Frequency	Percent
No Abitur	26	8.8%
(Fach-)Abitur	180	60.6%
University degree	91	30.6%
Total	297	100%

English skills	Frequency	Percent
None or basic skills	49	16.5%
Good skills	119	40.1%
Very good skills	129	43.4%
Total	297	100%

Note. Educational level: The category 'no Abitur' includes all participants without A-levels or a high school diploma, i.e. pupils, participants with 'Hauptschulabschluss' or 'Volkschul-abschluss', 'Realschulabschluss' or 'Mittlere Reife', and those with 'Abschluss Polytechnische Oberschule 10. Klasse (8. Klasse vor 1965)'.
English skills were again assessed in a self-report question based on the common reference levels (CEFR). Four participants selected 'English is my mother tongue', these were collapsed with the category of 'very good skills'.

9.4. Analysis and results [224]

In a first step, it was tested whether participants' evaluations differed significantly between the language versions of the advertisements. This was done by comparing the responses elicited by English mixed versions to the responses collected with German versions for each question and each advertisement separately. The most common level of measurement was ordinal [225]. Mann-Whitney-*U*-tests were chosen, because the response patterns to most questions did not correspond to a normal distribution (i.e. they were skewed). However, the distribution of scores had the same shape in both language groups, therefore arithmetic means are provided instead of medians to describe differences between the language versions [226]. For all metrical and normally distributed data *t*-tests were used to compare the mean values of the two language conditions. The null hypothesis H_0 is that the distributions (or means in the case of *t*-tests) are equal and the alternative hypothesis H_1 applies when the distributions (or means) differ significantly. Next to the level of significance on which the null hypothesis can be rejected (i.e. *p*-values), *U*-values and *z*-scores are reported for all results of interest. The original German wording used in the questionnaire is given in brackets, following the English translation or a super-ordinate factor and dimension name. All variables for which significance is reached in at least one advertisement are then graphically depicted thereafter.

In a second step, all responses to the same questions asked on different advertisements were aggregated for all English mixed versions and all German versions respectively. These aggregated data were again analysed for significant differences between the language versions to see if general language effects, which occur across all products and advertisements, apply. As some

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[224] The statistical analyses follow the guidelines of Laerd Statistics (Lund and Lund 2013) and were partly advised by the StaBLab LMU.

[225] Data collected with Likert-type scales, or discrete visual analog scales (DVAS) as in this study, are in essence ordered-categorical data. However, it is common practice in research to treat them as interval-level data (Diekmann 2009, 292), especially when progressive values are assigned to the items and equal distance between the steps on the scale is numerically and graphically anchored. Whenever the interval-level was targeted in this study, a scale's symmetry was further enhanced visually (by a twisted bar with colour gradient) and verbally (by labelling the middle option as neutral and the extremes as 'not at all' and 'totally' respectively).

[226] The effects observed in this study are generally small and do not correspond to a one step increase or decrease on the scale. Therefore, medians are not suitable for representing such small effects.

dimensions of emotional appeal and brand personality were measured using multi-item scales, all items that measure the same dimension or factor were further aggregated and analysed for differences between the language versions.

In a third step, the influence of personal factors, such as age, gender, education, English skills, comprehension of English slogans, and attitudes to English in German ads were tested with regression analysis. If the dependent variable was ordinal (i.e. evaluations on a seven point scale), a cumulative logit model was used. When the dependent variable was categorical (i.e. choices from among five options), a multinominal logit model was applied, and a classical linear regression model was used for a metric dependent variable (i.e. estimation of the target groups' age in years). To find the least complex model with the best goodness of fit (i.e. best prediction with fewest independent variables), the Akaike information criterion (AIC) was used. It measures the relative quality of the models and provides a means for selecting the best model from among competing options.

9.4.1. Evaluation of advertisements' emotional appeal

After seeing the advertisement for the first time, participants were asked to evaluate its appeal on a seven point semantic differential scale, which consisted of six adjective pairs (e.g. *abstoßend - anziehend* ('repulsive - attractive') [227]. The poles of the semantic differential and the individual scale items were randomised in the questionnaires. Mann-Whitney-*U*-tests were used to test for statistically significant differences in the distributions of the two groups, i.e. differences between the evaluations of participants who saw the English mixed version of an advertisement and the evaluations of participants who responded to the German version. Table 25 presents the results. In the following one asterisk behind the *p*-value (*) indicates that the null hypothesis (H_0: the distributions (or medians) of the two groups are equal) can be rejected on a significance level of 5%, two asterisks (**) mark highly significant differences

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[227] This method was developed by Osgood and colleagues (1957) to assess connotative contents of linguistic expressions and is mainly used in empirical social research and commercial market and attitude research (cf. Kellerhals 2008, 94). It is also commonly used in questionnaires to measure credibility, attractiveness, and sympathy (Crijns 2011, 325).

and a significance level of 1%, and three asterisks (***) indicate a significance level of 0.1% or lower [228].

Table 25

Results of Mann-Whitney-U-Tests for Advertisements' Appeal

Item pair (*Original wording*)	*p*-values for			
	SECURE	*CITY SCENE/ STADTSZENE*	*LUXELIA*	*ZISCH'S*
'repulsive - attractive' *abstoßend - anziehend*	.555	.845	.272	.653
'trustworthy - untrust- worthy' *unglaubwürdig - glaub- würdig*	.206	.117	.280	.775
'serious - cheerful' *ernst - heiter*	.477	.600	.129	.745
'boring - interesting' *langweilig - interessant*	.700	.351	.007 **	.373
'modern - traditional' *modern - traditionell*	.898	.433	.429	.007 **
'obtrusive - unobtrusive' *aufdringlich - zurückhal- tend*	.607	.486	.783	.018 *

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***'; Means (*M*), standard deviations (*SD*), *U*- and *z*- values are reported in the text.

When comparing the response values of the group evaluating the English mixed version to the response values of the group judging the German version of an advertisement for each of the six items measuring emotional appeal, H_0 can only be rejected in three cases [229] . No significant differences in the

[228] Setting the significance level to 5% (α = .05) means that a 5% chance of wrongly rejecting the null hypothesis (i.e. seeing a language effect where there is none) is accepted. Blindly adhering to this level of significance, which despite being conventionalised in scientific research is none the less arbitrary, is not mandatory. The price for committing a type I error (i.e. assuming that there is a language effect, when differences are in fact due to pure chance) is comparatively low for language effects in advertising. Nevertheless, when specific hypotheses were formulated on the basis of previous research and are to be tested for statistical significance in a sample, the researcher is does not want to wrongly reject H_0 in more than 5% of the cases. Since this view might not be shared by all, low *p*-values, which indicate that the probability of getting such results or more extreme ones is low when the null hypothesis is true, are reported and discussed in the following. This is done, because unlikely results might indicate tendencies and could serve as a starting point for further research.

[229] The item pair 'modern - traditional' does not measure emotional appeal, but achieving modernity is one of the most widely reported functions of English elements in advertisements. Therefore, it was also measured alongside emotional appeal just after participants had formed their first impression of the advertisement.

evaluation of the advertisement's appeal were found for the advertisements of *SECURE/SEKUR* and *CITY SCENE/STADTSZENE*. For the *LUXELIA* advertisement H_0 can be rejected for the characteristics of 'boring - interesting' (U = 5001.5, z = -2.688, p = .007**). Taking a look at the medians (*Mdn*) of both groups informs us that the German version of *LUXELIA* was evaluated as more interesting and less boring (Mdn_G = 5) than the English mixed version (Mdn_E = 4). It has to be noted, however, that the size of the language effect is easily overestimated when only regarding medians. The fact that a median is always a whole number disguises finer differences between the groups. The arithmetic mean (*M*) indicates that (M_E = 3.98, M_G = 4.58) the discrepancy is not a whole point on the scale, therefore, the mean is provided in the following analyses [230]. Yet, these means apply to a specific scale and the numbers do not speak for themselves. Moreover, "comparing means without considering the distributions from which the means were calculated can be seriously misleading" (Fritz et al. 2012, 3). For this reason standard deviations (*SD*) are reported. Descriptive statistics are vital, but still do not give a clear idea of the actual extent of this effect. To do so, the sample size independent effect size measure *r* can be calculated from the *z*-value and the sample size (*N*) by a simple formula: $r = z/\sqrt{N}$. Note that N [231] is only contained in the formula, because *z* is sensitive to sample size and "dividing by a function of *N* removes the effect of sample size from the resultant effect size estimate" (Fritz et al. 2012, 12). Fritz et al. report that according to Cohen, an *r* of .5 would be considered a large effect, .3 a medium effect, and .1 a small effect (Fritz et al. 2012, 12). It follows that the effect of English elements on the evaluation of the *LUXELIA* advertisement as boring has to be classified as small (r = -2.688/$\sqrt{224}$ = - .180). This was not as obvious by only looking at the medians of the two groups. The data are graphically depicted in Figure 9, whereby colour codes are used to show the relative frequency of responses in the different categories of the seven point scale. Asterisks after the ad's name indicate statistically significant differences between the language versions.

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[230] The prerequisites for treating measurements of an ordinal scale as interval data have been described before and are taken to be met here.

[231] *N* refers to the number of cases used in the calculation of comparisons, i.e. the total number of observations in both groups, therefore, $N = n_E + n_G$, which is 224 in all stimuli advertisements but *SECURE/SEKUR*, where it is 223.
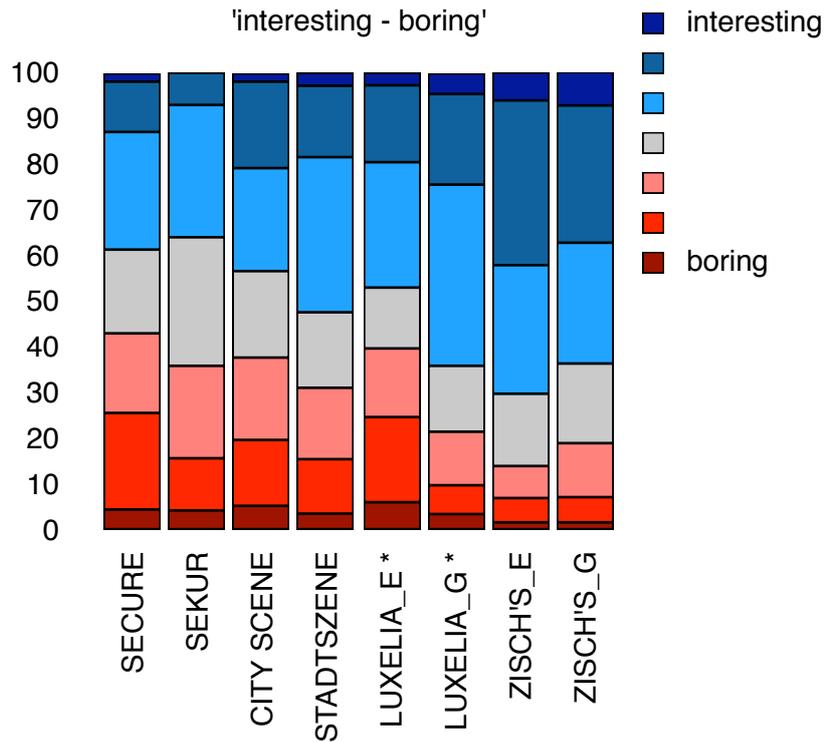
Figure 9. Appeal of advertisements on the dimension interesting - boring.

An empirical analysis of differences in the evaluations of advertisements for distinct product types is not the aim of this study and would have required a very different research design, however, the graph allows for a rough comparison. The version which received the highest frequency of negative evaluations on the 'boring - interesting' scale (red shades) was *SECURE* and the one with the most positive evaluations (i.e. 'interesting', indicated by the blue shades) was the English-mixed version of *ZISCH'S* (*ZISCH'S_E*). Generally, the advertisement for *ZISCH'S* was evaluated more often as interesting than the advertisement for *SECURE/SEKUR*. Such advertisement related differences are not the object of study, but have to be kept in mind when later analysing language effects on an aggregated level across all advertisements.

The H_0, that there are no differences in the evaluation of the advertisements' appeal between the English mixed and the German versions, can also be rejected for the attributes 'modern - traditional' ($U = 5001.0$, $z = -2.712$, $p = .007**$) and 'obtrusive - unobtrusive' for *ZISCH'S* ($U = 5162.5$, $z = -2.372$, $p = .018*$). Figure 10 shows that the German version of *ZISCH'S* was more often perceived to be traditional than the version containing English elements ($M_E = 2.46$, $SD_E = 1.213$; $M_G = 2.95$, $SD_G = 1.407$). However, both

versions of the ad are only rarely evaluated as traditional and are generally perceived to be modern. The language effect is small ($r = -.18$). It can also be observed that the advertisements for *SECURE/SEKUR* and *LUXELIA* generated similar responses and so did the ads for *ZISCH'S* and *CITY SCENE/ STADTSZENE*.
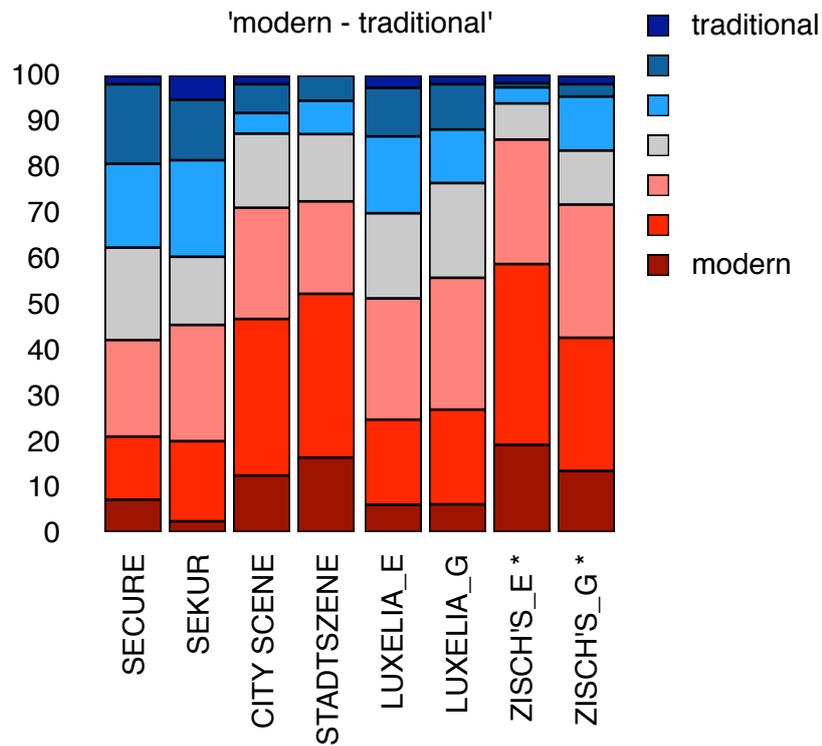
Figure 10. Appeal of advertisements on the dimension modern - traditional.
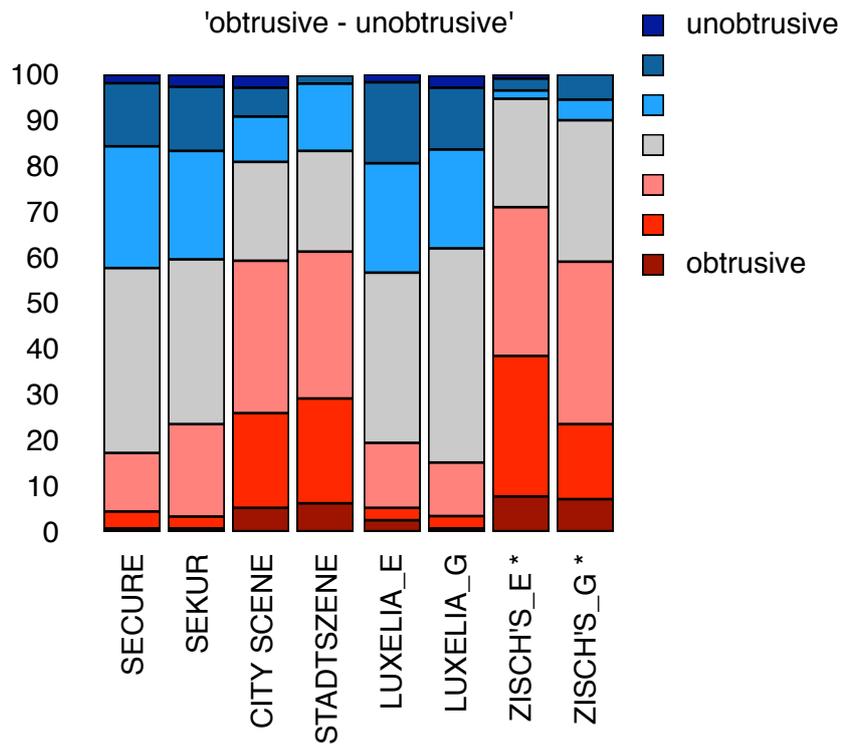
Figure 11. Appeal of advertisements on the dimension obtrusive - unobtrusive.

Figure 11 shows the same tendency for the items 'obtrusive - unobtrusive', with *CITY SCENE/STADTSZENE* and *ZISCH'S* being rated more obtrusive than the other two. Significant differences between the language versions were only found for *ZISCH'S*, however, where the English mixed version was felt to be more obtrusive than the German version (M_E = 5.18, SD_E =1.146; M_G = 5.12, SD_G = 1.177). Again, this is a small effect (r = - .16). To visualise the general evaluation of the advertisements' appeal, a profile of each ad version is presented in Figure 12. Broken lines represent English mixed ad versions, full lines German ad versions.
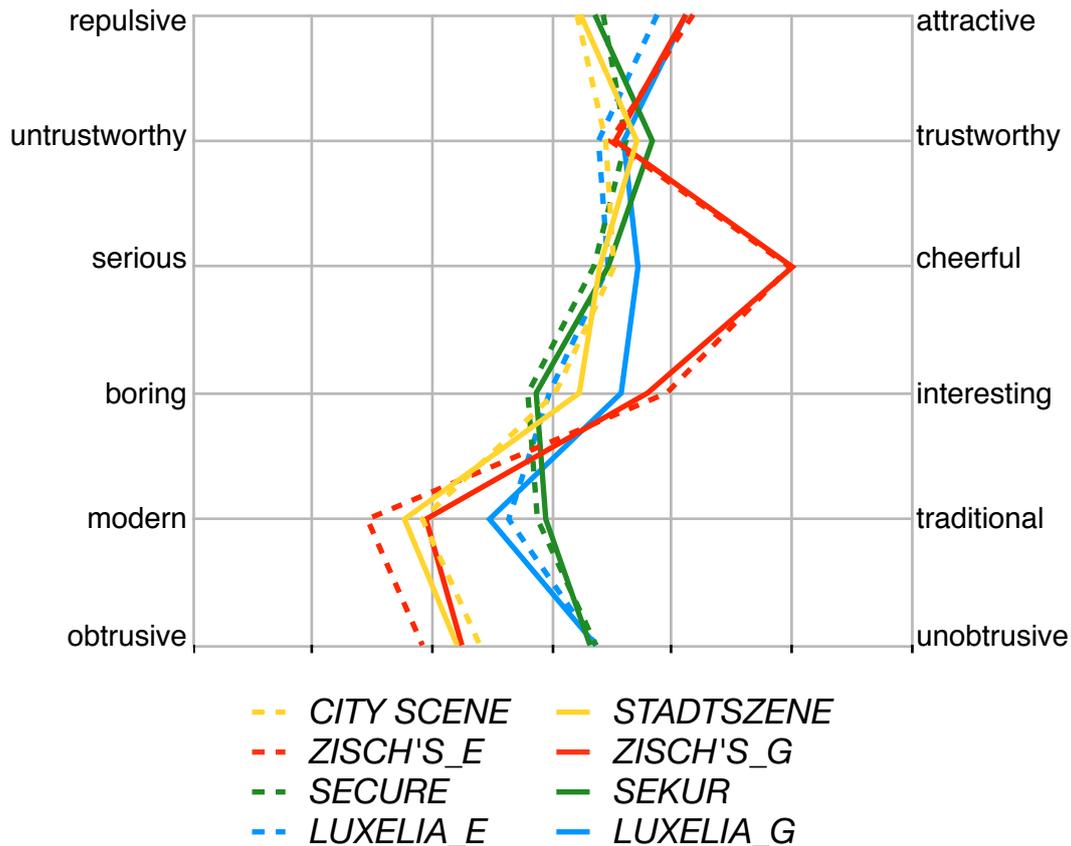
Figure 12. Appeal profiles of advertisements.

It can be concluded that out of 24 comparisons between language versions only three indicated significant results. These language effects were witnessed for *LUXELIA* in the domain of interest and for *ZISCH'S* in the domains modernity and obtrusiveness. Generally, it was observed that the differences between ads for different products are considerably larger than the differences between the language versions of the same ad. This was to be expected, because the appeal of advertisements is primarily based on the visual mode which is noticed first and transports emotions faster than the textual elements.

9.4.2. Language effects on appeal: analysis of aggregated variables

In the following, the data are analysed on an aggregated, product independent level. For this, all English mixed versions (n_E = 447) and all German mixed versions (n_G = 444) are aggregated respectively and tested for significant differences in the evaluation of the advertisement's appeal. To

compare the general appeal of the language versions all item pairs of the semantic differential were combined into one variable ($n_E = 2,235$, $n_G = 2,220$), except for 'modern - traditional' [232]. Means above 4 indicate a generally positive appeal, whereby the following applies: the higher the mean, the more positive the appeal of the advertisement. Poles considered to be positive are 'unobtrusive', 'attractive', 'interesting', 'cheerful', and 'trustworthy', while the negative poles are 'obtrusive', 'repulsive', 'boring', 'serious', and 'untrustworthy'. The factor emotional appeal was measured in two dimensions, dominance and valence ($n_E = 1,788$, $n_G = 1,776$), which were analysed separately in addition to their constituent items in the following. Table 26 states the results of the Mann-Whitney-U-tests calculated to find statistically significant differences between all English mixed and all German advertisement versions.

Table 26

Results of Mann-Whitney-U-Tests for Aggregated Appeal

Dimension: item	p	z	M_E	M_G
General appeal	.062	-1.869	4.39	4.49
Dominance: 'obtrusive-unobtrusive'	.606	-0.516	3.76	3.80
General valence	.059	-1.886	4.55	4.66
Valence: 'repulsive-attractive'	.996	-0.005	4.68	4.71
Valence: 'boring-interesting'	.188	-1.318	4.20	4.36
Valence: 'serious-cheerful'	.584	-0.548	4.84	4.90
Valence: 'untrustworthy-trustworthy'	.040 *	-2.054	4.49	4.67
Appeal: 'modern-traditional'	.422	-0.803	3.22	3.29

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Under general appeal all individual items of the scale are subsumed; General valence includes all single items except for dominance and appeal;
Standard deviations (*SD*) and *U*-values are reported in the text.

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[232] The item pair 'modern - traditional' does not necessarily imply a positive-negative dichotomy and is excluded here.

When comparing the overall emotional appeal of English mixed versions to German versions, statistical significance is just not attained (p = .062). Comparing the perceived dominance of the language versions also did not yield significant differences [233]. On the domain level, the differences in valence between German and English mixed versions also just failed the 5%-significance level (p = .059). Neither was it reached for the items 'repulsive - attractive', 'serious - cheerful', and 'boring - interesting'. However, the data suggest that German advertisements are generally perceived to be more trustworthy than advertisements which contain English elements (p = .040*, U = 91571.0; SD_E = 1.327, SD_G = 1.305). It follows that even though this effect is small (r = .07), the null hypothesis that English-mixed advertisements are evaluated equally trustworthy as German advertisements can be rejected for an aggregated level of analysis. In addition to emotional appeal, how modern or traditional German ad versions were evaluated in comparison to English mixed ones was also measured. The data do not contain evidence for significant differences concerning the perception of modernity. To visualise how close the scores on the advertisements' appeal were in the two groups Figure 13 presents their profiles by plotting the aggregated means of each item.

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[233] This domain consists of just one item and it is uncertain if 'obtrusive - unobtrusive' can measure the construct of dominance sufficiently. Three practical reasons outweighed having to compromise some validity. First of all, the pre-test had shown that other dominance items without immediate relevance to the object being evaluated (e.g. 'warm - cold', 'female - male') raised questions about the meaning of it all and made some participants reluctant to carry on. Secondly, even though multi-item scales are known to generally outperform single-item scales in measuring constructs (cf. Diamantopoulos et al. 2012), the whole construct of dominance does not correspond to a function or effect English elements are assumed to have in advertising. Therefore, in a trade-off between keeping the questionnaire as short as possible, while testing for all the selected socio-psychologic effects of English, other items to measure dominance were not included in the final questionnaire. Finally, it is believed that the perceived (un-)obtrusiveness of an advertisement can on the one hand provide insights into how the attention-getting function of English elements is evaluated by consumers, and serve as an indicator for the wider concept of dominance on the other hand.
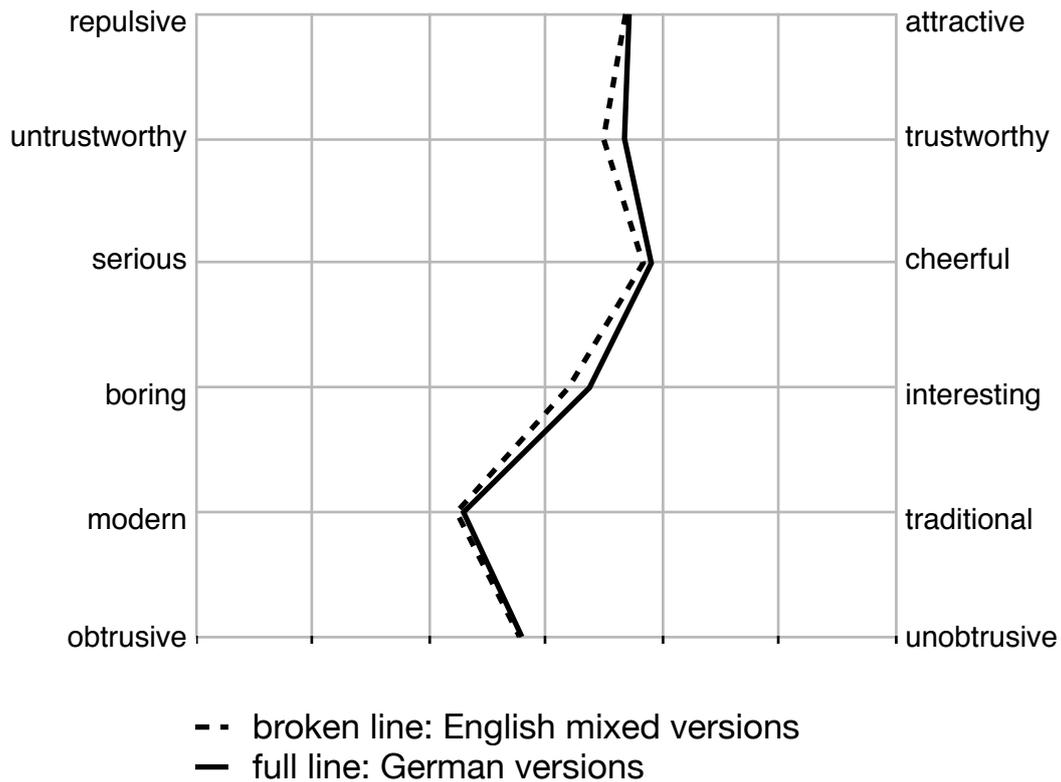
Figure 13. Aggregated appeal profiles of advertisements.

As can easily be seen, using English elements in the ads did not make much of a difference for their general appeal. Note that the full line, representing the German versions, runs to the right of the broken line, which stands for the English versions, on most dimensions. This indicates that the German versions have generally been evaluated slightly more cheerful, interesting and traditional, too. It should not be concluded from this, that these results are due to more than coincidence, or even that English mixed adds are in any way less well suited to achieve a positive emotional appeal. Nevertheless, this result does challenge the assumption that English elements can 'automatically' make advertisements seem more positive (i.e. attractive, modern, interesting and cheerful). H_0, that in general using English elements in ads does not lead to a different emotional appeal, cannot be rejected on an aggregated level of analysis. To conclude, language effects were found to be advertisement specific for the evaluation of interest, modernity and obtrusiveness, but on an aggregated level there is evidence that German advertisements were generally perceived to be slightly more trustworthy.

9.4.3. Evaluation of product attributes

Before having been asked to evaluate specific product characteristics, the advertisement was shown to participants again and they were instructed to look it over. The following questions asked participants for their level of agreement to statements concerning the quality of the product, either on a seven point Likert-type scale ranging from 'not correct at all' (*trifft überhaupt nicht zu*) to 'fully correct' (*trifft voll und ganz zu*), or by selecting their preferred option from the presented choices. Perceived quality was measured and analysed individually for all four products, because very different aspects define the quality of a travel insurance, a web-portal, a hotel chain, and a soft drink. In addition to quality, it was tested to what extent certain product characteristics were imagined to apply to the advertised product or service.

SECURE vs SEKUR

Mann-Whitney-*U*-Tests showed a highly significant difference between groups for the perceived nationality of the insurance agency (U = 4266.5, z = -4.144, p < .001***), with *SEKUR* (M_G = 5.50, SD_G =1.285) being more often believed to be German than *SECURE* (M_E = 4.61, SD_E = 1.650). This can be regarded as evidence for the language of origin effect, which led participants to assume that an insurance agency with an English name and which uses English elements in its advertisement is less likely to be a German insurance agency than one which contains no English elements. Table 27 gives an overview of the result in presenting the *p*-values obtained by comparing all individual items of the language versions and Figure 9 visualises the response pattern to the item '*SECURE/SEKUR* is an international insurance agency'.

Table 27

Results of Mann-Whitney-U-Tests for Features of SECURE/SEKUR

Dimension/factor/item (*Original wording in questionnaire*)	p
International orientation (*SECURE/SEKUR ist ein deutscher Versicherungsanbieter.*)	< .001***
Price (*SECURE/SEKUR ist im Vergleich zu anderen Versicherungen günstig.*)	.892
Quality/reliability (*Mit SECURE/SEKUR ist man gut abgesichert.*)	.322
Quality/service/consulting (*Bei SECURE/SEKUR wird man gut beraten.*)	.670
Quality/service/rapid assistance (*SECURE/SEKUR hilft im Ernstfall schnell.*)	.945
Quality/service/easy claim settlement (*Die Schadenabwicklung mit SECURE/SEKUR ist unkompliziert.*)	.710
Quality/reliability (*Auf SECURE/SEKUR kann man sich verlassen.*)	.301
Quality/service/obligingness (*Die SECURE/SEKUR ist kulant.*)	.748
Quality/transparency/comprehensibility (*Die Versicherungsbedingungen der SECURE/SEKUR sind leicht verständlich.*)	.059

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Means (*M*), standard deviations (*SD*), *U*- and *z*- values are reported in the text.
For reasons of brevity and clarity the original German items used in the questionnaire are not translated, but described by key words, and the dimension and factor they belong to.
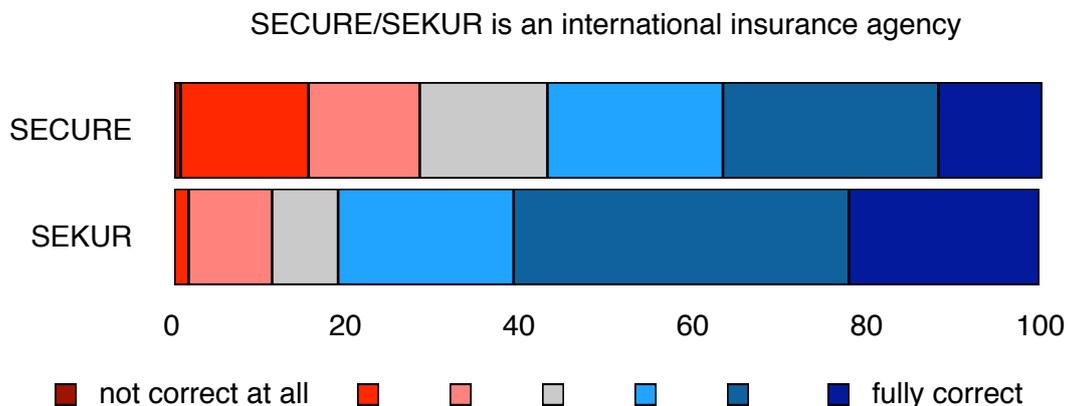
Figure 14. Evaluation on dimension of internationality for *SECURE/SEKUR*.

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A similar tendency, which just fails the set 5%-confidence threshold, was observed for the assumed comprehensibility of the insurance's policy conditions (U = 5321.5, z = -1.888, p = .059), which were believed to be more difficult to understand in the English mixed version (M_E = 3.75, SD_E = 1.656) than in the German (M_G = 4.19, SD_G = 1.444). It remains to be seen whether participants, who had difficulties understanding the slogan were more likely to assume they would find it hard to comprehend the terms of insurance. The use of English elements did not affect product evaluation on other domains for this product. The services offered were evaluated the same with regard to getting rapid assistance, and price in comparison to other insurance agencies in both versions. Neither were, obligingness, easy claims settlement, and consulting perceived significantly different. Interestingly, the two items measuring security and reliability do not exhibit significant differences, because the probability of obtaining these results (or more extreme ones) when there is no language effect is roughly 30%.

CITY SCENE vs STADTSZENE

Table 28 summarises the results of the Mann-Whitney-U-tests calculated to analyse the differences in the evaluation of product features between *CITY SCENE* and *STADTSZENE*. The dimension of internationality displays the only significant difference in product evaluation between the two groups (U = 4136.5, z = -4.140, p < .001***). This difference is also graphically depicted in Figure 15.

CITY SCENE/STADTSZENE was developed for an international market...
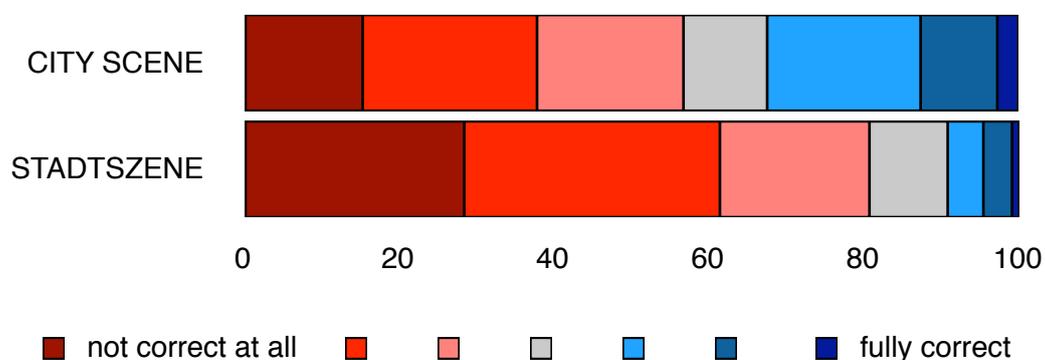
Figure 15. Evaluation of internationality for *CITY SCENE/STADTSZENE*.

Table 28

Results of Mann-Whitney-U-Test for Features of CITY SCENE/STADTSZENE

Dimension/factor/item (*Original wording in questionnaire*)	*p*
Quality/functionality/clarity (*Auf CITY SCENE/STADTSZENE findet man schnell was man sucht.*)	.954
Exclusivity/sophistication (*CITY SCENE/STADTSZENE veranstaltet exklusive Events für seine Mitglieder.*)	.408
International orientation (*CITY SCENE/STADTSZENE wurde für den internationalen Markt entwickelt.*)	< .001***
Quality/range of offer (*Das Angebot von CITY SCENE/STADTSZENE ist vielfältig.*)	.748
Quality/reliability/independence from sponsors (*Inhalte auf CITY SCENE/STADTSZENE werden von Unternehmen gesponsort.*)	.189
Quality/reliability/correctness of information (*Auf die Informationen von CITY SCENE/STADTSZENE ist Verlass.*)	.560
Quality/transparency/hidden costs (*Bei der Nutzung von CITY SCENE/STADTSZENE gibt es versteckten Kosten.*)	.116
Quality/hedonistic reputation (*Von CITY SCENE/STADTSZENE organisierte Partys sind beliebt.*)	.520
Youth orientation (*CITY SCENE/STADTSZENE ist bei Jugendlichen beliebt.*)	.082

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Means (*M*), standard deviations (*SD*), *U*- and *z*- values are reported in the text.
For reasons of brevity and clarity the original German items used in the question-naire are not translated, but described by key words, and the dimension and factor they belong to.

It comes as no surprise that the English mixed version ($M_E = 3.38$, $SD_E = 1.717$) is viewed as being more international than the German version ($M_G = 2.44$, $SD_G = 1.391$); this is evidence for the function of English as an international language. No differences were found between the language versions concerning the estimation of ease of use, range of offer, and correctness of informational content. Likewise, participants believed roughly to the same degree for both versions that the web portal organised exclusive events for members and that these parties are popular. The results for the extent to which the content of the web portal was assumed to be sponsored by firms, and hidden costs were suspected have a chance of 19% and 17% respectively of occurring without any language effects. The means suggest a vague tendency that in the English version *CITY SCENE* the contents were more often believed to be subject to corporate sponsorship ($M_E = 4.95$,

$SD_E = 1.546$; $M_G = 4.70$, $SD_G = 1.607$) and non-transparent pricing was perceived as more likely ($M_E = 3.86$, $SD_E = 1.672$; $M_G = 3.50$, $SD_G = 1.735$) than in the German version *STADTSZENE*. Although still not reaching the 5% significance level ($U = 5243.5$, $z = -1.739$, $p = .082$), the data indicate an inclination of a disparate evaluation of youth orientation with a higher acceptance of '*CITY SCENE/STADTSZENE* is popular with teenagers' in the German version ($M_E = 4.20$, $SD_E = 1.542$; $M_G = 4.56$, $SD_G = 1.566$). Even though H_0 cannot be rejected for these variables, they are unlikely enough to occur when the null hypothesis holds true to recommend themselves to further research.

In another question, participants evaluated in which cities they believed to find information on *CITY SCENE/STADTSZENE*, and in how many languages they assumed this information to be accessible [234]. The answers to both questions differed significantly between the language versions, with available cities obtaining $p = .008$** ($U = 4999.5$, $z = -2.652$,) and available languages $p = .003$** ($U = 4801.5$, $z = -2.981$). The English mixed version of the ad was more often believed to be available in more languages than English and German, and to contain information on cities in Europe and all over the world as Figures 16 and 17 show. In numbers this is indicated by the mean ranks in the two groups, where the mean rank in the German version was 99.05 and the mean rank in the English mixed version 121.74. Again, there is evidence that English functions as an international language, suggesting to the consumers that the service on offer has a more cosmopolitan orientation.

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[234] Note that these variables are essentially categorical, but since each higher category represents an increase in internationality or a widening of the scope they can be treated as ordinal. Instead of comparing medians, Mann-Whitney-*U*-tests are here used to compare mean ranks.

CITY SCENE/STADTSZENE contains information on...
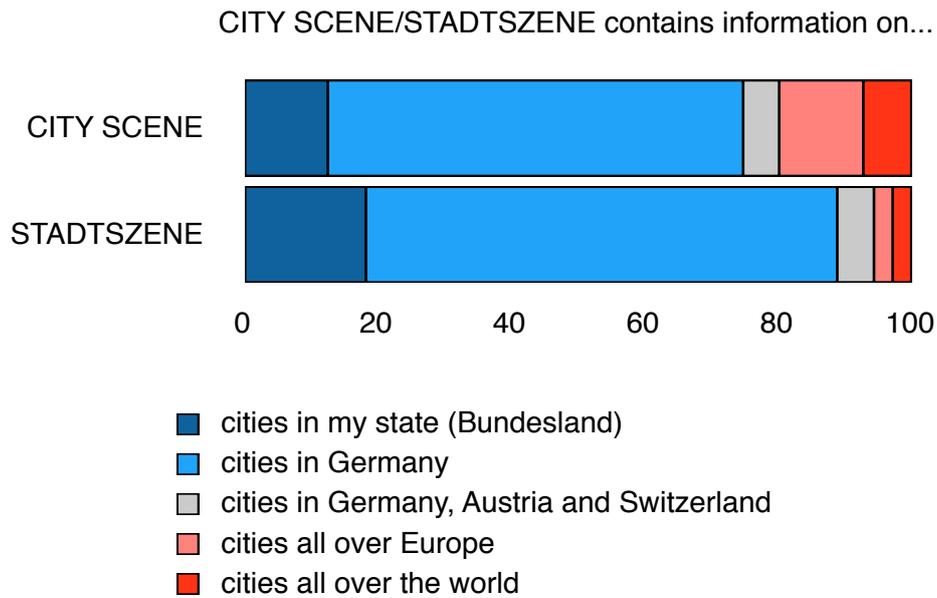
Figure 16. Evaluation of available information for *CITY SCENE/STADTSZENE*.

In what languages is CITY SCENE/STADTSZENE available?
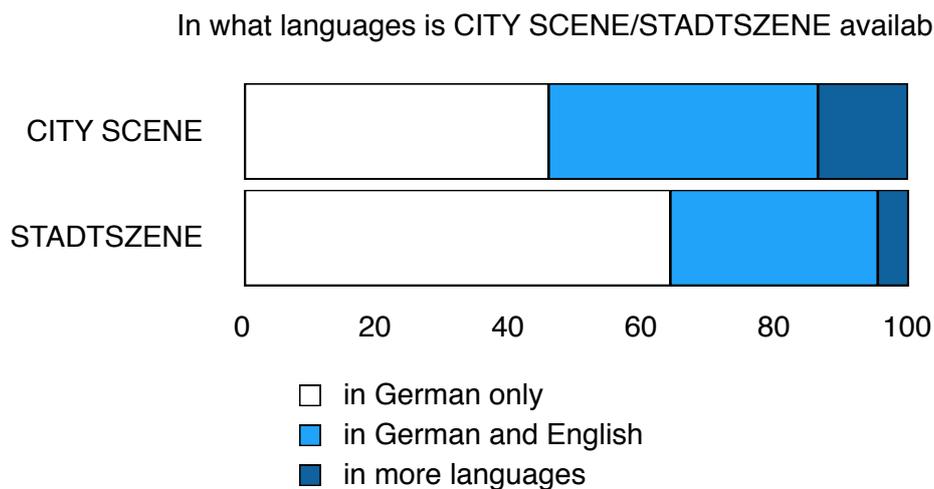
Figure 17. Evaluation of available languages for *CITY SCENE/STADTSZENE*.

LUXELIA

For the *LUXELIA* advertisement, no significant differences in the evaluation of product attributes were found between the two language versions. Participants were asked to evaluate the suitability of *LUXELIA* hotels for a number of different types of trips, such as city breaks, activity breaks, wellness trips, business trips, party holidays, language and study holiday, and school

trips or youth vacations by choosing up to three categories. A chi-square test of independence was performed to test for differences in frequencies between the English mixed and the German version of *LUXELIA* ($\chi2(6) = 3.124$, $p = .793$, $N = 521$). A *p*-value of .793 indicated that the responses were equally distributed. Table 29 gives an overview of the absolute and relative frequencies of each category for the two language versions.

Table 29

Results of Chi-Square-Tests for LUXELIA's Suitability for Trip Types

LUXELIA Hotels are suitable for... (*LUXELIA Hotels sind gut geeignet für...*)	*LUXELIA_E*		*LUXELIA_G*	
	Frequency	Percent	Frequency	Percent
city breaks (*Städtereisen*)	82	30.5%	88	34.9%
activity breaks (*sportliche Aktiv-reisen*)	28	10.4%	22	8.7%
wellness trips (*Wellnessreisen*)	103	38.3%	95	37.7%
business trips (*Geschäftsreisen*)	12	4.5%	9	3.6%
party holidays (*Party-Urlaube*)	39	14.5%	30	11.9%
language and study trip (*Sprach-und Studienreisen*)	4	1.5%	7	2.8%
school trips and youth vacations (*Klassenfahrten und Jugendreisen*)	1	0.4%	1	0.4%
Total	269	100%	252	100%

Product quality was tested in the areas of hotel facilities, service, cleanliness, food, and entertainment. Participants were asked to assess the perceived service of *LUXELIA* hotels on a seven point scale ranging from 'very bad' to 'very good'. Mann-Whitney-*U*-tests did not yield significant differences between the language versions. The *p*-values, *z*-values and means are presented in Table 30.

Table 30

Results of Mann-Whitney-U-Tests for LUXELIA's Quality

Dimensions of service (*original wording*)	p	z	M_E	M_G
Facilities (*Ausstattung*)	.610	-0.510	5.49	5.56
Service (*Service*)	.611	-0.508	5.50	5.43
Cleanliness (*Sauberkeit*)	.307	-1.022	5.59	5.44
Food (*Essen*)	.956	-0.056	5.30	5.30
Entertainment (*Unterhaltungsangebot*)	.183	-1.331	4.76	5.00

Note. Significance codes: p < .05 '*', p < .01 '**', p < .001 '***';
Standard deviations (*SD*) and *U*-values are reported in the text.

Moreover, the assumed hotel category was assessed on a scale from zero to five stars as a further indicator of quality. The calculated Mann-Whitney-*U*-test did not return a significant result (U = 6212.5, z = -0.133, p = .894; M_E = 4.57, SD_E = 0.730; M_G = 4.52, SD_G = 0.872). Differences in the perceived internationality of *LUXELIA* were tested for by asking in which regions *LUXELIA* Hotels were assumed to be located. Participants could chose one of the following answering options: in Germany only, in Germany, Austria and Switzerland, all over Europe, or worldwide. As the distribution increased with each category, the data were taken to be ordinal and Mann-Whitney-*U*-tests were performed to compare the mean ranks. No evidence for significant differences between the language versions was found (U = 6265, z = -0.015, p = .988). Another product attribute assessed was the age and family status of potential hotel guests. Participants were asked to select up to three of the presented options. A Chi-square test was run to compare the frequencies obtained in each answering category (presented in Table 31) between the language versions. It can be concluded that the perceived suitability of *LUXELIA* for specific target groups does not differ between the language versions ($\chi 2(8)$ = 1.256, p = .988, N = 224).

Table 31

Evaluation of LUXELIA's Suitability for Guest Groups

LUXELIA Hotels are suitable for... (*LUXELIA Hotels sind gut geeignet für...*)	LUXELIA_E		LUXELIA_G	
	Frequency	Percent	Frequency	Percent
singles under the age of 30 (*Singles unter 30*)	22	7.9%	23	8.6%
singles between 30 and 50 (*Singles zwischen 30 und 50*)	55	19.7%	55	20.5%
singles older than 50 (*Singles über 50*)	16	5.7%	17	6.3%
couples under the age of 30 (*Paare unter 30*)	39	14.0%	35	13.1%
couples between 30 and 50 (*Paare zwischen 30 und 50*)	90	32.2%	81	30.2%
couples older than 50 (*Paare über 50*)	38	13.6%	35	13.1%
families with children younger than 6 years (*Familien mit Kindern unter 6 Jahren*)	5	1.8%	4	1.5%
families with children 6 to 12 years (*Familien mit Kindern 6 - 12 Jahre*)	7	2.5%	9	3.4%
families with children older than 12 years (*Familien mit Kindern über 12 Jahren*)	7	2.5%	9	3.4%
total	279	100%	268	100%

ZISCH'S

In contrast to *LUXELIA* there were some significant differences in the product evaluation of the two versions of the *ZISCH'S* advertisement. At first, participants agreed or disagreed with eight statements on product attributes using the previously described seven point Likert-type scale. Mann-Whitney-*U*-tests were performed to test for differences in the evaluations of participants who evaluated the English mixed version *ZISCH'S APPLE-MANGO* and participants who assessed the German version *ZISCH'S APFEL-MANGO*. Table 32 lists the *p*-values.

Table 32

Results of Mann-Whitney-U-Tests for Attributes of ZISCH'S

Dimension/factor/item (*Original wording in questionnaire*)	p
Quality/taste/freshness (*schmeckt frisch*)	.909
Quality/taste/sweetness (*schmeckt süß*)	.022*
Quality/healthiness/vitamins (*enthält wichtige Vitamine*)	.133
Quality/added value/natural ingredients (*enthält nur natürliche Zutaten*)	.372
Quality/benefit (*löscht den Durst*)	.105
Quality/added value/organic food (*wird Fruchtsaft aus ökologischer Erzeugung verwendet*)	.524
Quality/added value/regional produce (*wird vorwiegend Apfelsaft aus regionaler Produktion verwendet*)	.166
Quality/safety (*Die Qualität ist gut*)	.545

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Means (M), standard deviations (SD), U- and z- values are reported in the text.
For reasons of brevity and clarity the original German items used in the questionnaire are not fully included here, but described by key words, and the dimension and factor they belong to.

The null hypothesis that there are no differences in the distributions can only be rejected for one product attribute, the assumed sweetness of the soft drink ($U = 5219.5$, $z = -2.294$, $p = .022*$). It was believed to taste sweeter in the English mixed version *ZISCH'S APPLE-MANGO* ($M_E = 6.02$, $SD_E = 1.097$) than in the German version *ZISCH'S APFEL-MANGO* ($M_G = 6.02$, $SD_G = 1.097$). Further interesting, but not significant differences, were obtained when participants assessed how well *ZISCH'S* would quench thirst ($U = 5502$, $z = -1.623$, $p = .105$); here the drink was evaluated better when advertised only in German ($M_G = 4.57$, $SD_G = 1.288$) than when English elements were used ($M_E = 4.25$, $SD_E = 1.560$). Even though *ZISCH'S_E* was believed to taste sweeter, it was not assumed to be less healthy. Though not significant ($U = 5555$, $z = -1.502$, $p = .133$), the data might even be interpreted to indicate a tendency that participants were less inclined to believed the drink contained important vitamins in the German version ($M_G = 2.95$, $SD_G = 1.432$) than in the English mixed version ($M_E = 3.29$, $SD_E = 1.606$). Neither version was estimated

more natural or perceived to contain more juice from organic produce. Furthermore, there were no differences in the assumed food quality. Another interesting, but not significant ($U = 5624$, $z = -1.385$, $p = .166$) tendency is suggest by the data. Participants believed the drink less likely to contain juice from regional produce in the English mixed version ($M_E = 2.18$, $SD_E = 1.307$) than in the German version ($M_G = 2.42$, $SD_G = 1.377$). Despite many comparatively low p-values, which indicate that the differences between the language versions are generally not likely to occur when H_0 is true, the null hypothesis can only be confidently rejected for the perceived taste of the drink. Figure 18 illustrates the response pattern to this item.

ZISCH'S APPLE-/APFEL-MANGO tastes sweet
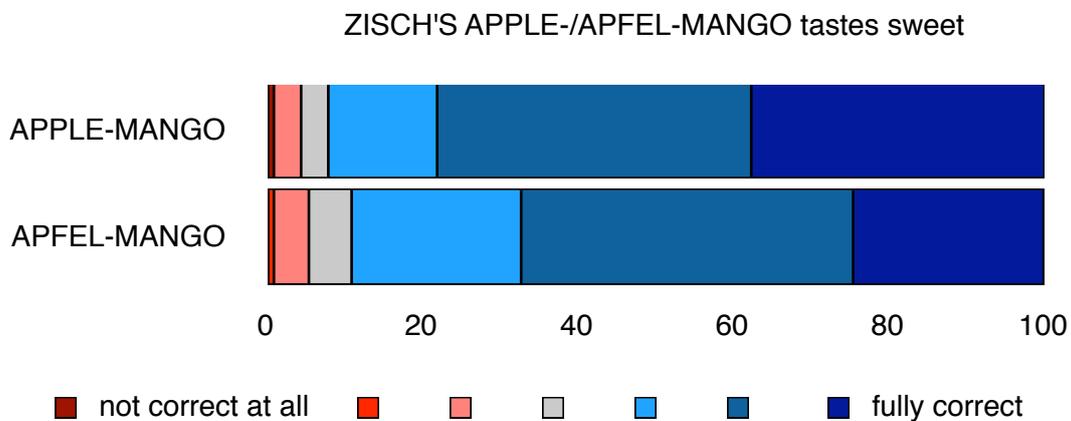
Figure 18. Evaluation of sweetness for *ZISCH'S APPLE-/APFEL-MANGO*.

Additionally, participants were asked to estimate the amount of sugar contained in *ZISCH'S*. To provide an anchor value, they were informed that 500 ml of juice drink usually contained the equivalent of 8 to 15 cubes of sugar, depending on the manufacturer. Participants then entered their guess into a text box. When the two language versions were compared using a t-test, a significant language effect was found, $t(222) = 2.108$ and $p = .036$*. While the *ZISCH'S* drink was believed to contain on average 14 cubes of sugar when the English mixed version was evaluated ($M_E = 14.02$, $SD_E = 5.597$), participants believed it contained only 12.5 cubes of sugar when seeing the German version ($M_G = 12.54$, $SD_G = 4.881$). The boxplot graphs in Figure 19 present the estimates for both language versions.
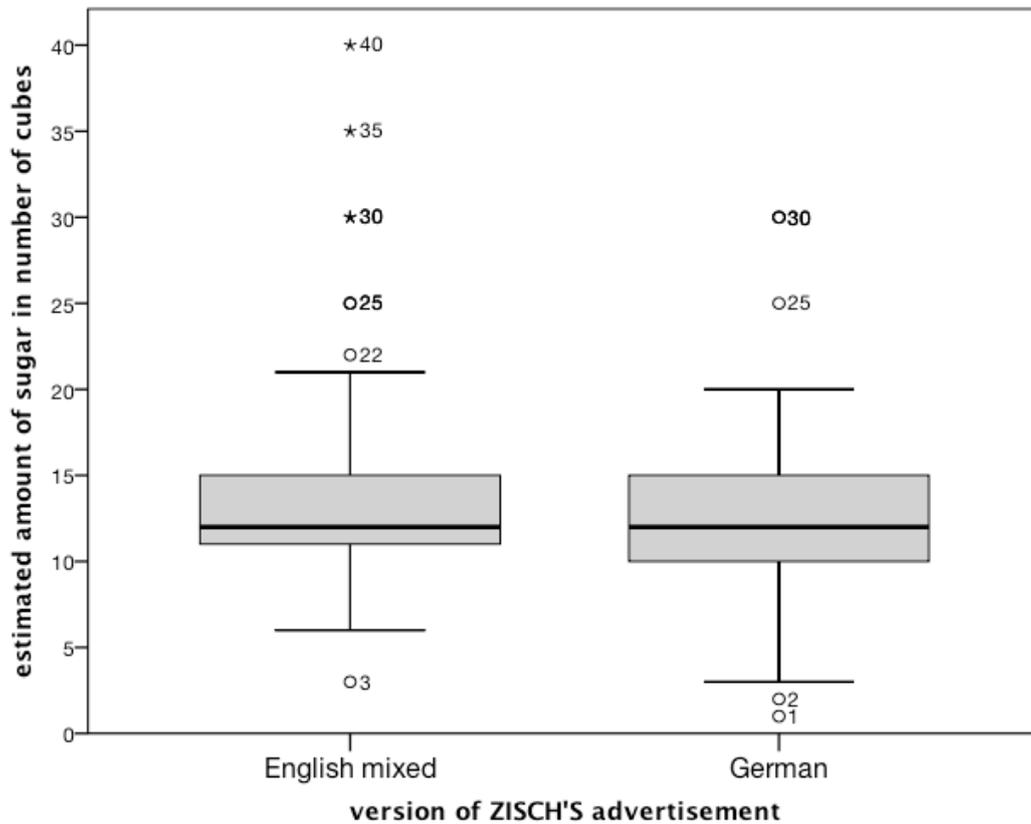
Figure 19. Estimated amount of sugar in *ZISCH'S APPLE-/APFEL-MANGO.*

Product quality comprises very different product dependent factors, such as reliability, transparency, cleanliness, food safety and many more. Along with sheer quality, also the relevance of added benefits, such as prestige-related values, depends on the product or service offered and cannot be directly compared. Therefore, product quality is not analysed on an aggregated level, it is rather the more abstract concepts of brand personality and target group that are used to gain deeper insights into general language effects.

9.4.4. Evaluation of brand personality

After completing the product specific evaluation, participants were again shown the logo, brand name and slogan. They were instructed that their next task was to estimate the brand's personality, and that it could be helpful to imagine what the brand would be like as a person. A seven point Likert-type scale was used to measure the agreement with nine personality traits. Again,

the distributions of the language versions were compared using Mann-Whitney-U-tests. Table 33 gives an overview of the *p*-values for all the advertisements.

Table 33

Results of Mann-Whitney-U-Tests for Brand Personality

Dimension/factor (*original wording*)	*p*-values for			
	SECURE	*CITY SCENE/ STADTSZENE*	*LUXELIA*	*ZISCH'S*
Attractiveness/ extravagance (*chic*)	.240	.175	.509	.096
Attractiveness/aesthetics (*geschmackvoll*)	.970	.473	.253	.411
Attractiveness/eroticism (*bezaubernd*)	.308	.423	.074	.030*
Reliability/competence (*kompetent*)	.389	.283	.460	.166
Reliability/integrity (*vertrauenswürdig*)	.092	.138	.987	.153
Temperament/creativity (*einfallsreich*)	.813	.329	.579	.003**
Temperament/dynamics (*fortschrittlich*)	.092	.986	.655	.003**
Naturalness (*natürlich*)	.485	.619	.047*	.345
Stability (*erfolgreich*)	.390	.816	.919	.287

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Means (*M*), standard deviations (*SD*), *U*- and *z*- values are reported in the text.

All differences in the evaluations of brand personality are graphically visualised in the following, whereby statistical significance is marked by an asterisk after the name of the ad version. Starting with the factor attractiveness, only the dimension of eroticism yielded one significant difference between the two language versions of *ZISCH'S* (U = 5239, z = -2.165, p = .030*), where the brand is perceived as more enchanting in the English mixed version (M_E = 3.84, SD_E = 1.572) than in the German (M_G = 3.41, SD_G = 1.486). Figure 20 illustrates this and also indicates that there are differences between the two versions of *LUXELIA*, these come close to reaching

the 5% level of significance (U = 5427.5, z = -1.784, p = .074.) However, the direction of the observed (and indicated) language effect is not uniform. While the brand *LUXELIA* was evaluated as more enchanting (*bezaubernd*) in the German version (M_G = 4.40, SD_G = 1.422) than in the English mixed version (M_E = 4.01, SD_E = 1.590), the brand *ZISCH'S* was perceived to be more enchanting when English elements were used to advertise it than when it was advertised using only German. For *SECURE/SEKUR* and *CITY SCENE/ STADTSZENE* no differences were found for this factor.
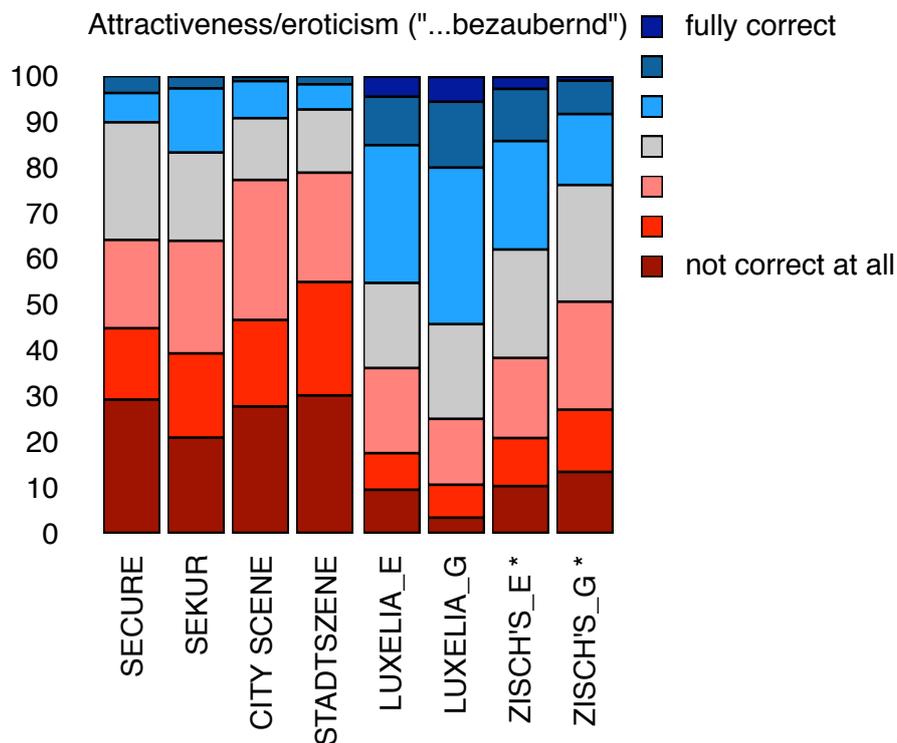
Figure 20. Evaluation of brand personality on the factor attractiveness, dimension eroticism.

Concerning another factor of the dimension attractiveness, extravagance, the low but insignificant *p*-value of *ZISCH'S* (U = 5478, z = -1.663, p = .096) deserve attention. The means suggest a tendency for the English mixed version to be evaluated as more extravagant (M_E = 4.36, SD_E = 1.569) than the German one (M_G = 3.99, SD_G = 1.588) [235]. The *p*-values obtained for the third factor of attractiveness, aesthetics, do not invite a more detailed analysis. Reliability consists of the factors competence and integrity, for which the null hypothesis cannot be rejected for any of the advertisements. However, the data indicate

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[235] This trend is also witnessed for *CITY SCENE/STADTSZENE*, but the probability of this effect occurring when the null hypothesis holds true is even larger.

higher scores on integrity ($U = 5422$, $z = -1.687$, $p = .092$) for the German version *SEKUR* ($M_G = 4.72$, $SD_G = 1.399$) than its language mixed equivalent *SECURE* ($M_E = 4.38$, $SD_E = 1.445$). This is in line with the finding that generally German advertisements were perceived to be more trustworthy when emotional appeal was analysed across all advertisements. Temperament was measured in the dimensions of creativity and dynamics, whereby the results in both dimensions were found to be highly significant for *ZISCH'S*, but not for other advertisements. The brand *ZISCH'S* was evaluated as more creative ($U = 4841$, $z = -3.021$, $p = .003**$) and more dynamic ($U = 4883.5$, $z = -2.929$, $p = .003**$) in the English mixed versions. Creativity was operationalised by the item 'imaginative' (*einfallsreich*), which received a considerably higher mean score in the English mixed condition ($M_E = 4.83$, $SD_E = 1.590$) than in the German only condition ($M_G = 4.26$, $SD_G = 1.506$). To measure the concept of dynamics the item 'progressive' was employed, the obtained means were $M_G = 4.18$ with $SD_G = 1.428$ for *ZISCH'S_G* and $M_E = 4.74$ with $SD_E = 1.482$ for *ZISCH'S_E*. Figures 21 and 22 demonstrate these differences graphically and it can be observed that participants were also inclined to assume that *SECURE* ($M_E = 4.48$, $SD_E = 1.405$) is more dynamic than *SEKUR* ($M_G = 4.17$, $SD_G = 1.343$). However, the test statistics indicate that the null hypothesis cannot be rejected in this case ($U = 5421$, $z = -1.687$, $p = .092$). Concerning the perceived naturalness of the brands, the only significant differences were found for *LUXELIA* ($U = 5329$, $z = -1.983$, $p = .047*$), which appears much more natural in the German version ($M_G = 4.14$, $SD_G = 1.381$; $M_E = 3.77$, $SD_E = 1.402$). Figure 23 illustrates the answering pattern and shows that the data do not invite further deductions for the dimension of naturalness. No language effects were found for the dimension of stability (operationalised by the assumed successfulness of the brand) in any of the advertisements.
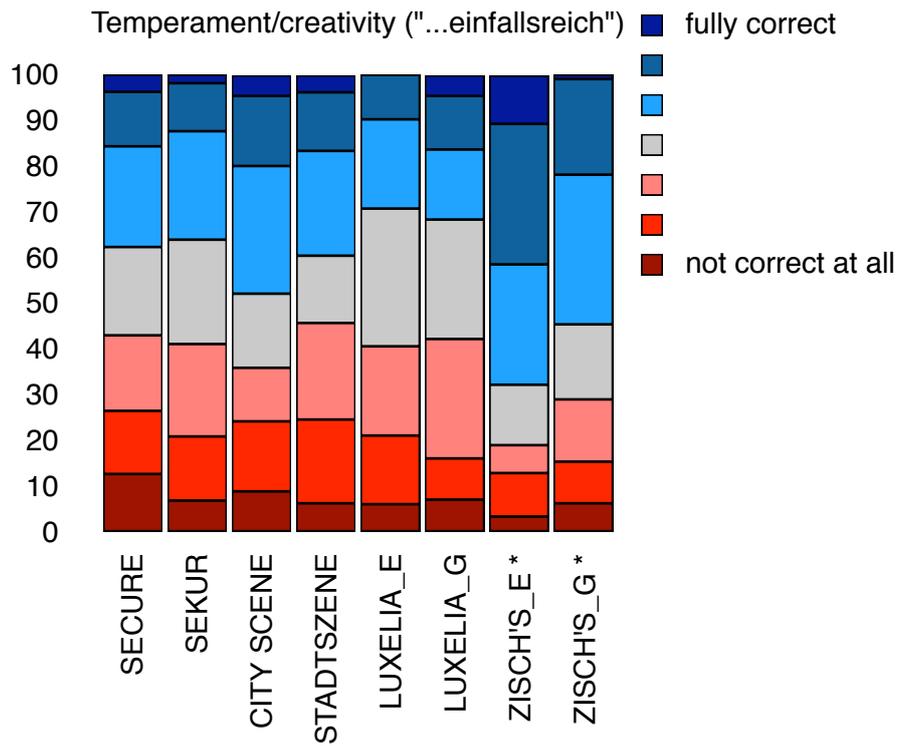
Figure 21. Evaluation of brand personality on the factor temperament, dimension creativity.
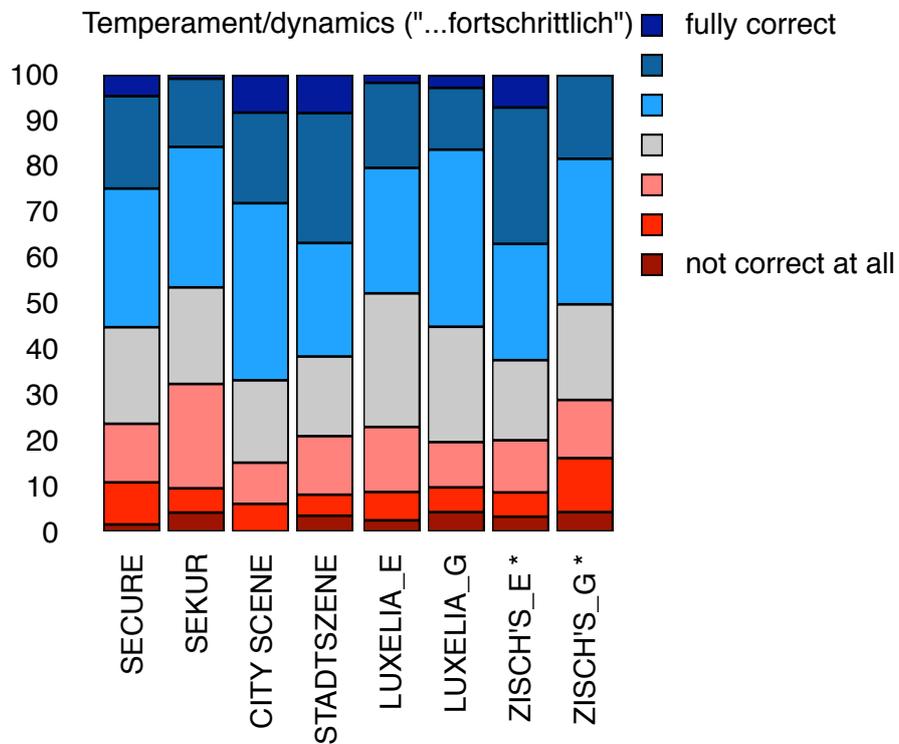
Figure 22. Evaluation of brand personality on the factor temperament, dimension dynamics.

Naturalness ("...natürlich")

fully correct

not correct at all

SECURE SEKUR CITY SCENE STADTSZENE LUXELIA_E * LUXELIA_G * ZISCH'S_E ZISCH'S_G
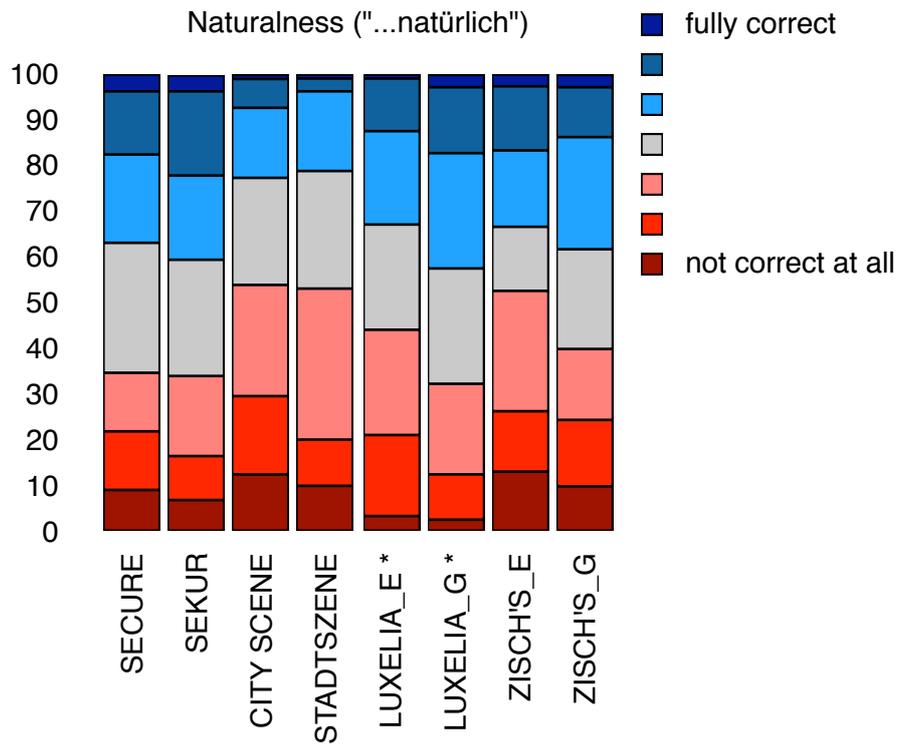
Figure 23. Evaluation of brand personality on the factor naturalness.

9.4.5. General language effects on brand personality

To analyse the influence of language on brand perception in general, brand personality items were aggregated across all advertisements and the distributions of the English mixed group and the German group compared using Mann-Whitney-U-Tests. Table 34 lists the factors and dimensions of brand personality, p- and z-values and arithmetic means. As only positive attributes were used to measure brand personality, higher mean values indicate a more positive evaluation of the brand [236].

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[236] Please refer to the previous chapter for the original German wording of the question and items.

Table 34

Results of Mann-Whitney-U-Tests for Aggregated Brand Personality

Factor: Item	p	z	M_E	M_G
Attractiveness	.134	-1.498	3.98	3.90
Attractiveness: extravagance	.018*	-2.357	4.23	4.00
Attractiveness: aesthetics	.773	-0.289	4.39	4.39
Attractiveness: eroticism	.979	-0.026	3.30	3.30
Reliability	.007**	-2.685	4.37	4.54
Reliability: competence	.149	-1.445	4.49	4.62
Reliability: integrity	.020*	-2.323	4.25	4.47
Temperament	.006**	-2.731	4.34	4.15
Temperament: creativity	.133	-1.504	4.08	3.94
Temperament: dynamics	.023*	-2.275	4.60	4.37
Naturalness	.040 *	-2.054	3.66	3.86
Stability	.644	-0.462	4.68	4.70

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Attractiveness includes the factors extravagance, aesthetics, and eroticism;
Reliability consists of competence and integrity, temperament of creativity and dynamics;
Standard deviations (*SD*) and *U*-values are reported in the text.

The brand's overall attractiveness ($N = 2673$) does not differ significantly between the language versions, however, this level of aggregation disguises an actual language effect for the factor extravagance ($N = 891$; $U = 90339.5$). Brands are perceived as more extravagant in English mixed versions than in German versions ($SD_E = 1.577$, $SD_G = 1.564$). The evaluations of aesthetics and eroticism indicate no language specific direction. Higher estimates for extravagance in the English mixed versions go hand in hand with the finding that brands advertised using only German are believed to be more reliable than brands advertised with English ($N = 1782$; $U = 368586$). H_0 that brands advertised with English are evaluated equally competent as brands advertised using only German cannot be rejected, but the mean values indicate that participants were inclined to rate a brand as more competent when it was advertised without English elements. Similarly, the results contain significant evidence ($N = 891$; $U = 90536$) that brands advertised in German only are generally attributed a higher integrity than brands advertised with English elements ($SD_E = 1.399$, $SD_G = 1.338$). Brands in English mixed ads were found

to be perceived as significantly more temperamental (N = 1782; U = 367864) than brands in German ads (SD_E = 1.539, SD_G = 1.490). While the slightly higher evaluation of a brand's creativity in the English mixed versions is not statistically significant, the higher evaluation of it progressiveness (i.e. dynamics) allows the null hypothesis to be rejected (N = 891; U = 90718.5; SD_E = 1.375, SD_G = 1.414). For the factor naturalness, the data show that brands are believed to be more natural when advertised using only German (N = 891; U = 91483; SD_E = 1.548, SD_G = 1.489). A brand's stability, on the other hand, was evaluated independently of the languages used to advertise it and therefore the H_0, that brands are perceived to be equally successful in German and English mixed ads, cannot be rejected.

This analysis of brand personality on the aggregated level has provided valuable insights into a number of language effects in advertising, proving that English elements make brands be perceived as more extravagant, temperamental and dynamic. Tendencies suggesting that English elements are likely to increase the overall attractiveness and assumed creativity of a brand were observed, too. Moreover, there is evidence that English elements decrease the assumed reliability, integrity and naturalness of a brand. Furthermore, the data suggest that evaluations of a brand's competence were probably higher when English was not used to advertise it. Figure 24 presents an overview of the personality profiles of English brands and German brands.
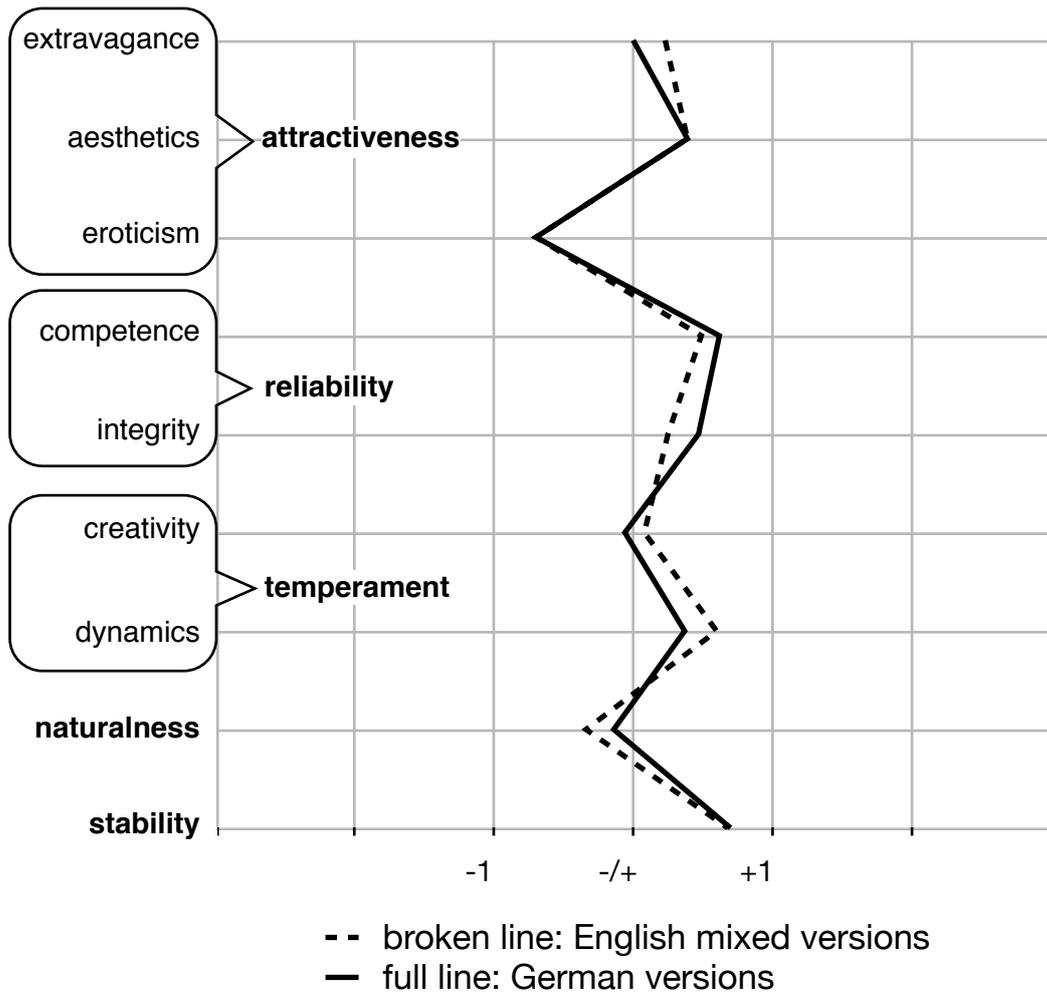
Figure 24. Aggregated personality profiles of brands.

9.4.6. Evaluation of target groups

Following the assessment of brand personality, participants were shown the advertisement again and asked to imagine somebody, who would typically buy, book or use the product or service promoted in the advertisement. This was followed by questions on age, character traits and social status of the imagined consumer. Again, the data were analysed by comparing the mean values or distribution of responses between the language versions. Age was measured in years, which participants indicated on a slider with values ranging from 1 to 100. The data were normally distributed so an independent-sample t-test was conducted to compare the estimated age of the target group in English mixed and German versions. Table 35 indicates, that there were no significant differences in the estimated age of the target group between the two language versions for any of the advertisements. However, fairly low p-values for *SECURE/SEKUR* and *ZISCH'S* suggest that observed differences are probably language related. Table 35 also lists the arithmetic means, 25%-quantiles, medians, 75%-quantiles and interquartile range (IQR) to provide further insight into the distributions of the target groups' estimated age. This information is also graphically visualised in the boxplot of Figure 25.

Table 35

Estimated Age of Target Groups

Advertisement	*M*	25%-quantile	*Mdn*	75%-quantile	IQR	*p*
SECURE	39.83	35	39	46	11	
SEKUR	41.47	36	41	46	10	.166
CITY SCENE	27.37	22	26	31	9	
STADTSZENE	25.98	22	25	29	7	.531
LUXELIA_E	39.46	33	38	46	13	
LUXELIA_G	39.52	33	38	45	12	.972
ZISCH'S_E	22.34	18	22	25	7	
ZISCH'S_G	23.74	18	23	29	9	.126

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Arithmetic mean (*M*), median (*Mdn*), interquartile range (IQR);
Standard deviations (*SD*) and t-values are reported in the text.
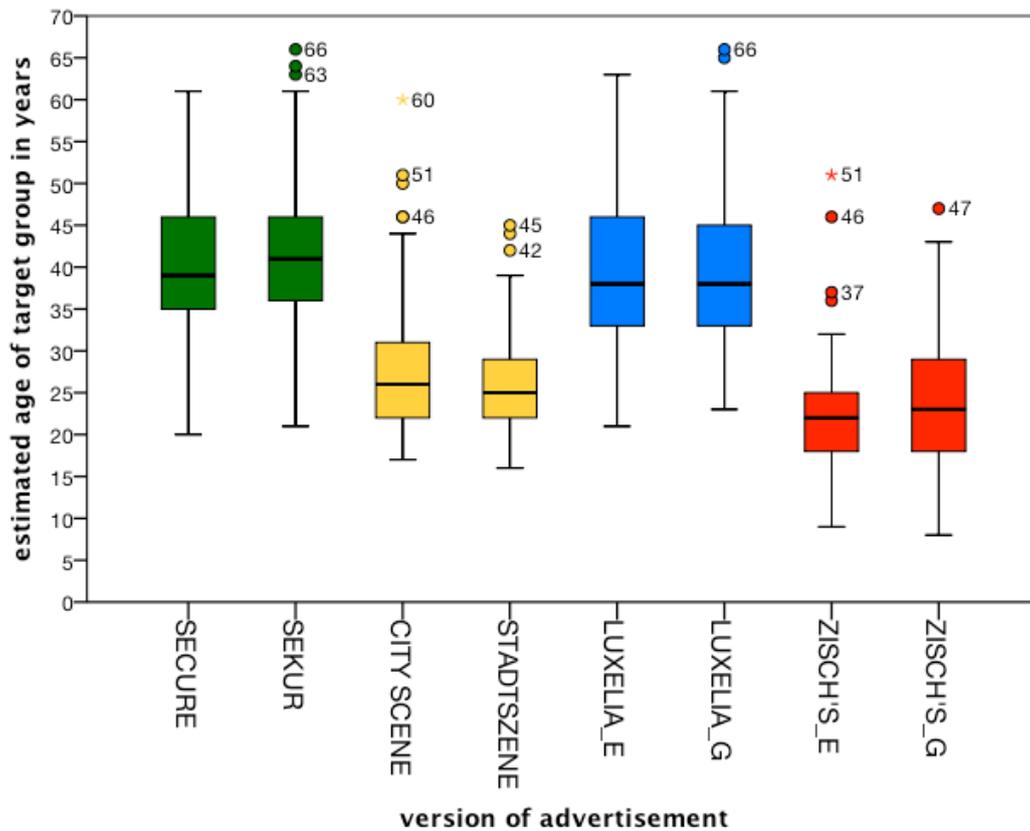
Figure 25. Estimated age of target group for all ads and language versions.

It is obvious that the differences between advertisements are larger than the differences between language versions. As was to be expected, the target groups of *ZISCH'S* and *CITY SCENE/STADTSZENE* were estimated to be younger than the target groups for *LUXELIA* and *SECURE/SEKUR*. The arithmetic means for *SECURE* and *SEKUR* differ by 1.64 years, which is the largest discrepancy in the data, but it does not reach statistical significance. When taking a look at quartiles, it becomes evident, that any observable differences between the language versions are small. The largest difference of 4 years occurs between the language versions of *ZISCH'S* at the 75%-quartiles. When regarding the mean, median and 75%-quartile, there seems to be a slight tendency for participants to estimate the target group as older in the German versions of *ZISCH'S* ($t(208.339) = -1.529$; $p = .126$; $SD_E = 6.012$, $SD_G = 7.527$) and *SEKUR* ($t(221) = -1.430$; $p = .154$; $SD_E = 8.345$, $SD_G = 8.746$) than in the English mixed versions. These tendencies are however neither significant, nor substantiated by the results obtained for *CITY SCENE/STADTSZENE* and *LUXELIA*. H$_0$ that there are no differences in the estimated age of the target

groups between advertisement that used English elements and those that are purely in German cannot be rejected on the basis of these data. In addition to the age of the target group, participants evaluated how well certain characteristics describe the typical consumers on a seven point Likert-type scale. The following table (Table 36) summarises the *p*-values obtained by the Mann-Whitney-*U*-tests performed to analyse differences in the distributions of the language versions.

Table 36

Results of Mann-Whitney-U-Tests for Target Group Traits

The typical XY consumer... (*original wording*)	*p*-values for			
	SECURE/ SEKUR	*CITY SCENE/ STADTSZENE*	*LUXELIA*	*ZISCH'S*
is cool (*ist cool*)	.650	.738	.832	< .001***
is sporty (*ist sportlich*)	.289	.111	.910	.116
is educated (*ist gebildet*)	.993	.484	.713	.522
is dynamic (*dynamisch*)	.307	.768	.545	.007**
earns good money (*verdient gut*)	.254	.534	.646	.851
is successful (*ist erfolgreich*)	.215	.350	.416	.687
is trendy (*ist trendig*)	.786	.555	.695	.001**
is open-minded (*weltoffen*)	.651	.416	.960	.059
is multilingual (*spricht min. eine Fremdspr.)*	.013*	.323	.416	.335
is humorous (*ist humorvoll*)	.991	.091	.688	.008**
is sociable (*ist gesellig*)	.267	.391	.748	.001**
is fun-oriented (*ist spaßorientier*t)	.254	.558	.562	.004**
has a wide rage of interests (*ist vielseitig interessier*t)	.474	.394	.442	.707

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***';
Means (*M*), standard deviations (*SD*), *U*- and *z*- values are reported in the text.

Participants estimated the typical consumer of *ZISCH'S* as more 'cool' when looking at the English mixed version (M_E = 5.02, SD_E = 1.248) than when looking at the German version M_G = *4.30, SD_G* = 1.352). This effect of 'English as cool' was highly significant in *ZISCH'S* (U = 4497; z = -3.753; p < .001***), but could not be witnessed for any of the other advertisements. Figure 26 visualises these results.
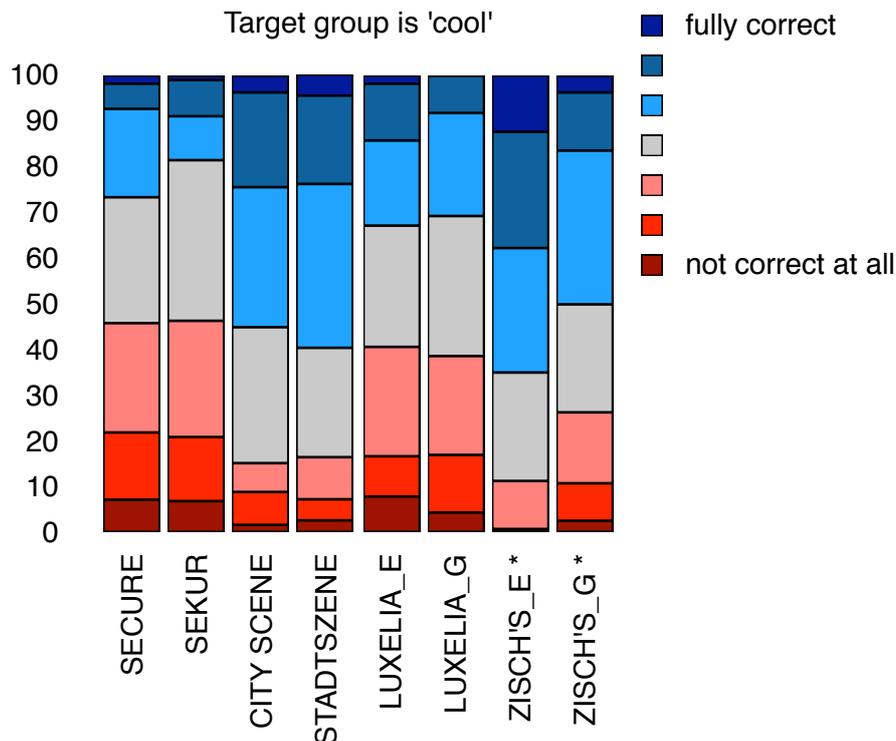
Figure 26. Evaluation of target group trait: 'is cool'.

Though there were no significant effects on the perception of the target group as sporty, some relatively low *p*-values obtained for *CITY SCENE/ STADTSZENE* (U = 5327; z = -1.593; p = .111), *ZISCH'S* (U = 5527; z = -1.570; p = .116) deserve attention. When looking at the mean values, it turns out that there is no one directional tendency, because the target group is estimated a little less sporty in the English mixed *CITY SCENE* ad (M_E = 4.35, SD_E = 1.117; M_G = 4.60 SD_G = 1.115) and a little more sporty in the English mixed *ZISCH'S* ad (M_E = 4.32, SD_E = 1.454; M_G = 4.00 SD_G = 1.388). Keeping in mind that these are not significant effects, we can conclude that if there were an effect of the English language on the evaluation of the target group's sportiness, it would very likely be product specific. The target groups' education was estimated similarly between the language versions of all advertisements, so that H_0 cannot be rejected. The same holds true for the target groups' perceived

success and income. For the items 'dynamic' and 'trendy' no interesting deviations were found between the language versions of *LUXELIA*, *CITY SCENE/STADTSZENE* and *SECURE*, but in both cases *ZISCH'S* exhibited highly significant differences, with $U = 4656.5$, $z = -3.433$, $p = .001$** for 'dynamic', and $U = 5013$, $z = -2.685$, $p = .007$** 'for trendy'. Participants believed that the English mixed versions targeted a more dynamic ($M_E = 5.04$, $SD_E = 1.262$; $M_G = 4.64$ $SD_G = 1.123$) and trendy ($M_E = 5.49$, $SD_E = 1.207$; $M_G = 4.85$ $SD_G = 1.400$) target group than the German ones. Figures 27 and 28 give an overview of the responses to these items.
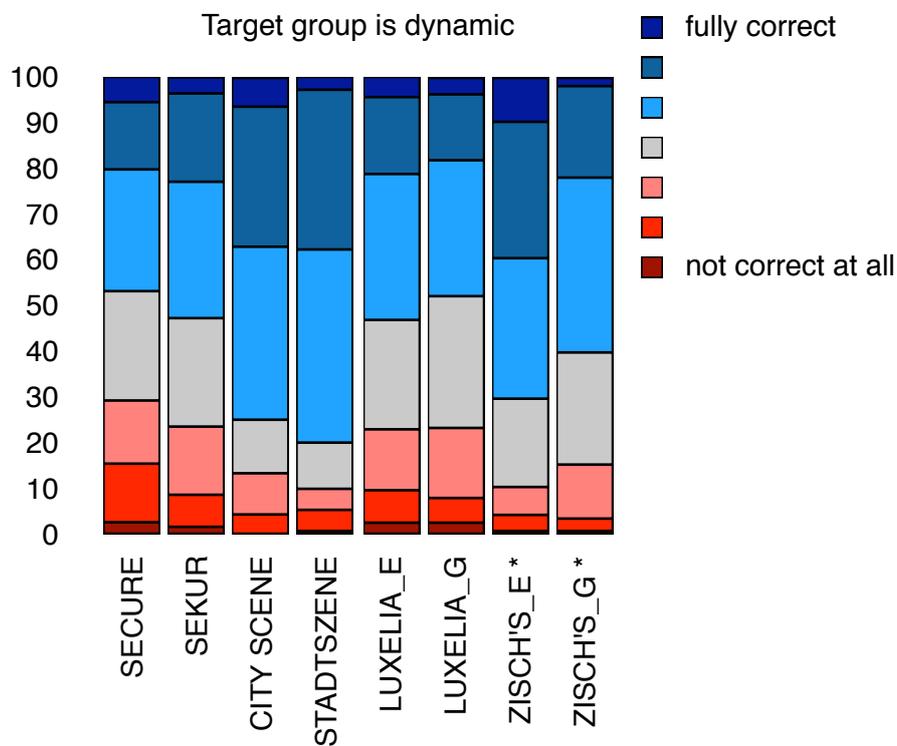
Figure 27. Evaluation of target group trait: 'dynamic'.
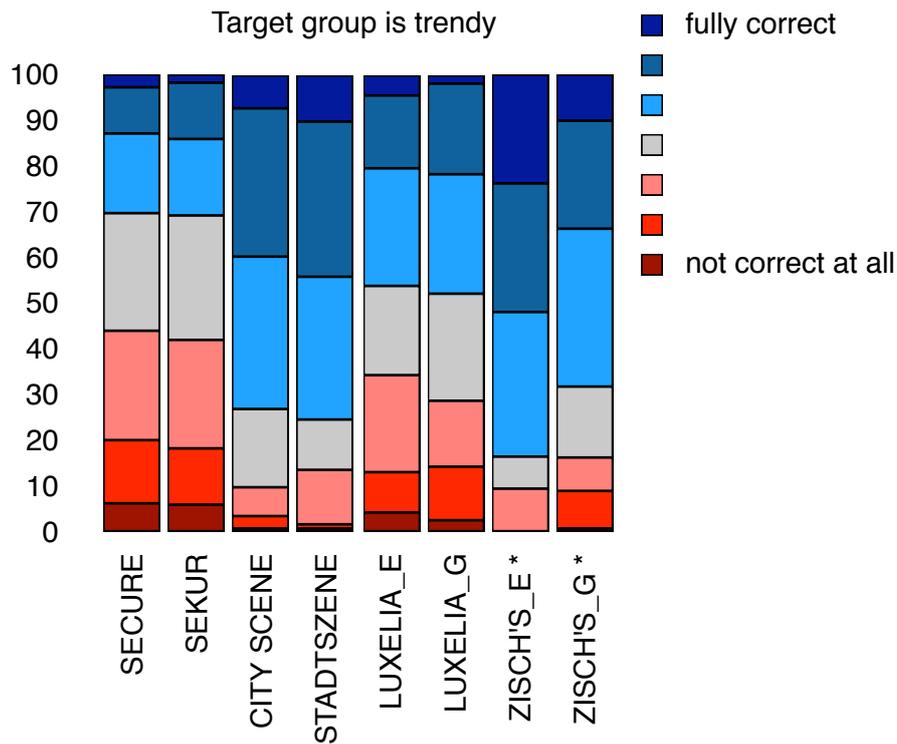
Figure 28. Evaluation of target group trait: 'trendy'.

Regarding the assumed open-mindedness of the target groups, the significance level was not reached by the *p*-values of any advertisement, but the disparate responses in the two *ZISCH'S* versions are very unlikely to occur under the assumption that the null hypothesis is correct (U = 5388; z = -1.886; p = .059). Again, the English mixed version (M_E = 4.94, SD_E = 1.139) tended to receive higher estimates than the German version (M_G = 4.67 SD_G = 1.189). The only significant language effect witnessed for *SECURE/SEKUR* (U = 5050; z = -2.486; p = .013*) occurred for the belief that *SECURE*'s target group is more likely to be multilingual (M_E = 4.70, SD_E = 1.316) than *SEKUR*'s target group (M_G = 4.24 SD_G = 1.385). While such a language effect would have been expected for all advertisements, it was not found to occur for any other tested product. Yet, as Figure 29 shows, participants never assumed the target group of the German versions to be more likely to speak at least one foreign language.
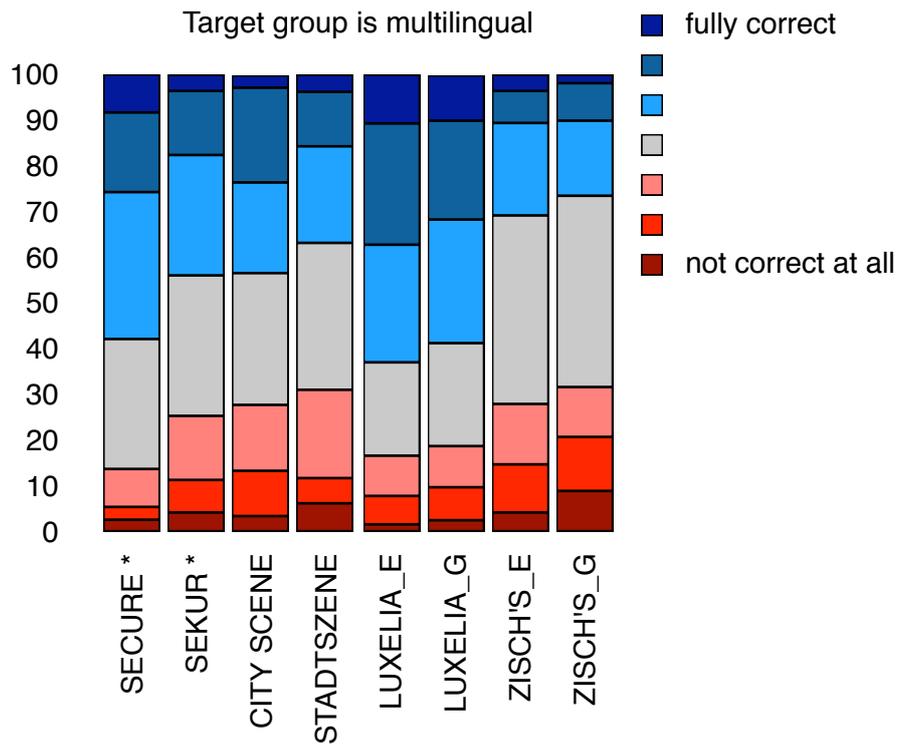
Figure 29. Evaluation of target group trait: 'is multilingual'.

The range of interests were not assessed as significantly different between target groups of different language versions, but sense of humour, sociability and fun-orientation yielded significant differences in the case of *ZISCH'S*. Using English elements to advertise a soft drink made participants believe that the target group had a better sense of humour (U = 5047, z = -2.640, p = .008**; M_E = 5.13, SD_E = 0.927; M_G = 4.68, SD_G = 1.196) and was more sociable (U = 4696, z = -3.426, p = .001**; M_E = 5.63, SD_E = 1.041; M_G = 5.19, SD_G = 1.045). Moreover, the typical consumer of *ZISCH'S* was believed to be more inclined to a light-hearted lifestyle by generally exhibiting a greater fun-orientation in the English mixed version (U = 4932.5, z = -2.901, p = .004**; M_E = 5.89, SD_E = 0.957; M_G = 5.37, SD_G = 1.340). These results are graphically visualised in the following (Figure 30 to Figure 31).
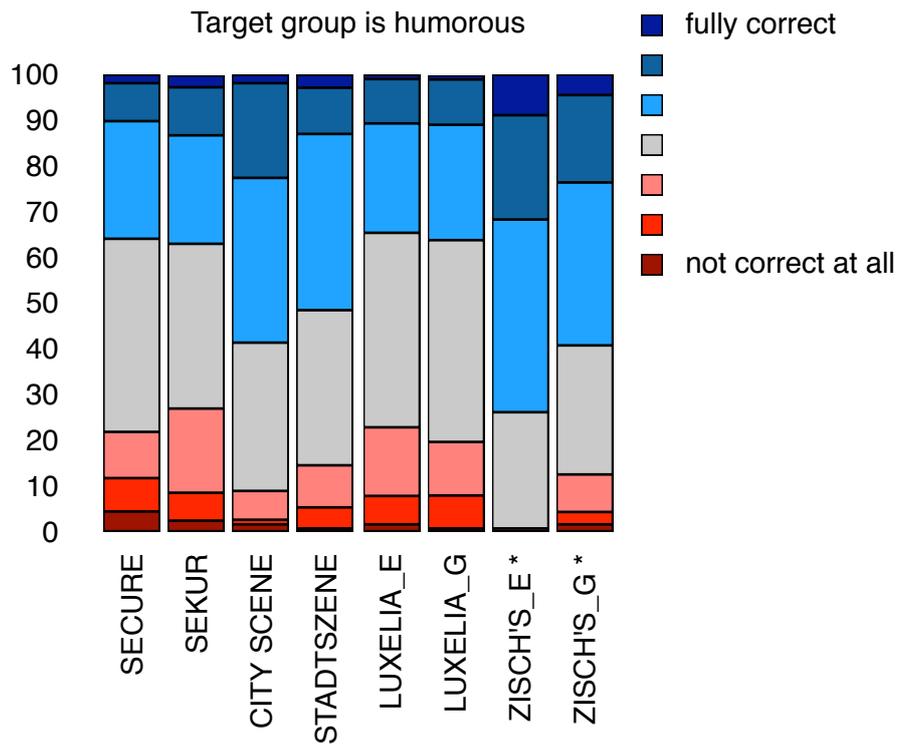
Figure 30. Evaluation of target group trait: 'is humorous'.
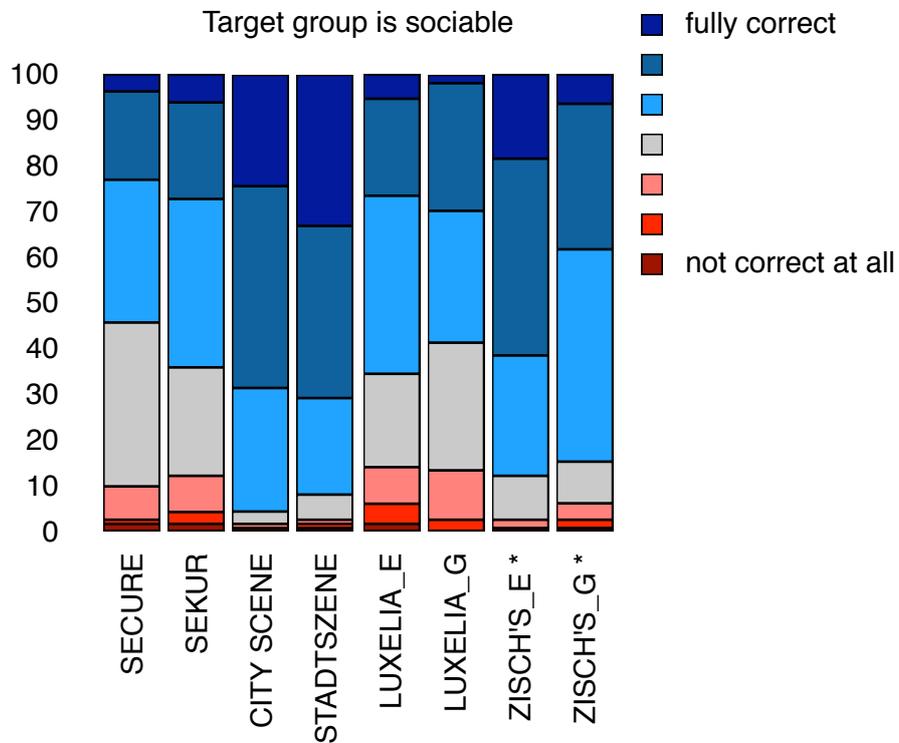
Figure 31. Evaluation of target group trait: 'is sociable'.
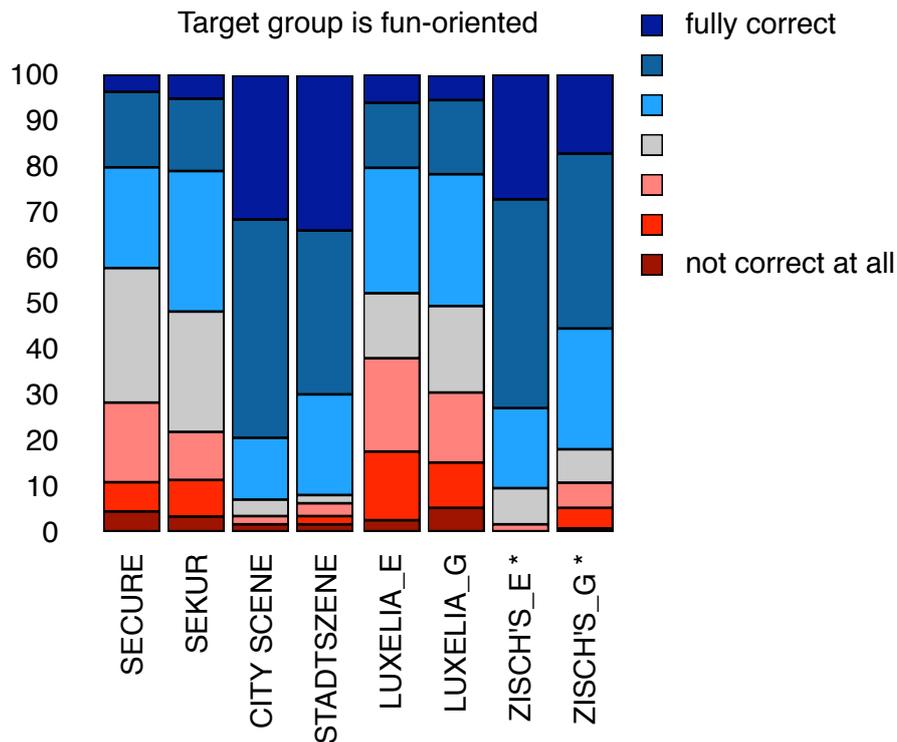
Figure 32. Evaluation of target group trait: 'is fun-oriented'.

Again, the graphs show that *SECURE/SEKUR* and *LUXELIA* received similar evaluations and so did *CITY SCENE/STADTSZENE* and *ZISCH'S*. However, only the perceived differences in the humour of the target groups for *CITY SCENE* (M_E = 4.69, SD_E = 1.068) and *STADTSZENE* (M_G = 4.46, SD_G = 1.093) came close to arriving at a 5% level of significance (U = 5289, z = -1.691, p = .091). It can be concluded that significant differences between language versions were only found in 7 out of 52 comparisons. Except for the difference in the evaluation of the target group's language skills between *SECURE* and *SEKUR*, all significant differences were found between the two *ZISCH'S* versions, where the target group was perceived to be more cool, dynamic, trendy, humorous, sociable and fun-oriented when English elements were used in the advertisement. This again indicates that language effects are advertisement (or product) specific.

In a next step, participants estimated the social class of a typical consumer by selecting one of the following options: upper class, upper middle class, middle middle class, lower middle class, or lower class. This evaluation of the target groups' social class did not yield any significant differences between the language versions. The only vague tendency observed in the data was that the

English version of *ZISCH'S* generated lower estimates of the target group's social class than the German version. Table 37 indicates the mean ranks of the English mixed versions (E) and the German versions (G), *U*-, *z*- and *p*-values obtained by conducting Mann-Whitney-U-tests for equal distributions .

Table 37

Results of Mann-Whitney-U-Tests for Target Groups' Social Class

Advertisement	Mean rank (E)	Mean rank (G)	*U*	*z*	*p*
SECURE/ SEKUR	108.68	115.17	5851.5	-0.815	.415
CITY SCENE/ STADTSZENE	108.53	112.51	5830.5	-0.514	.607
LUXELIA	108.67	116.40	5839.0	-1.001	.317
ZISCH'S	117.86	106.95	5659.0	-1.408	.159

Note. Significance codes: *p* < .05 '*', *p* < .01 '**', *p* < .001 '***';
Higher mean ranks indicate a higher evaluation of the target group's social class.

In addition, participants were asked to choose one out of six mottos which they believed best described the target group's attitude towards life. These attitudes towards life correspond to three fundamental values that represent important criteria for a classification in line with the Sinus Milieus® (Markt- und Sozialforschung GmbH 2014): tradition (represented by the red shades in Figure 33), modernisation and individualisation (the grey shades), and re-orientation (the blue shades). To compare frequencies between language versions 6 x 2 contingency tables were analysed using Fisher's exact test, because some expected frequencies were less than 1. Especially the cells of the most conservative and most progressive mottos were sparsely populated. No language effect was observed for *SECURE/SEKUR* (*p* = .922), *CITY SCENE/ STADTSZENE* (*p* = .625) and *LUXELIA* (*p* = .421). However, a significant difference in the evaluation of the target group's attitude towards life was found for *ZISCH'S* (*p* = .013*) [237]. Participants evaluating the English mixed version of *ZISCH'S* most often felt that the target group's motto for life was best

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[237] Since the mottos can be ordered along a scale from the least to the most progressive (or the most traditional to the least traditional), results of Fisher's exact test were double-checked with Mann-Whitney-*U*-Tests. These yielded very similar results, with no significant differences for *SECURE/SEKUR*, *CITY SCENE/STADTSZENE* and *LUXELIA*, but highly significant differences in the *ZISCH'S* versions (*U* = 4959.5, *z* = -2.966, *p* = .003** with the mean rank of the English mixed version being 124.00 and the mean rank of the German version being 100.59).

described by 'doing and experiencing' (51%), but only 32% of the participants evaluating the German version chose this option. On the contrary, those participants believed that 'having and enjoying' was the most suitable description of the target group's attitude towards life (54%), this motto was only selected by 39% of the people who looked at the English mixed ad.
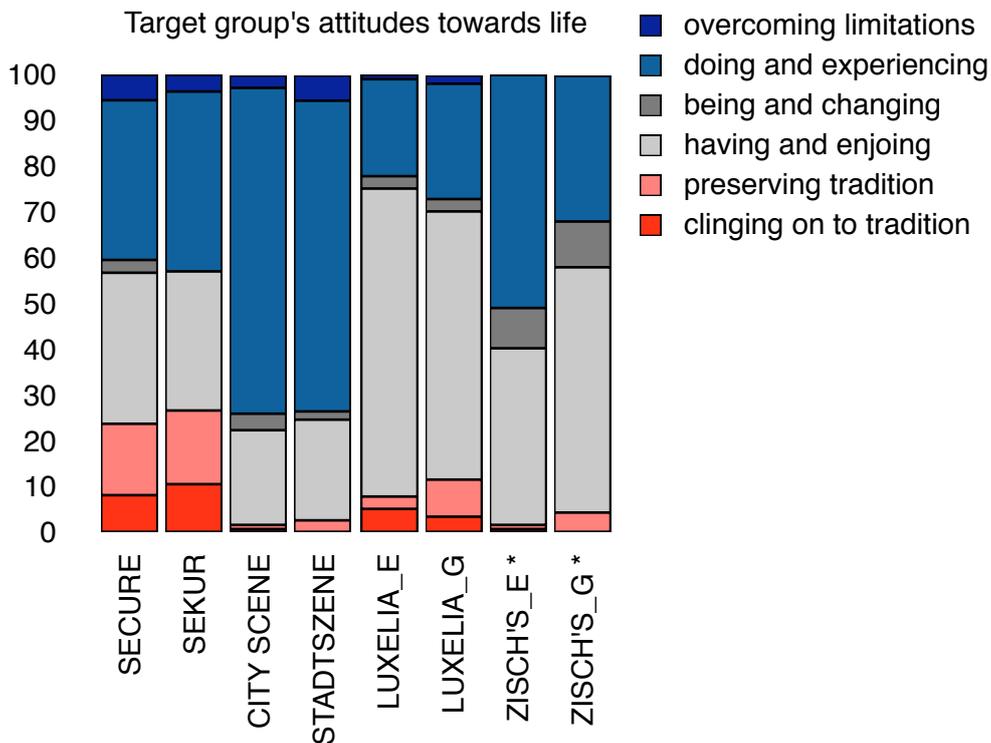
Figure 33. Evaluation of target group's attitudes towards life.

9.4.7. General language effects on perception of target groups

To gain insight into the general effects of English elements, evaluations of assumed target groups were compared on an aggregated level. Since the estimated age of the target groups had been found to differ insignificantly, but also inconsistently in the different advertisements, it was not analysed on the aggregated level. All other variables measuring target group traits were aggregated across advertisements and the distributions between the English mixed group and the German group were compared using Mann-Whitney-*U*-tests. As all items were positive and measured on a seven point Likert-type scale, the following applies: the higher the mean, the more positive the

perception of the target group. Table 38 summarises the results by presenting the p- and z-values, and the means for English mixed and German versions respectively.

Table 38

Results of Mann-Whitney-U-Tests for Aggregated Target Group Traits

Item	p	z	M_E	M_G	SD_E	SD_G
Coolness	.028*	-2.200	4.26	4.05	1.460	1.377
Trendiness	.199	-1.285	4.63	4.50	1.510	1.471
Sportiness	.629	-0.483	4.35	4.39	1.322	1.267
Good education	.936	-0.080	4.39	4.37	1.292	1.281
Dynamics	.328	-0.978	4.68	4.61	1.373	1.256
Good income	.736	-0.337	4.46	4.50	1.585	1.536
Success	.881	-0.150	4.46	4.45	1.296	1.348
Open-mindedness	.324	-0.985	4.95	4.88	1.322	1.317
Multilingualism	.012*	-2.500	4.44	4.19	1.424	1.461
Wide interests	.635	-0.474	4.72	4.65	1.360	1.378
Humour	.040*	-2.050	4.52	4.36	1.175	1.176
Sociableness	.296	-1.044	5.23	5.15	1.208	1.213
Fun-orientation	.240	-1.175	5.06	4.96	1.546	1.541

Note. Significance codes: $p < .05$ '*', $p < .01$ '**', $p < .001$ '***'; U-values are reported in the text. $N = 891$.

On a product independent level, a language effect was found for the perceived coolness of target groups addressed by advertisements that contain English elements ($U = 90975$). However, even though the response pattern points in the same direction for all advertisements, this effect is largely due to differences between the language versions of *ZISCH'S*, where the target group was believed to be more 'cool' in the English mixed version than in the German version. Moreover, a significant language effect on the assumed multilingualism of target groups was observed ($U = 89869.5$): target groups of English mixed advertisements were assumed more likely to be multilingual than target groups of German only advertisements. In addition, the null hypothesis that English elements have no effect on the target group's presumed sense of humour can be rejected ($U = 91681$), but this effect did not occur for the insurance

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advertisement. Taking a look at the sample size independent effect size measure r informs us that these are only very small effects, with $r = -.07$ for 'coolness', $r = -.08$ for multilingualism and $r = -.08$ for humour. The data also indicate that on a general level of analysis English elements in ads do not have a significant effect on the perception of the target group's sportiness, education, dynamics, income, success, open-mindedness, and range of interests. According to theories on the functions of English in advertisements, one would assume a tendency for target groups of English mixed ads to be evaluated as more dynamic and open-minded, but H_0 could not be rejected for either of these factors, as the probability of obtaining such results or more extreme ones is one out of three when the null hypothesis that there is no language effect holds true.

9.4.8. Comprehension

After having completed all the questions on the appeal of the advertisement, product quality, brand personality and target group, those participants who had evaluated the English-mixed version of *SECURE*, *ZISCH'S* or *LUXELIA* were asked whether they understood the slogan, which was shown to them again. Three response options were presented, 'yes', 'no' and 'I am not sure'. This question was designed as a filter question, so that a 'no'-response ended the evaluation of comprehension for this slogan. All the participants who answered with a 'yes'-response were asked to enter their translation of the slogan in the following. Forcing participants to prove their previously claimed understanding is tricky and was expected to lead to a higher dropout rate for this question; therefore, an escape option was included. Next to the text field provided for translation, there was the possibility of checking a box reading 'I do not know', which directed the participant to the same multiple choice question as everybody, who had replied with an 'I am not sure'-response in the first place. This question then required participants to choose the correct translation for the slogan from a set of options. Absolute frequency counts and the relative frequency in percent are provided for each selected translation option of the slogans for *SECURE*, *LUXELIA_E* and *ZISCH'S_E* respectively in Table 39.

Table 39

Comprehension of Slogans Tested with Multiple Choice Questions

Translation options for '*SECURE* insures relaxation'	Frequency	Percent
(*) *SECURE versichert Entspannung.*	14	60.9%
SECURE gewährleistet Lockerung.	2	8.7%
SECURE bietet Schutz mit Entspannung.	2	8.7%
Entspannte Sicherheit mit SECURE.	5	21.7%
Total	23	100%
Translation options for '*ZISCH'S* fruity refreshment'	Frequency	Percent
(*) *ZISCH'S fruchtige Erfrischung.*	9	90.0%
ZISCH ist fruchtig frech.	1	10.0%
Total	10	100%
Translation options for 'Dive into the world' (*LUXELIA*)	Frequency	Percent
(*) *Tauche ein in die Welt*	11	100%

Note. The only translation accepted as correct is marked by an asterisk (*).

It can be concluded that selecting the correct translation posed the most difficulties in the case of *SECURE*'s slogan, where an incorrect option was chosen by 9 out of 23 participants. Only one participant was unable to select the correct translation of the English *ZISCH'S* slogan and everybody succeeded with the *LUXELIA* slogan. Similar results were obtained for participants who entered their translation of the slogan. The aim of this translation task was to test whether the meaning of the slogans was understood, therefore, all translations which indicated that the relevant concepts had been grasped were treated as correct.

SECURE insures relaxation. This slogan was translated in various ways [238]. Only the following six translations were coded as incorrect (the original wording and orthography was retained):

SECURE versichert das Wohlbefinden.

Secure versichert ihren Urlaub.

Secure versichert Situationen des Lebens

sichere urlaubsversicherung

sicherheit bedeutet entspannung

Relex Versicherung

ZISCH'S fruity refreshment. Here, only two translations lacked either the meaning of *fresh* or *fruit* and were considered as indicating incomplete comprehension [239].

Ist erfrischend

vernichtet durst und hat ein fruchtiges geschmack

Dive into the world. Three translations were considered wrong [240].

In die Welt abtauchen.

In das Glück eintauchen

erlebe einen All Inclusive Urlaub auf irgendeiner Südseeinsel

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[238] All answers that translated *insures* into either 'versichert', 'sichert', 'sichert ab', 'stellt sicher', 'garantiert', or 'gewährleistet' and *relaxation* into 'Entspannung', 'Erholung', 'Relaxen', 'Ausspannen', 'Entspanntheit', 'Gelassenheit', 'Erholungsurlaub', or 'erholsamen Urlaub' were treated as correct. Some participants also translated the name *SECURE*. Next to the intended translation 'sicher', *SECURE* was also translated as 'Sicherheit' ('security') by three participants. Even though this is not entirely correct, it was not taken as a decisive criterion if the rest was in line with the previously mentioned versions. There were grey zones which departed from literal translations but still grasped the essence of the slogan, e.g. *insures* was translated to 'verspricht' ('promises') and *relaxation* to 'Ruhe' ('rest', 'repose'). These were nevertheless accepted, because the concepts are related metonymically. Another questionable translation was *entspannt versichert*, which includes the relevant concepts but not the required structure, it was nevertheless treated as an indication of correct understanding.

[239] A translation was taken to be correct when it included the words 'fruchtige Erfrischung'. Whether *ZISCH'S* was translated as a genitive construction ('die fruchtige Erfrischung von *ZISCH*', '*ZISCH*'s fruchtige Erfrischung') or not, was considered to be irrelevant since both options are equally valid. Grey zones, in which the word classes of the English original were not represented, were still considered to be appropriate indicators of understanding; e.g. 'fruchtig erfrischend', 'Ein auf Frucht basierendes Erfrischungsgetränk', 'Früchte-erfrischung', 'Obsterfrischungen'.

[240] For the English slogan of *LUXELIA Dive into the world* literal as well as metaphorical translations of *Dive* as 'erlebe' ('experience'), 'entdecke' ('discover'), 'bereise' ('travel') were accepted. Also translations that did not reflect the imperative structure of the original (e.g. 'in die Welt eintauchen', 'Ich tauche in die Welt ein') were considered as indicating sufficient understanding. It might be argued that 'In das Glück eintauchen' ('Dive into luck') also grasps the essence of the advertising message, but *indulging* alone does not include the second key aspect of *discovering*.

Table 40 indicates the (absolute and relative) frequencies of self-reported comprehension and actual comprehension of the slogans.

Table 40

Self-reported vs Actual Slogan Comprehension

Self-reported, actual comprehension	SECURE		ZISCH'S_E		LUXELIA_E	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes, yes	66	60.6%	102	89.5%	96	85.0%
Yes, no	6	5.5%	2	1.8%	3	2.7%
No, (not tested)	14	12.8%	0	0%	3	2.7%
Not sure, yes	14	12.8%	9	7.9%	11	9.7%
Not sure, no	9	8.3%	1	0.9%	0	0%
Total	109	100%	114	100%	113	100%

Note: Actual comprehension was not tested, when participants reported not being able to understand the slogan. One participant who evaluated the *LUXELIA_E* advertisement claimed to understand the slogan in the first question, but then did not enter a translation when asked to do so, and selected the 'I do not know'-button provided. He or she was then directed to the multiple choice question to select the appropriate translation.

Only 11 out of all 297 participants believed they could understand a slogan which they were not able to translate correctly in the following. Six cases of incorrect self-assessment occurred for *SECURE*, which proved to be the most difficult slogan with a total of 27% (29 out of 109) wrong translations. As expected, *ZISCH'S* English slogan, which contained only English-German cognates, was believed to be understood by 91% of the participants (104 out of 114), and it actually was translated correctly by almost everyone (111 out of 114, i.e. 97%). Also the English slogan of *LUXELIA* posed no problems for participants. It was believed to be understood by 88% of the participants (99 out of 113) and was actually comprehended by 95% (107 out of 113). This high level of comprehension corresponds to the generally high level of the participants' English skills in this sample.

9.4.9. Influence of comprehension on evaluation of *SECURE*

The influence of comprehension on an advertisement evaluation is only analysed for *SECURE*, because the slogans of *ZISCH'S_E* and *LUXELIA_E* were understood by more than 95% of the participants. The two language versions of the advertisement *SECURE/SEKUR* were only evaluated as significantly different for two aspects. *SEKUR* was more often believed to be a German insurance agency ($p < .001$***), and the target group of *SECURE* scored higher on estimated multilingualism ($p = .013$*). These effects can be explained by the function of English as an international language, which occurs in an advertisement of an international insurance agency that is believed to address a multilingual target group. In the following the influence of slogan comprehension on these evaluations is presented in a contingency table (results in Table 41) and a Chi-square test of independence was conducted to test for differences in the two groups. The estimation of multilingualism was coded into three categories (yes = including all positive responses, no = containing all negative responses, and neutral). On the basis of the results H_0, that the frequencies in cells are as expected, cannot be rejected ($\chi2(2) = 3.686$, $p = .158$, $N = 109$). It can be concluded that comprehension of the English slogan did not influence the evaluation of the target group's multilingualism.

Table 41

Influence of Slogan Comprehension on Target Group Perception

Evaluation of target group	Slogan not comprehended		Slogan comprehended		Total
	F	%	*F*	%	*F*
multilingualism = no	1	3.4%	14	17.5%	15
Neutral	10	34.5%	21	26.3%	31
Multilingualism = yes	18	62.1%	45	56.3%	63
Total	29	100%	80	100%	109

Note: Total frequency (*F*)

Moreover, the Chi-square-test conducted to test for a language effect on the evaluation of *SECURE* as international was not significant. The data suggest that comprehension is irrelevant for the perception of *SECURE* as a German

insurance agency ($\chi2(2) = 1.374$, $p = .503$; $N = 109$). Table 42 summarises the response patter.

Table 42

Influence of Slogan Comprehension on Company Perception

Evaluation of com-pany	Slogan not comprehended		Slogan compre-hended		Sum of rows
	F	%	F	%	F
National (German)	6	20.7%	25	31.3%	31
Neutral	4	13.8%	12	15.0%	16
International	19	65.5%	43	53.8%	62
Sum of columns	29	100%	80	100%	109

Note: Total frequency (*F*)

In order to learn more about the interpersonal factors that influence the evaluation of advertisements, selected results were further examined with regression analysis. Up to now, the envisioned effects have been solely attributed to language use in the ad versions. It is assumed that other factors, such as language skills, attitudes towards English, gender, age, or education, influence the evaluation of the ad versions. To test whether different consumer characteristics lead to specific evaluations, selected language effects on an advertisement's appeal, the evaluation of brand personality and perceived target group are focussed on in the following.

9.4.10. Attitudes towards the use of English in Germany

Table 43

Attitudes towards the use of English in Germany

Attitude	Frequency	Percent
Very negative	1	0.3%
Negative	33	11.1%
Neutral	150	50.5%
Positive	107	36.0%
Very positive	6	2.0%
total	297	100%

Note. This is an index variable computed out of participants' agreement to the following items: Positive items: "Englisch gibt der Werbung der nötigen Pep", "Englische Ausdrücke sind eine Bereicherung für die deutsche Sprache", "Es ist in Ordnung, wenn ausländische Firmen mit Englisch werben", "Englisch in der Werbung ist in Ordnung solange man es versteht"; Negative items: "Es sollte in Deutschland ein Gesetz geben, das es verbietet ganz auf Englisch zu werben", "Englisch wird bewusst eingesetzt um Negatives zu verschleiern", "Deutsche Firmen sollten in Deutschland nicht mit Deutsch werben", "Es ist generell wichtig die deutsche Sprache vor dem Einfluss des Englischen zu schützen","In der Werbung wird zu viel Englisch benutzt";

The attitudes towards English were measured on a five point multi-item scale ranging from 'do not agree at all' to 'totally agree'. As the extremes were poorly populated, all negative and all positive scores were collapsed respectively and an index variable with three categories was computed. Most participants held neutral (51%) or positive attitudes (38%), only 11% reported having negative attitudes towards the use of English in German advertisements (Table 43). A chi-square test for association was conducted between gender and attitudes on the use of English in German advertisements. All expected cell frequencies were greater than five. There was no statistically significant association between gender and attitudes ($\chi2(2) = 2.673$, $p = .263$). The same holds true for attitudes and age ($\chi2(4) = 5.602$ $p = .231$), attitudes and education ($\chi2(4) = 2.999$, $p = .558$), attitudes and English skills ($\chi2(4) = 5.591$, $p = .232$), and attitudes and English contact ($\chi2(8) = 11.769$, $p = .162$).

9.4.11. Contact with the English Language

The way in which lexical items are linked to concepts is believed to vary with the level of proficiency and the circumstances of acquisition. Moreover, it is assumed that the frequency of encountering an item of English origin in either a German text or an English text has an effect on its mental representation [241]. When somebody is highly proficient in English chances are that he or she will have come across an English item more often in an English context than somebody with few English skills, who only encounters English elements when they are used in German texts, that is when they are 'borrowed' in some sense. As has been explained, borrowing usually leads to a change in meaning, be it a broadening or a narrowing of the original concept. From this it follows that somebody who only knows the meaning of English elements from their use in German contexts will have a different mental representation of it than somebody who has also acquired the original meaning of an English item in an English context. While for the first person only one conceptual representation is available, the latter could have formed two concepts, which overlap to some degree but not completely. These forms of compound or coordinate representations are therefore associated with different modes of acquisition. Since modes of acquisition are not easily assessable, the frequency of contact with English serves as a proxy for the amount of input of English elements in English context with their original meanings. In essence, it is argued that whoever has no or basic English skills and little contact with the English language will have more narrow concepts for the known English items than somebody who is highly proficient and regularly uses the English language. This implies that English skills and English contact can moderate the meaning of English elements in advertisements, therefore, English contact was assessed by four questions in the survey. On a five point scale ranging from never to several times a week the participants reported how often they read English texts, watched English films, wrote English texts with more than ten sentences, and held conversations in English [242]. The scores on individual items

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[241] Here a broad conceptualisation of 'text' including context applies.

[242] Estimations of frequency are known to be based on two different processes of computation depending on whether they occur regularly or irregularly (Wyer 2008, 51). The frequency of events that occur regularly (e.g. having English lessons in school) is simply calculated, but when judging the frequency of irregular events (e.g. watching an English film) people search their memory for relevant instances. As this search is not likely to be exhaustive, "people may base their judgements on how easily these instances come to mind" which is known as the *availability heuristic* (Wyer 2008, 51).

were accumulated into an unweighted index variable for English contact, which is presented in Table 44.

Table 44

Participants' Overall Contact with English

English Contact	Frequency	Percent
Never	28	9.7%
Less than twice a month	82	27.6%
Twice to four times a month	87	29.3%
More than four times a month	69	23.2%
Several times a week	31	10.4%
Total	297	100%

Note. English contact was measured using individual items for the frequency of reading texts, watching films, writing texts and having conversations in English. The index English contact contains the rounded mean of the scores obtained for these four variables.

A chi-square test for association was conducted between English skills and English contact. One expected cell frequency was smaller than five and the minimal expected frequency was 4.62. There was a statistically significant association between English skills and contact with English ($\chi2(8) = 156.938$, $p < .001$***), as would be expected. The effect size for this finding, Cramér's V, was .514. There is also an association between English contact and level of education ($\chi2(8) = 90.541$ $p < .001$***) [243] with Cramér's *V* of .390 indicating a moderate effect. Similarly, the chi-square test conducted to analyse the association between age and English contact yielded significant results ($\chi2(8) = 53.829$ $p < .001$***). There were zero cells with frequencies of less than five, 60.7% of the participants who reported never coming in contact with the English language were older than 35, while 58.1% of the participants having contact with English several times a week were between 16 and 25 years old. Cramér's *V* of .301 indicates that there is a moderate correlation. No statistically significant difference in the frequency of English contact was found between men and women.

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[243] Here, two cells have a frequency of less than five, the minimal expected frequency is 2.45.

9.4.12. Factors influencing evaluation of advertisements as trustworthy

All advertisements are analysed in the following to find out whether the language version of an advertisement was the only factor influencing the evaluation of trustworthiness. The dependent variable is the perceived trustworthiness of the advertisement as assessed on a seven point semantic differential scale with the poles trustworthy and untrustworthy. Since extreme responses were rare, the outer categories were collapsed with the adjacent ones before an ordinal logistic regression analysis was performed. Predictive variables included in the final model are language version of the advertisement and education. The variables gender and age did not contribute to the fit of the model. The assumption of proportional odds was confirmed, as assessed by a full likelihood ratio test comparing the residual of the fitted location model to a model with varying location parameters ($\chi2(9) = 13.662$, $p = .135$). The Pearson goodness-of-fit test indicated that the model was a fairly good fit to the observed data ($\chi2(17) = 21.387$, $p = .209$). The final model statistically significantly predicted the dependent variable over and above the intercept-only model ($\chi2(3) = 8.011$, $p = .046*$). It was found that the language version evaluated has a statistically significant effect on the prediction of whether the advertisement is thought to be trustworthy (Wald $\chi2(1) = 4.422$, $p = .035*$). The odds ratio of perceiving the ad as less trustworthy for participants viewing the English-mixed version versus participants viewing the German version is 1.288 (95% CI, 0.613 to 0.983). The level of education was found to partly have an effect on the perceived trustworthiness of an advertisement (Wald $\chi2(2) = 4.345$, $p = .114$). The odds of participants without an Abitur evaluating an advertisement as less trustworthy was 0.643 times (95% CI, 1.011 to 2.392, Wald $\chi2(1) = 4.046$, $p = .044*$) that of participants who had an Abitur. The odds of participants with a university degree estimating an advertisement as trustworthy was similar to that of participants with only an Abitur (odds ration of 1.017, 95% CI, 0.758 to 1.276, Wald $\chi2(1) = 0.016$, $p = .899$). Theses results are summarised in Table 45.

Table 45

Logistic Regression Analysis of Evaluation of Trustworthiness 1

Variable	B	*SD*	Wald	*p*	Exp(B)
Language version English	0.253	0.120	4.422	.035 *	1.288
Education no Abitur	-0.442	0.220	4.046	.044*	0.643
Education university degree	0.017	0.133	0.016	.899	1.017
Threshold coefficients					
[-2] untrustworthy	-2.570	0.148	301.944	< .001***	0.077
[-1]	-1.438	0.114	158.940	< .001***	0.237
[0]	0.444	0.103	18.565	< .001***	0.642
[+1]	0.946	0.107	77.901	< .001***	2.576
[+2] trustworthy	(category of reference)				

Note: Reference categories are: language version German, education Abitur, gender female, and English skills good. 95% Wald confidence intervals are reported in the text; *df*(1).

In a next step, only responses to English advertisement versions were analysed for influences of English skills, attitudes to English and English contact (results in Table 46). The assumption of proportional odds was assessed by a full likelihood ratio test comparing the residual of the fitted location model to a model with varying location parameters and was confirmed ($\chi2(15) = 16.524$, $p = .348$). The Pearson goodness-of-fit test indicated that the model was a good fit to the data ($\chi2(115) = 117.921$, $p = .407$), however, 23,9% of cells contained zero frequencies. The final model was statistically significantly better at predicting the dependent variable than the intercept-only model ($\chi2(5) = 11.994$, $p = .035*$). It was found that negative attitudes towards English in German advertisements have a statistically significant effect on the perception of trustworthiness (Wald $\chi2(1) = 3.940$, $p = .047*$). The odds ratio of evaluating the ad as more untrustworthy for participants with negative attitudes towards English versus participants with neutral attitudes is 1.442 (95% CI, 1.005 to 2.069). However, positive attitudes do not have a significant influence (Wald $\chi2(1) = 1.494$, $p = .222$), and neither does the frequency of contact with English (Wald $\chi2(1) = 0.625$, $p = .429$). English skills also seem to have some power to predict the estimation of trustworthiness (Wald $\chi2(2) = 4.669$, $p = .097$). The odds of participants without or with only basic English skills evaluating an advertisement as trustworthy is 1.776 times (95%

CI, 1.035 to 3.047 Wald $\chi2(1) = 4.345$, $p = .037*$) that of participants with good English skills. Whether somebody had good or very good English skills did not change the odds, however (Wald $\chi2(1) = 0.738$, $p = .390$). To cross-check, whether these effects also hold for the evaluation of German versions, the identical model was run on the corresponding items of advertisements containing only German. The model was not better as the intercept-only model at predicting the outcome ($\chi2(5) = 6.864$, $p = .231$), and none of the individual variables or categories reach statistical significance [244]. It can be concluded, that the described effects only apply when English mixed advertisements are evaluated.

Table 46

Logistic Regression Analysis of Evaluation of Trustworthiness 2

Variable	B	SD	Wald	p	Exp(B)
English skills none or basic	0.574	0.276	4.345	.037 *	1.776
English skills very good	0.178	0.207	0.738	.390	1.195
Attitudes positive	0.332	0.272	1.494	.222	1.394
Attitudes negative	0.366	0.184	3.940	.047*	1.442
English contact	-0.078	0.099	0.625	.429	0.925
Threshold coefficients					
[-2] untrustworthy	-2.258	0.346	42.605	< .001***	0.105
[-1]	-1.118	0.323	11.980	.001**	0.327
[0]	-0.133	0.318	0.175	.676	0.875
[+1]	1.336	0.325	16.901	< .001***	3.803
[+2] trustworthy	(category of reference)				

Note: Reference categories are: good English skills and neutral attitudes to English. An increase in English contact was associated with an increase in the odds of considering the advertisement as trustworthy. 95% Wald confidence intervals are reported in the text; *df*(1).

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[244] For the aims of this study, variables which predict the evaluation of German versions are not of interest, therefore, the results of these regression analysis are not reported unless, they share significant influences on evaluation with the English mixed versions.

9.4.13. Factors influencing evaluation of brands

Reliability

A cumulative odds ordinal logistic regression with proportional odds was run to determine the effect of education, attitudes towards the use of English in advertising, age, English contact, and comprehension on perceived reliability of brands advertised with English mixing (results in Table 47). Gender and English skills did not contribute to the predictive power of the model and had no statistically significant influence. There were proportional odds, as assessed by a full likelihood ratio test comparing the fitted model to a model with varying location parameters ($\chi2(24) = 16.820$, $p = .856$). The deviance goodness-of-fit test indicated that the model was not a good fit to the observed data ($\chi2(400) = 607.483$, $p <.001***$), but only 39.6% cells were sparse with zero frequencies. However, the final model statistically significantly predicted the dependent variable over and above the intercept-only model ($\chi2(8) = 49.565$, $p < .001***$) [245].

Participants' level of education influenced the responses ($\chi2(2) = 6.938$, $p = .031*$). The odds of participants without an Abitur considering an English language version more reliable was 0.520 (95% CI, 0.314 to 0.860) times that for participants with an Abitur ($\chi2(1) = 6.477$, $p = .011*$), but whether participants had a university degree on top of an Abitur did not matter for their assessment of reliability ($\chi2(1) = 0.006$, $p = .937$). Attitudes indicated an effect on evaluation, too ($\chi2(2) = 8.957$, $p = .011*$). Negative attitudes towards the use of English in German advertising had a statistically significant effect on the prediction of whether a brand of an English mixed ad was thought to be reliable ($\chi2(1) = 7.210$, $p = .007**$). Participants with negative attitudes were 0.705 (95% CI, 0.546 to 0.910) times less likely than people with neutral attitudes to select a higher category on the scales measuring reliability. Yet, the influence of positive attitudes towards English in German advertising was not significant ($\chi2(1) = 0.247$, $p = .619$). A similar picture emerges for the influence of age, which was highly significant ($\chi2(2) = 25.255$, $p < .001***$) with participants younger than 25 years being only half (0.512 times, 95% CI, 0.363 to 0.723) as likely to chose a higher category when assessing reliability than people

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[245] The reason for not further reducing the number of variables in the model, which would lead to a better fit, is that of each predictor at least one category has a statistically significant effect on the dependent variable.

between 25 and 35 years of age ($\chi2(1) = 14.470$, $p < .001$***). Again, this effect was not found for the other category with participants older than 35 years ($\chi2(1) = 0.763$, $p = .382$). Furthermore, the amount of English contact somebody has proved to have an effect, too ($\chi2(1) = 4.370$, $p = .037$*). An increase in English contact was associated with an increase in the odds of considering English mixed advertisements reliable, with an odds ratio of 1.132 (95% CI, 1.008 to 1.272). Unsurprisingly, a lack of comprehension had a statistically significant negative effect on perceived reliability ($\chi2(1) = 5.415$, $p = .020$*) and made participants 0.732 (95% CI, 0.563 to 0.952) times less likely to think of a brand advertised in an English mixed ad as trustworthy and competent than participants, who had no difficulties comprehending the slogan ($\chi2(1) = 5.415$, $p = .020$*).

This model was again run on the corresponding German versions, to test, whether any of these effects are not language specific. Not only did the model fit poorly, but also the assumption of proportional odds was violated. However, the results indicate that attitudes towards the use of English also have a significant effect on the evaluation of the German versions and that positive attitudes led to a more positive evaluation of reliability. This was the only effect that reached significance for the German versions. While in the English mixed versions negative attitudes led to a significantly less favourable assessment of reliability, the effect only occurred for positive attitudes in the German versions, which led to a significantly more favourable evaluation of reliability [246].

It appears that positive attitudes to English in advertising go hand in hand with more positive attitudes towards advertising in general, which in turn influences the evaluation of both language versions. This tendency is also supported by the direction of effect positive attitudes suggest in the English versions. It can be concluded that a low educational level, negative attitudes, young age and a lack of comprehension lead to a more negative evaluation of a brand's reliability when it is advertised with English elements and that these effects are not found in the assessment of brands advertised only in German.

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[246] Keeping in mind that the model was not fit to the data and that the assumption of proportional odds was violated, these results have to be treated with caution: odds ration of 1.785 (95% CI, 1.192 to 2.674) with ($\chi2(1) = 7.904$, $p = .005$**).

Table 47

Logistic Regression Analysis of Brand Reliability

Variable	B	*SD*	Wald	*p*	Exp(B)
Education no Abitur	-0.654	0.257	6.477	.011*	0.520
Education university degree	-0.012	0.158	0.006	.937	0.988
Attitude positive	0.095	0.192	0.247	.619	1.100
Attitude negative	-0.350	0.130	7.210	.007**	0.705
Age 16 to 25	-0.669	0.176	14.470	< .001**	0.512
Age older than 35	0.190	0.217	0.763	.382	1.209
Comprehension = no	-0.312	0.1341	5.415	.020*	0.563
English contact	0.124	0.060	4.370	.037*	1.132
Threshold coefficients					
[-2]	(category of reference)				
[-1]	1.818	0.281	41.983	< .001***	6.158
[0]	0.711	0.270	6.907	.009**	2.035
[+1]	-0.378	0.269	1.966	.161	0.685
[+2]	-1.727	0.276	39.280	< .001***	0.178

Note: Reference categories are: education = Abitur, neutral attitude to English, Age = 25 to 35 years, and comprehension = yes. An increase in English contact is associated with an increase in the odds of considering the brand reliable. 95% Wald confidence intervals are reported in the text; *df*(1).

Temperament

Brands were estimated to be more temperamental, that is, more dynamic and creative, when advertised with English elements than when advertised using only German. In the following, the predictive variables for this effect are analysed: first for all English mixed versions and then for the German versions. This is done to examine whether these predictors are language specific, or whether they have power to forecast evaluations of the German advertisements, too. The variables included in the model were education, attitudes, age and comprehension (results in Table 48). Gender, English contact and English skills did not contribute to the fit of the model, which was assessed by a Pearson goodness-of-fit test ($\chi 2$(149) = 170.097, *p* = .114) [247]. There were proportional odds, as the full likelihood ratio test comparing the residual of the fitted

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[247] There were 19.5% of cells with zero frequencies.

location model to a model with varying location parameters indicated ($\chi2(21) = 22.779$, $p = .356$) and the final model had a highly significantly better power of predicting the evaluation of a brand's temperament than the intercept-only model ($\chi2(7) = 52.831$, $p < 000***$).

The participants' level of education proved to be the most influential factor ($\chi2(2) = 20.623$, $p < .001***$). The odds of participants without an Abitur choosing lower categories when evaluating a brand's temperament was 2.973 (95% CI, 1.816 to 4.868, $\chi2(2) = 18.765$, $p < .001***$) times that of participants with an Abitur. Once again, whether one additionally has a university degree or only an Abitur does not influence the evaluation *($\chi2(2) = 0.002$, $p = 968$)*. Moreover, attitudes towards English were good predictors ($\chi2(2) = 16.706$, $p < .001***$). Participants with a negative attitude were 1.490 (95% CI, 1.155 to 1.922) times as likely to choose a lower category than participants with neutral attitudes ($\chi2(2) = 9.429$, $p = .002**$). Interestingly, the effect of positive attitudes is close to reaching statistical significance, too ($\chi2(2) = 2.832$, $p = .092$), which appears to indicate that people with a positive attitude towards English were more inclined to perceive a brand promoted with English elements as temperamental (i.e. dynamic and creative) [248]. An overall highly significant effect of age was observed ($\chi2(2) = 12.190$, $p = .002**$), the individual categories, however, just failed to have significant effects. When somebody evaluating a brand advertised in an English mixed advertisement was older than 35 years, the odds for selecting a lower point on the scale was .673 (95% CI, 0.441 to 1.027) times that of somebody between 25 and 35 years of age ($\chi2(2) = 3.369$, $p = 066$). Younger participants, who were between 16 and 25 years old, appeared to be more likely (1.317 times, with 95% CI from 0.935 to 1.854) than 25 to 35 year olds to estimate a brand as temperamental ($\chi2(2) = 2.481$, $p = 115$), although not statistically significantly. Finally, comprehension proved to be a good predictor again ($\chi2(2) = 9.696$, $p = .002**$), in that a lack of it made participants 1.514 times (95% CI, 1.166 to 1.965) more likely to estimate brands less temperamental than participants who understood English slogans. This seems to be due to a generally negative effect of lacking comprehension on all dimensions of evaluation.

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[248] The odds of participants holding positive attitudes in choosing a lower category on the temperamental scale were 0.725 (95% CI, 0.499 to 1.054) times the odds of people with neutral attitudes, although this effect just failed statistical significance.

Running this model on the corresponding German items indicated, in addition to a bad fit, that the level of education not only influenced the evaluation of brands in English mixed advertisements ($\chi2(2) = 21.505$, $p < .001***$) with the odds of people without an Abitur assessing a brand as less temperamental than participants with an Abitur being 2.525 (95% CI, 1.468 to 4.345, $\chi2(2) = 11.201$ $p = .001**$). The education effect is also significant for the category of people with a university degree, whose odds in perceiving a brand as less temperamental than the reference category are 0.724 (95% CI, 0.535 to 0.981, $\chi2(2) = 4.355$, $p = .037*$).

Table 48

Logistic Regression Analysis of Temperament

Variable	B	*SD*	Wald	*p*	Exp(B)
Education no Abitur	1.090	0.252	18.765	< .001***	2.973
Education university degree	0.006	0.157	0.002	.968	1.006
Attitude positive	-0.321	0.191	2.832	.092	0.725
Attitude negative	0.399	0.130	09.429	.002**	1.490
Age 16 to 25	0.275	0.175	2.481	.115	1.317
Age older than 35	-0.396	0.216	3.369	.066	0.673
Comprehension = no	4.15	0.133	9.696	.002**	1.514
Threshold coefficients					
[-2]	-1.189	0.214	30.792	< .001***	0.305
[-1]	-0.396	0.208	3.610	.057	0.673
[0]	0.528	0.208	6.422	.011*	1.695
[+1]	1.770	0.216	67.220	< .001***	5.872
[+2]	(category of reference)				

Note: Reference categories are: education = Abitur, neutral attitudes to English, age = 25 to 35 year and comprehension of English slogans = yes. 95% Wald confidence intervals are reported in the text; *df*(1).

Naturalness

It was found that brands advertised using only German were perceived as being more natural than brands promoted with English (results in Table 49). This was assessed with a single item. A cumulative odds ordinal logistic

regression with proportional odds was run to determine the effect of education, English skills, attitudes, and age on assumed naturalness. There were proportional odds, as assessed by a full likelihood ratio test comparing the fitted model to a model with varying location parameters ($\chi2(24) = 22.398$, $p = .556$). The Pearson goodness-of-fit test indicated that the model was a good fit to the data ($\chi2(192) = 182.199$, $p = .683$), but 38.8% cells were sparse with zero frequencies. Nevertheless, the final model statistically significantly predicted the dependent variable over and above the intercept-only model ($\chi2(8) = 30.871$, $p < .001***$).

The strongest predictor for the perceived naturalness of a brand advertised with English elements was the participants' level of proficiency with English ($\chi2(2) = 10.113$, $p = .006**$). The odds of people with no or few English skills considering a brand less natural was 2.252 (95% CI, 1.263 to 4.010) times that of participants with good English skills, a statistically significant effect ($\chi2(1) = 7.582$, $p = .006**$). No effect could be witnessed for participants with very good English skills in comparison to those with good skills ($\chi2(1) = 0.687$, $p = .407$). Age also proved to have a statistically significant influence on perception ($\chi2(2) = 7.304$, $p = .026*$), even though the individual categories did not yield significant effects. There are tendencies, however, for younger people to evaluate a brand's naturalness as more negative (odds of 1.310 (95% CI, 0.807 to 2.127) and to choose a lower category on the scale ($\chi2(2) = 1.190$, $p = .275$) than for people who are 25-35 years old. On the contrary, participants over the age of 35 years were more inclined to assess a brand advertised with English more natural than the reference group, the odds being 0.618 (95% CI, 0.337 to 1.134) for a more negative evaluation ($\chi2(2) = 2.416$, $p = .120$). While the overall effect of education is not statistically significant ($\chi2(2) = 4.619$, $p = .100$), the odds of participants without an Abitur were 2.265 (95% CI, 1.065 to 4.818) times that of participants with an Abitur but no university degree in perceiving brands as natural, when the advertisements contained English elements ($\chi2(1) = 4.507$, $p = .034*$). There was no effect for people older than 35 years ($\chi2(2) = 0.617$, $p = .438$). Also the influence of attitudes just fails the 5% significance level ($\chi2(2) = 4.867$, $p = .088$), but the odds of whoever holds negative attitudes towards the use of English in ads are 1.486 (95% CI, 1.038 to 2.127) in assuming a brand less natural than a person with neutral attitudes. This is a statistically significant effect, with $\chi2(2) = 4.689$ and $p = .030*$. The

variables gender, English contact and comprehension could not contribute to the prediction of brands' assumed naturalness.

Since it is likely for the predictors to have an effect on the evaluation of brands in German advertisements, too, the described regression model was applied to the corresponding data of the German only versions. None of the effects reached statistical significance and neither did the overall model, but education came rather close in one category, indicating the same effect for people without an Abitur (increasing odds of a negative evaluation by 2.145 (95% CI, 0.974 to 4.724; $\chi2(2) = 3.588$, $p = .058$ compared to the reference group) as in the English mixed versions.

Table 49

Logistic Regression Analysis of Naturalness

Variable	B	*SD*	Wald	*p*	Exp(B)
No or basic English skills	0.811	0.295	7.582	.006*	2.251
Very good English skills	-0.157	0.189	0.687	.407	0.855
Age 16 to 25	0.270	0.247	1.190	.275	1.310
Age older than 35	-0.481	0.310	2.416	.120	0.618
Education no Abitur	0.818	0.385	4.507	.034*	2.265
Education university de-gree	0.175	0.226	0.601	.438	1.191
Attitude positive	0.066	0.271	0.060	0.805	1.068
Attitude negative	0.396	0.183	4.689	.030*	1.486
Threshold coefficients					
[-2]	-0.726	0.287	6.398	.011*	0.484
[-1]	0.285	0.284	1.005	.316	1.330
[0]	1.260	0.291	18.815	< .001***	3.526
[+1]	2.386	0.309	59.483	< .001***	10.873
[+2]	(category of reference)				

Note: Reference categories are: good English skills, age = 25 to 35 years, educa-tion = Abitur, and neutral attitudes to English. 95% Wald confidence intervals are reported in the text; *df*(1).

9.4.14. Factors influencing evaluation of target groups

'Coolness'

A clear language effect was witnessed for the evaluation of a target group as 'cool', when English elements were used in an advertisement. The following analysis sheds light on the underlying factors that support such a perception (results in Table 50). The final model, which statistically significantly predicted the dependent variable over and above the intercept-only model ($\chi2(4) = 20.535$, $p < .001$***), contained the independent variables comprehension, gender, and attitude. There were proportional odds, as assessed by a full likelihood ratio test comparing the residual of the fitted location model to a model with varying location parameters ($\chi2(12) = 10.552$, $p = .568$). The Pearson goodness-of-fit test indicated that the model was not a good fit to the observed data ($\chi2(40) = 31.857$, $p = .817$).

Comprehension of English slogans proved to have the strongest effect on the evaluation of advertisements' target groups as 'cool' ($\chi2(1) = 16.024$, $p < .001$***). A lack of comprehension significantly decreased the chances of believing the implied target group is 'cool' (odds ration of 2.125 (95% CI, 1.469 to 3.074) in choosing a response denying coolness). Surprisingly, no other effects were found, however; excluding any further variable did not improve the overall fit of the model. Attitudes did not display a significant effect ($\chi2(2) = 0.764$, $p = .682$) and neither did gender ($\chi2(2) = 0.307$, $p = .120$).

Running the same model on evaluations of the German versions showed that comprehension of English slogans also had an effect on the evaluation of target groups addressed in German only. The odds of participants who did not understand English slogans in evaluating target groups of German advertisements as less cool were 0.598 (95% CI, 0.405 to 0.881) times that of participants who were able to comprehend the English slogans. This highly significant effect ($\chi2(2) = 6.751$, $p = .009$**) is contrary to the effect of comprehension on target group perception in English mixed ads.

Table 50

Logistic Regression Analysis of Coolness

Variable	B	SD	Wald	p	Exp(B)
Gender female	.307	0.197	2.422	.120	1.359
Attitude positive	-0.091	0.2681	0.115	.735	0.913
Attitude negative	0.121	0.182	0.444	.505	1.129
Comprehension = no	0.754	0.188	16.024	< .001***	2.125
Threshold coefficients					
[-2]	-1.240	0.249	24.862	< .001***	0.289
[-1]	-0.168	0.234	0.517	.472	0.845
[0]	1.003	0.239	17.625	< .001***	2.725
[+1]	2.159	0.255	71.860	< .000***	8.660
[+2]	(category of reference)				

Note: Reference categories are: attitude = neutral, gender = male, and comprehension of English slogans = yes. 95% Wald confidence intervals are reported in the text; *df*(1).

Multilingualism

A cumulative odds ordinal logistic regression was run to determine the effect of education, gender and English contact, on the belief that the addressed target group of English mixed advertisements was multilingual (results in Table 51). None of the independent variables was particularly well suited to predict the outcome, and the model with the best fit just failed to meet the assumption of proportional odds ($\chi2(12) = 21.278$, $p = .046*$). The Pearson goodness-of-fit test indicated that the model was an acceptable fit to the data ($\chi2(92) = 102.527$, $p = .213$), with 20.8% cells with zero frequencies. The final model statistically significantly predicted the dependent variable over and above the intercept-only model ($\chi2(4) = 9.904$, $p = .042*$).

However, only the variable gender reached statistical significance ($\chi2(1) = 4.490$, $p = .034*$), which indicated that the odds of women to think a target group unlikely to be multilingual were 1.521 (95% CI, 1.032 to 2.241) that for men. Put differently, men were more likely than women to assume the target group of English mixed advertisements speaks at least one foreign language. The overall effect of English contact fail to reach significance

($\chi2(1) = 2.867$, $p = .090$), as did the overall effect of education ($\chi2(2) = 4.422$, $p = .110$). However, there seems to be a tendency for people without an Abitur to assume target groups of English mixed ads are less likely to be multilingual than participants with an Abitur (with an odds ration of 1.750 (95% CI, 0.942 to 3.252) for a lesser evaluation of multilingualism ($\chi2(1) = 3.136$, $p = .077$). No effect was found for the highest level of education. Applying this model to the data of the German only versions proved that the model had no predictive power at all, whereby the variable gender almost reached the level of significance ($\chi2(1) = 3.264$, $p = .071$). This indicates that the effect gender has on the evaluation of target groups' open-mindedness is not language specific, but is most likely to occur for all advertisements.

Table 51

Logistic Regression Analysis of Multilingualism

Variable	B	*SD*	Wald	*p*	Exp(B)
Education no Abitur	0.560	0.316	3.136	.077	1.750
Education university degree	0.278	0.191	2.134	.144	1.321
Gender = female	0.419	0.198	4.490	.034*	1.521
English contact	0.138	0.082	2.867	.090	1.148
Threshold coefficients					
[-2]	-1.305	0.3315	15.501	< .000***	0.271
[-1]	-0.439	0.3179	1.904	.168	0.645
[0]	0.927	0.319	8.429	.004**	2.528
[+1]	2.031	0.3307	37.713	< .000***	7.621
[+2]	(category of reference)				

Note: Reference categories are: Education = Abitur, and gender = male.
An increase in English contact is associated with an decrease in the odds of considering the target group open-minded. 95% Wald confidence intervals are reported in the text; *df*(1).

Humour

As there were no unidirectional differences in the evaluation of the target groups' sense of humour for the two language versions of the travel insurance advertisement and the hotel chain advertisement, these are excluded from the analysis in the following. Instead, the predictors for the evaluation of CITY

SCENE/STADTSZENE and *ZISCH'S* target groups as humorous are analysed (results in Table 52). The final model, which statistically significantly predicted the dependent variable over and above the intercept-only model ($\chi2(8) = 41.998$, $p < .001$***) included the predictors gender, education, attitude, age, and comprehension. There were proportional odds, as assessed by a full likelihood ratio test comparing the residual of the fitted location model to a model with varying location parameters ($\chi2(24) = 31.240$, $p = .147$), yet, the large number of sparsely populated cells with zero frequencies (61.1%) advises caution when interpreting these figures [249]. The Pearson goodness-of-fit test indicated that the model was not an acceptable fit to the observed data ($\chi2(200) = 222.083$, $p = .136$).

The strongest predictor was gender ($\chi2(1) = 19.507$, $p < .001$***), with an odds ration of 4.204 (95% CI, 2.223 to 7.950) for women to perceive the target group of English mixed advertisements as less humorous than men. Attitudes towards English in advertising exhibited a significant effect ($\chi2(2) = 9.240$, $p = .010$*); surprisingly, though, positive as well as negative attitudes lower the chances of the target group being assumed humorous. The participants with positive attitudes were 2.750 times more likely to chose a lower category (and demonstrate lacking agreement) when evaluating humour than the participants with neutral attitudes ($\chi2(1) = 5.336$, $p = .021$*; 95% CI, 1.166 to 6.486). Similarly, participants who held negative attitudes were 2.021 times more likely to not fully agree with the statement '*The typical consumer is humorous*' ($\chi2(1) = 6.755$, $p = .009$**; 95% CI, 1.189 to 3.435) than the participants who were indifferent to the use of English in German advertising.

It remains to be seen whether this effect also occurs when German advertisements are evaluated. As noted before, a lack of comprehension increases the chances of evaluating a target group as less humorous (odds ratio of 1.988, 95% CI, 1.084 to 3.648), this is a significant effect ($\chi2(1) = 4.927$, $p = .026$*). A general effect of education was not found. However, participants with a university degree seemed to be more likely than participants with an Abitur only (odds ration 1.939, 95% CI 1.003 to 3.750) to assess target groups of English mixed ads as less humorous ($\chi2(1) = 3.874$, $p = .049$*). It has to be mentioned, that this also appears to hold true for an educational level lower

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[249] Further exclusion of variables reduced the amount of empty cells, but did not improve the overall fit of the model.

than an Abitur, which is not a significant effect, however ($\chi2(1) = 3.874$, $p = .375$). These findings do not readily lend themselves to explanation. In general, the respondents' age does not appear to have an effect on the evaluation of the target groups' sense of humour ($\chi2(2) =3.086$, $p = .214$), but the data indicate that participants who are older than 35 tend to be less inclined to select a lower category on the scale than participants between 26 and 35 years of age (odds ratio 0.465, 95% with CI 0.191 to 1.130, $\chi2(1) = 2.854$, $p = .091$). Applying the same regression model to the data of the German advertisements, returns similar results. Women and people with negative attitudes were generally less likely to assume a target group humorous than men and participants with neutral attitudes. Additionally, but just not reaching significance, people who did not understand English mixed slogans appeared to be more likely to perceive the target groups of German ads as more humorous than participants who comprehended the English slogans. This indicates that none of the variables can successfully account for language related effects on the evaluation of the target groups' sense of humour.

Table 52

Logistic Regression Analysis of Humour

Variable	B	*SD*	Wald	*p*	Exp(B)
Gender = female	1.436	0.325	19.507	< .001***	4.204
Education no Abitur	0.460	0.518	0.788	.375	1.584
Education university degree	0.662	0.337	3.874	.049*	1.939
Attitude positive	1.011	0.438	5.336	.021*	2.750
Attitude negative	0.704	0.271	6.755	.009**	2.021
Age 16 to 25	-0.176	0.381	0.214	.644	0.839
Age above 35	-0.765	0.453	2.854	.091	0.465
Comprehension = no	0.687	0.310	4.927	.026*	1.988
Threshold coefficients					
[-2]	-2.668	0.730	13.357	< .001***	0.069
[-1]	-1.320	0.546	5.836	.016**	0.267
[0]	1.243	0.512	5.889	.015**	3.468
[+1]	3.169	0.547	33.611	< .001***	23.787
[+2]	(category of reference)				

Note: Reference categories: gender = male, Education = Abitur, Age = 26 to 35 years, comprehension = yes. 95% Wald confidence intervals are reported in the text; *df*(1).

9.5. Results and discussion

11) Does the use of English mixing in German advertisements have an effect on consumers?

Yes. English elements were found to influence the advertisement's emotional appeal, the assumed product attributes, the perception of the brand's personality and the evaluation of the implied target group. However, there were generally few differences in the evaluations of the two language versions, which indicates that the participants viewed English as a neutral language choice in advertising (cf. Gerritsen et al. 2007b, 96). Moreover, the obtained effects were generally limited, which is likely due to the fact that the task-induced evaluations in this study were primarily conceptually-driven, and in such settings linguistic factors have less impact than in data-driven settings (cf. Luna et al. 2005, 421).

12) Does the use of English elements have an effect on consumers' evaluations of the advertisement's emotional appeal?

On an aggregated level, there was no difference in the general appeal of English-mixed and German advertisements, although German advertisements were found to appear more trustworthy than their English-mixed equivalents. On the level of individual advertisements, only a few (3/24) advertisement specific language effects were observed. The hotel chain advertisement (*LUXELIA*) was evaluated as less interesting in the English version than in the German version. One reason for this could be that the participants were generally less likely to process English elements conceptually than German elements (cf. Luna and Peracchio 2001, 285), and that when processed conceptually, especially the German slogan in the purely German version (*Tauche ein in die Welt*) stimulated richer semantic representations than the equivalent English slogan (*Dive into the world*) in the English-mixed version (cf. Brysbaert & Duyck 2010, 368). The advertisement for a soft drink (*ZISCH'S*) was evaluated as more modern in the English-mixed version and this language effect was highly significant even though the advertisement was generally rated as very modern in both versions. Moreover, the same advertisement was perceived to be more obtrusive in the English mixed version than in the German version, indicating that despite an identical layout and typography the English elements were more salient than their German equivalents. While from a

symbolic view of the use of English in ads one would have expected to observe more language effects, the finding that only a few comparisons of the language versions' (emotional) appeal yielded significant differences is not totally unexpected, from a psycholinguistic perspective, because corresponding research indicates that advertising texts are perceived as more emotionally effective in participants' native language than in a second language (cf. Puntoni et al. 2009, 35). However, these language effects were not witnessed for all advertisements alike, indicating that the effects of English elements on the appeal of advertisements are advertisement specific. While the level of involvement in this study is assumed to be the same for all ads and can thus not explain any differences, involvement is assumed to vary between the ads regarding the thinking-feeling dimension. Since all the differences in the appeal of the ad versions were found in advertisements that are positioned towards the affective end of this scale (*LUXELIA* and *ZISCH'S*) (cf. Haley 2012, 123f.), the results could be interpreted to suggest that language effects tend to be more relevant for such product categories.

13) Are there statistically significant differences in the evaluation of the product when it is advertised with English elements and when it is advertised in German?

Yes, but very few. The travel insurance (*SECURE/SEKUR*) and the web portal (*CITY SCENE/STADTSZENE*) were perceived as more internationally oriented in the English-mixed versions, which indicates that the use of English here was attributed to its occurrence as a lingua franca. The soft drink (*ZISCH'S*) was assumed to contain more sugar and to taste sweeter in the English mixed version, but conceptually associated dimensions like nutrition, organic and regional produce, and quality were not evaluated as being significantly different in the two language versions. These results indicate that product categories (e.g. soft drink vs fruit juice spritzer) are unlikely to be the source of transfer, because the perceived similarity to a product category would lead to assimilation effects and a transfer of beliefs, evaluations and affects from the typical exemplar of the category. For example, if the product is perceived to be similar to a fruit juice spritzer, it should be rated more likely to contain natural ingredients and important vitamins, but if it is perceived to be similar to a soft drink, it should be rated less likely to contain juice from regional or organic produce. Therefore, these highly product specific findings

are thus more likely to result from ethno-cultural stereotypes that foods and drinks from the Anglophone cultures (or alluding to them) taste sweeter and therefore contain more sugar [250]. Generally, no differences were found in the evaluation of quality, price and prestige, and suitability or effectiveness in any of the tested advertisements.

14) Is the perception of the brand (i.e. brand personality) influenced by English elements?

Yes. On the aggregated level, brands advertised with English mixing received higher scores for temperament and dynamics, as well as extravagance. But on the other hand, English elements also made brands seem less natural and less reliable (i.e. less trustworthy). As in Germany, English elements are rarely used in serious contexts and usually occur in situations involving shallow entertainment (cf. Altleitner 2007, 118-119), they do not appear well suited to evoke reliability. This negative effect on reliability is assumed to weigh heavily, because the aim of brands is to create trust between the product and the consumer, thus reducing consumers' risks (cf. Krugman and Hayes 2012, 439). In the evaluation of individual brands, the soft drink brand *ZISCH'S* was evaluated as being more 'enchanting', more creative and more dynamic in the English mixed version. The hotel chain *LUXELIA* was believed to be more natural in the German version. These results indicate that English mixing does not necessarily have positive effects on consumers' evaluations of a brand, especially the negative effect on reliability runs contrary to the aim of branding. One possible explanation is that even though English elements are ubiquitously used in Germany, the English language is still perceived as foreign and encountered with some scepticism, making it less well suited than German to evoke the connotation of trustworthiness. However, the German language was also found to be associated with reliability outside Germany, for example in the Netherlands (Hornikx et al. 2007), indicating that more general language stereotypes may play a role, too.

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[250] This interpretation is also in line with the results of the interviews conducted in advance to test the mock advertisements, where one of the participants associated "Ami-Zeugs" ('Yankee stuff') with the English mixed version of the *ZISCH'S* advertisement.

15) Do participants' judgements of the advertisement's implied target group differ between the language versions of the same advertisement?

Yes. On the aggregated level the target group of English-mixed advertisements was more often believed to be multilingual, 'cool' and to have a good sense of humour. However, there were no language effects for the target group's assumed level of education, success, income, dynamics, open-mindedness, range of interests, sociableness, fun-orientation, trendiness and sportiness. On the product dependent level the target group of *SECURE* scored higher for multilingualism than the target group of the German equivalent *SEKUR*, indicating that participants assumed the target group would be able to understand the English elements used in the insurance ad. Quite to the contrary, the target group of the English-mixed version of *ZISCH'S* was believed to be more dynamic, trendy, cool, sociable, humorous and fun-oriented than the target group of the German version. These are all traits that make target groups generally more 'likeable' and that correspond to the hedonistic value of the English language. Correspondingly, the target group's motto of life was perceived differently, too, with the English-mixed version of *ZISCH'S* yielding more 'doing & experiencing' responses and the German version yielding more 'having & enjoying' and 'preserving tradition' responses. However, no language effects of the target group's assumed age and social class were found in any of the advertisements. Most of these socio-indexical effects of the English language occurred in an advertisement where the use of English could not be attributed to the international orientation of the company, brand or product and thus had to be perceived as part of the strategically communicated meaning of the ad. Moreover, the meaning content of the verbal text was designed for a maximum overlap of the two language versions by using only cognate pairs to ensured that language effects would not be due to different denotations. Additionally, only cognate pairs without strong connotations of stylistic usage restrictions (e.g. youth language) were selected to ensure that English elements would not be perceived as indicating a specific target group's language use. This was successful, as the fact that there were no differences in the perceived target groups' ages demonstrates. Since there were no differences in the perceived multilingualism of the target groups either, the obtained effects are best interpreted as symbolic values of the English language used in the sense of an 'impersonal multilingualism' (cf. Haarmann 1989).

16) What role does the comprehension of English elements play in evaluations?

The only difficulties in comprehension occurred for the English slogan of the *SECURE* advertisement, which only features language effects in two aspects: the brand's international orientation and the target group's multilingualism. Comprehension did not influence either of these evaluations, which comes as no surprise. However, on a product independent level a lack of comprehension *did* influence the evaluation of brands, which were evaluated as less reliable, less creative and dynamic. Since English elements must appear more foreign to those who do not comprehend them, they are less likely to evoke the connotation of trustworthiness, and likewise, the appreciation of creativity requires that the employed linguistic creative means are understood. The finding that the evaluation of dynamics and innovation is mediated by comprehension challenges the purely symbolic view on the use of English in advertising, which assumes that comprehension is irrelevant (cf. Hornikx et al. 2010, 184). Moreover, participants who did not comprehend the tested English slogans rated target groups less 'cool' and less humorous, which implies that they perceived the target group as less 'likeable'. This is probably a result of the participants not identifying with the implied target group, because it was generally believed to be unlike themselves. This interpretation is supported by the finding that participants who did not understand the tested English slogans were more likely to evaluate the target group in the purely German advertisements as 'cool'.

17) Do attitudes towards the use of English influence evaluations?

Yes. While positive attitudes were not found to have any effect on the perception of English mixed advertisements, negative attitudes increased the chances of perceiving the advertisement as untrustworthy. Additionally, participants with negative attitudes were more likely to evaluate the target group as less humorous and the brand as less reliable, less dynamic and creative, and less natural. Moreover, the results suggest that positive attitudes towards the use of English also increased the chances for German ads to be evaluated as trustworthy. This might indicate that the perception of trustworthiness is influenced by a more positive attitude towards advertising in general, rather than an explicitly positive attitude towards English in advertising.

18) Does contact with the English language have an influence on evaluations?

Only the perceived reliability of a brand was significantly influenced by contact with English: participants with more frequent contact with the English language were more likely to evaluate brands in an English-mixed ad as reliable. As more English contact decreases the foreignness of the English language and thus reduces scepticism, it increases the chances for trust. In contrast to participants with less contact with English language material, who primarily associate the use of English elements with entertaining German contexts (cf. Altleitner 2007, 118-119), people with more English contact are less likely to have such associations because they also come across the English language in serious settings, e.g. their professional life, the news, academic literature.

19) Which factors (i.e. level of education, attitudes towards the use of English, comprehension, English skills, contact with the English language, age, gender) influence participants' judgements?

The most influential factors for the evaluation of English-mixed advertisements were the participants' level of education, attitudes towards the use of English and comprehension. Moreover, English skills and in some cases also English contact, age and gender were found to significantly influence participants' evaluations. Participants without an Abitur were less likely to evaluate a brand advertised with English as reliable and creative or dynamic than participants with an Abitur, whereas it did not matter whether participants additionally had a university degree or not. However, those with a university degree were less likely to perceive the target group of an English mixed advertisement as humorous. No, or only basic, English skills decreased the chances of brands in English-mixed ads being evaluated as natural, indicating that English is an 'unnatural' choice for these participants. Young participants (16-25 years old) were less likely to perceive a brand advertised with English as reliable. Moreover, women were less likely to assume that a target group was multilingual and humorous than men; however, this applied to English-mixed and German ads alike and so does not contribute to the understanding of language effects. Similarly, positive attitudes towards the use of English were also found to increase the chances of evaluating brands advertised with German as more reliable, which, as was previously noted, could indicate an underlying effect of positive attitudes towards advertising in general.

20) Is there evidence for general effects of English elements that apply to all different product types and styles of advertisements?

No. None of the effects was found to occur in all advertisements, which proves that English elements do not automatically influence how advertisements are received. Nevertheless, the fact that on an aggregated level the use of English was found to have numerous socio-indexical effects by influencing brand as well as target group perception indicates that the English language *did* transport positive affective values (i.e. temperament and dynamics, humour, and 'coolness', and the air of multilingualism) independently of the connotations of individual English elements. The results also demonstrate, however, that English elements were not well suited for transporting the values of trustworthiness and naturalness, which were associated with purely German advertisements. In all, the obtained effects were limited, which demonstrates that the English language does not convey the ascribed symbolic values in every advertisement.

IV. General discussion and conclusion

The advertising effectiveness study of this thesis aimed to fill an empirical gap between analytically derived propositions about the functions of English elements in German advertisements and effects reported by interviewees when comparing two language versions of the same ad. It has shed light on the extent of the effects that English elements have in advertisements, not only where these effects were found to be limited but also where the obtained effect sizes turned out to be small. From a perception-based perspective this comes as no surprise, because language is only one aspect of a multimodal print advertisement, and compared to pictures, layout and typographic aspects, it is not the first in the processing hierarchy. The results of this study have thus put the importance of English mixing in perspective, contributing to a more realistic view of English language effects in print advertising, which appears to have been somewhat distorted in linguistic research over the past years, with connotations like modernity and internationalism having reached the status of commonly accepted universals.

The results indicate, furthermore, that showing participants two language versions of the same advertisement and then asking for their associations and evaluations leads to very different findings than testing the advertisements in a quantitative study with a between group design which leaves participants blind to the aim of the experiment. This demonstrates that qualitative research alone is prone to lose sight of the bigger picture of the actual effects of English, because the importance of their occurrence is overestimated. Making use of quantitative methods, even if they entail the risk of obtaining no statistically significant results at all, thus comes with a plea for conducting masked studies in which participants are blind to the research aim when the effects of language use are studied in advertising. Nevertheless, qualitative interviews are indispensable, because they provide the pool of reported effects out of which selected aspects can then be tested in quantitative studies. Moreover, these cognitively mediated effects that participants report can provide valuable information when interpreting the results of quantitative analysis. As methodological triangulation proved to be essential in studying the effects of the English language in advertisements, it can be concluded that neither qualitative nor quantitative methods alone are sufficient.

When the participants' focus is not on language use, they do not interpret the use of English elements as equally meaningful in all advertisements. This is an important finding, which suggests that it is not necessarily a matter of foreignness and salient position that leads to the effects of English, but rather an issue of (subjectively) perceived relevance to the meaning of an advertisement. This means that, the affective use of English elements in advertising shares similarities with Auer's definition of conversational codeswitching, which is defined as the locally meaningful juxtaposition of two languages (Auer 1999, 309). While Androutsopoulos draws on this concept to shift the focus away from lexical contact phenomena towards the use of English as a resource in discourse in his 'English on top' approach (cf. Androutsopoulos 2011, 25), the results suggest that not all uses of non-integrated English elements in prominent positions are interpreted as discourse strategies by receivers of advertisements. Therefore, empirically testing in which cases 'English on top' is actually perceived as meaningful by participants could contribute to further developing this valuable approach.

What is probably the most important achievement of the present advertising study is that it indicates that there are no general language effects. None of the effects was observed to occur in all the advertisements and it can be assumed that there are no automatic effects of English that always apply in German advertising as soon as unassimilated English elements are present. The fact that in most cases the responses did not differ between the language versions is consistent with the results obtained by Gerritsen et al. (2010) and does not support a purely symbolic view of English elements in advertising (cf. Hornikx et al. 2010, 184-185). Moreover, the use of English elements does not effect all tested aspects of advertising to the same extent, and future research could, for example, aim to explore how the effects of English differ for the structural components of ads (e.g. names vs headers vs slogans), communicative aims (e.g. rational conviction vs emotional appeal), advertisement types (e.g. picture-dominated vs text-dominated), or product categories (either specific e.g. cars, or general e.g. on a feeling-thinking dimension or high vs low involvement). Additionally, the findings strongly challenge views that predict only positive affective values of the English language in advertising, because compared to purely German advertisements, English mixed ads generally appeared less trustworthy and, depending on the individual advertisement design, also more boring and more obtrusive.

Moreover, brands advertised in German were rated as more trustworthy and more natural than brands advertised with English elements.

Factors like the comprehension of English elements and attitudes towards the use of English were found to influence the evaluation of both language versions, suggesting that other underlying variables could be present. One promising direction for identifying such predictors could be to test whether the subjectively perceived difficulty of an advertising text moderates the effects of comprehension found in this study (cf. Hornikx 2010, 183 for empirical evidence of such effects). Regression analysis has confirmed that the most influential factor for the evaluation of advertisements was the use of English mixing, even though interpersonal consumer variables, such as education, gender, age and English skills also played a role. The question of whether these results are specific to the advertisements and products used in this study, or whether they apply to specific product types or advertisement styles is left to future investigations. Furthermore, subsequent research could analyse attitudes, differentiating, for example, between attitudes towards the English language, the use of English in German advertising, advertising in general, and the particular advertisement.

The main language effects found in this study are of a socio-indexical nature and affect the evaluation of a brand's personality as well as the perception of the target group, which can be regarded as an empirical backing for the focus on the identity constructing function of English in ads (e.g. Martin 2007; Piller 2001). English elements are not just a sign for internationalism but also point towards a dynamic, trendy, 'cool', sociable, humorous and fun-oriented crowd. In general, a hedonistic consumer group whose social class and motto of life best corresponds to the "adaptive pragmatic" and the "escapist" milieu, both characterised by re-orientation in the Sinus Milieus® framework. In contrast, the target group of German advertisements was perceived to be more conservative, and to hold values between tradition and modernisation. However, it should not be taken for granted that such implied target groups actually feel addressed by the advertisement versions, as Wetzler demonstrated for a teenage target group:

> Während man von Seiten des Unternehmens glaubt, "die Allgemeinheit" anzusprechen, hält eben diese "Allgemeinheit" ausschließlich Jugendliche für die Zielgruppe der Anzeige. Diese wiederum fühlen sich ganz und gar nicht angesprochen und gehen, wie die Unternehmerseite davon aus, hier sollten "alle" erreicht werden. So glaubt also jeder, der jeweils Andere sei Adressat der Werbung, während er selbst nicht vermutet, dass er überhaupt angesprochen werden **soll**, geschweige denn tatsächlich angesprochen **wird**. [251]
>
> (Wetzler 2006, 256-257, emphasis in original)

Following this confusion as to who is believed to be addressed by whom and who is assumed the target, it would be interesting to test if the perceived target group of the mock advertisements in the advertising effect study would actually feel addressed by the ads.

The visual word recognition study that was conducted to gain insight into the factors underlying language decisions, also offers some promising research directions. The results indicate that language specific graphemic cues have an effect on the perception of words and can thus influence language decisions. Graphemic cues can thus serve as valuable predictors of how a newly invented linguistic item that appears to be English, but does not consist of lexemes is perceived (e.g. *Qype, Zazzle, Swoodoo, Zune*). Especially for people lacking sufficient English skills to recognise a neologism's similarity with a specific English word, graphemic cues gain importance as indicators of the item's English nature. In addition to this focus on orthographic word form, also phonological similarities between languages that are known to have an impact on visual word recognition should be taken into account to fully comprehend how linguistic items are processed. When designing such studies, the advantage of automatically generated word lists, which can ensure an equal distribution of all psycholinguistically relevant word internal factors and thus increase the validity of results, has to be weighed against the objective of only analysing phenomena that actually occur in advertising texts and are thus immediately relevant. However, some language immanent issues pose limitations to such research aims, i.e. the relevant variables for word processing are usually not interdependent, e.g. short words generally have more neighbours than long words.

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[251] My translation: 'While on the part of the company it is believed that the 'general public' is being addressed, this very 'general public' assumes teenagers are the target group of the advertisement. They, however, do not feel addressed at all and assume, as does company side, that 'everybody' is supposed to be reached. Thus each believes that the other is the addressee of the advertisement, whereas they themselves do not suspect that they are even **intended** to be addressed, let alone actually **are** addressed.'

To overcome this methodological hurdle, mock brands or product names that do not consist of actual lexemes or meaning carrying sublexical units, but that use English graphemic cues, could be designed and compared to (near) homophones that follow German orthographic rules for the affective evaluations they elicit. Such research would help to explain whether product names like, for example, *Halbes Hoon* (offered by a fast food caterer for chicken meals called *Hoons*) are successful in transporting values associated with the English language or whether such innovations simply live off their originality and have to rely on English elements in the surrounding context to convey the values associated with the English language. This is accompanied by the firm belief that research on language effects should concentrate on instances of language use that have proven to be relevant to language users in blinded experiments that mimic central aspects of realistic processing situations.

V. Bibliography

Aaker, Jennifer Lynn. 1997. "Dimensions of brand personality". *Journal of Marketing Research* 34 (August): 347-56.

Ajzen, Icek. 2008. "Consumer Attitudes and Behaviour." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 525-48.

Allen, Chris T., Susan Fournier, and Felicia Miller. 2008. "Brands and Their Meaning Makers." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 781-822.

Allport, Gordon W. 1935. "Attitudes." *Handbook of Social Psychology*. Ed. Murchison, Carl M. Worcester, MA: Clark University Press. 798-844.

Altleitner, Margret. 2007. *Der Wellness-Effekt: Die Bedeutung von Anglizismen aus der Perspektive der kognitiven Linguistik*. Frankfurt: Peter Lang.

Androutsopoulos, Jannis, Nevin Bozkurt, Simone Breninck, Catrin Kreyer, Markus Tornow, and Verena Tschann. "Sprachwahl im Werbeslogan. Zeitliche Entwicklung und branchenspezifische Verteilung englischer Slogans in der Datenbank von slogans.de". 2004. Networks 41. <http://www.mediensprache.net/de/networx/networx-41.aspx> (accessed September 24, 2012).

Androutsopoulos, Jannis, Ingrid Breckner, Bernhard Brehmer, Kristin Bührig, Roland Kießling, Julia Pauli, and Angelika Redder. 2013. "Facetten gesellschaftlicher Mehrsprachigkeit in der Stadt – kurze Einleitung." *Mehrsprachige Kommunikation in der Stadt: das Beispiel Hamburg*. Eds. Grießhaber, Wilhelm and Jochen Rehbein. Münster: Waxmann. 13-27.

Androutsopulos, Jannis. "English 'on top': Discourse functions of English resources in the German mediascape". 2011. *Printed in Sociolinguistic Studies (2012) 6:2*. 209-38.2012. <https://jannisandroutsopoulos.files.wordpress.com/2009/12/english-on-top-pre-print-april-2011.pdf> (accessed December 2, 2011).

Androutsopoulos, Jannis. 2000. "Non-standard spellings in media texts: the case of German fanzines". *Journals of Sociolinguistics* 4(4): 514-33.

Angleitner, Alois, and Fritz Ostendorf. 1994. "5.2 Von aalglatt bis zynisch: Merkmale persönlichkeitsbeschreibender Begriffe." *Handbuch deutsch-*

sprachiger Wortnormen. Eds. Hager, Willi and Marcus Hasselhorn. Göttingen: Hogrefe 340-81.

Auer, Peter. 1999. "From codeswitching via language mixing to fused lects: Toward a dynamic typology of bilingual speech". *International Journal of Bilingualism* 3(4): 309-32.

Augustyn, Prisca. 2004. "The Seductive Aesthetics of Globalization: Semiotic Implications of Anglicisms in German." *Globalization and the Future of German: With a Select Bibliography*. Eds. Gardt, Andreas and Bernd-Rüdiger Hüppauf. Berlin: Walter de Gruyter. 307-19.

Bakhtin, Mikhail M. 1981. *The Dialogic Imagimation: Four Essays*. Ed. Holquist, Michael. Transl. by Caryl Emerson and Michael Holquist. Austin: University of Texas Press.

Bao, Yeqing, Alan T. Shao, and Drew Rivers. 2008. "Creating New Brand Names: Effects of Relevance, Connotation, and Pronunciation". *Journal of Advertising Research* 48(1): 148-62.

Barthes, Roland. 1972. *Mythologies*. Transl. by Annette Lavers. New York: The Noonday Press (Farrar, Straus and Giroux).

Barthes, Roland. 1964. "Rhetorik des Bildes." *Der entgegenkommende und der stumpfe Sinn. Kritische Essays III*. Ed. Barthes, Roland. Transl. by Dieter Hornig. Frankfurt a. M.: Surkamp. 28-46.

Baumgart, Manuela. 1992. *Die Sprache der Anzeigenwerbung: eine linguistische Analyse aktueller Werbeslogans*. Heidelberg: Physica-Verlag.

Beasley, Ron, and Marcel Danesi. 2002. *Persuasive Signs: The Semiotics of Advertising*. New York: De Gruyter Mouton.

Bell, Allan. 1995. "Language and the Media". *Annual Review of Applied Linguistics* 15: 23-41.

Berns, Margie. 2009. "English as lingua franca and English in Europe". *World Englishes* 28(2): 192-99.

Berns, Margie. 1995. "English in the European Union". *English Today* 11(03): 3-11.

Betz, Werner. 1949. *Deutsch und Lateinisch. Die Lehnbildungen der Althochdeutschen Benediktinerregel*. Bonn.

Bhatia, Tej K. 2001. "Language Mixing in Global Advertising". *The Three Circles of English*. Ed. Thumboo, Edwin. Singapore: Singapore University Press. 195-215.

------.   1992. "Discourse functions and pragmatics of mixing: advertising across cultures". *World Englishes* 11(2-3): 195-215.

------.   1987. "English in advertising: multiple mixing and media". *World Englishes* 6(1): 33-48.

Bhatia, Tej K., and William C. Ritchie. 2008. "The Bilingual Mind and Linguistic Creativity". *Journal of Creative Communications* 3(1): 5-21.

------.   2006. "Bilingualism in the Global Media and Advertising." *The Handbook of Bilingualism*. Eds. Bhatia, Tej K. and William C. Ritchie. Oxford: Blackwell Publishing Ltd. 513-46.

Bidmon, Robert K. "Zur Psychologie des Werbetextens im Dialogmarketing. Lesbarkeit und Verständlichkeit von Texten bei On- und Offline-Medien [shortened version in]." *Dialogmarketing Perspektiven 2007/2008 Tagungsband 2. wissenschaftlicher interdizipinären Kongress für Dialogmarketing* (2008): 103-23.

Bidmon, Robert K., and Siegfried Vögele. 2006. "Neue Erkenntnisse zur Mailinggestaltung nach der Dialogmethode. Gestaltungsempfehlungen zwischen Anforderungen der Wissenschaft und der Praxis." *Ganzheitliches Direktmarketing*. Eds. Wirtz, Bernd W. and Christoph Burmann. Wiesbaden: Gabler Verlag. 423-52.

Blom, Jan-Petter, and John Gumperz. 1972. "Social Meaning in Linguistic Structures: Code Switching in Northern Norway." *Directions in Sociolinguistics: The Ethnography of Communication*. Eds. Gumperz, John and Del Hymes. New York: Holt, Rinehart and Winston. 407-34.

Blommaert, Jan. 2005. *Discourse: A Critical Introduction*. Cambridge: Cambridge University Press.

Blumenthal, Peter. 1983. *Semantische Dichte: Assoziativität in Poesie und Werbesprache*. Tübingen: Niemeyer.

Bohmann, Stephanie. 1996. *Englische Elemente im Gegenwartsdeutsch der Werbebranche*. Marburg: Tectum-Verlag.

Bratschi, Rebekka. 2005. *Xenismen in der Werbung: die Instrumentalisierung des Fremden*. Frankfurt a. M.: Lang.

Brinker, Klaus. 2001. *Linguistische Textanalyse. Eine Einführung in Grund-begriffe und Methoden*. 5[th] ed. (= Grundlagen der Germanistik. Band 29). Berlin: Erich Schmidt.

Brysbaert, Marc. 2003. "Bilingual Visual Word Recognition: Evidence from Masked Phonological Priming." *Masked Priming: The State-of-the-art*.

Eds. Kinoshita, Sachiko and Stephen J. Lupker. New York: Psychology Press. 323-43.

Brysbaert, Marc, Matthias Buchmeier, Markus Conrad, Arthur M. Jacobs, Jens Bölte, and Andrea Böhl. 2011. "SUBTLEX-DE: The word frequency effect: A review of recent developments and implications for the choice of frequency estimates in German". *Experimental Psychology* 58: 412-24.

Brysbaert, Marc, and Wouter Duyck. 2010. "Is it time to leave behind the Revised Hierarchical Model of bilingual language processing after fifteen years of service?". *Bilingualism: Language and Cognition* 13(3): 359-71.

Brysbaert, Marc, and B. New. 2009. "SUBTLEX-US: Moving beyond Kucera and Francis: A critical evaluation of current word frequency norms and the introduction of a new and improved word frequency measure for American English". *Behavior Research Methods* 41: 977-90.

Bucher, Hans-Jürgen. 2011. "Multimodales Verstehen oder Rezeption als Interaktion. Theoretische und empirische Grundlagen einer systematischen Analyse der Multimodalität." *Bildlinguistik. Theorie - Methoden - Fallbeispiele*. Eds. Diekmannshenke, Hajo, Michael Klemm and Hartmut Stöckl. Berlin: Erich Schmidt. 121-56.

Bühler, Karl. 1934. *Sprachtheorie. Die Darstellungsfunktion der Sprache.* Jena: Gustav Fischer.

Buschmann, Matthias. 1994. "Zur "Jugendsprache" in der Werbung". *Muttersprache* 104(3): 219-31.

Busse, Ulrich, and Manfred Görlach. 2002. "German." *English in Europe*. Ed. Görlach, Manfred. Oxford: Oxford University Press. 13-36.

Bußmann, Hadumod. 1990. *Lexikon der Sprachwissenschaft*. Stuttgart: Kröner.

Carroll, Susanne E. 1992. "On Cognates". *Second Language Research* 8(2): 93-119.

Carstensen, Broder. 1979. "Evidente und latente Einflüsse auf das Deutsche." *Fremdwort - Diskussion*. Ed. Braun, Peter. München: Wilhelm Fink Verlag. 90-94.

Carstensen, Broder. 1968. "Zur Systematik und Terminologie der deutsch-englischer Lehnbeziehungen. Wortbildung, Syntax und Morphologie". *Festschrift für Hans Marchand*. Eds. Breckle, Hans E. and Leonhard Lipke. The Hague: Mouton. 32-45.

------. 1965. *Englische Einflüsse auf die deutsche Sprache nach 1945*. Beihefte zum Jahrbuch für Amerikastudien. Heft 13. Heidelberg: Carl Winter Universitätsverlag.

------. 1963. "Amerikanische Einflüsse auf die deutsche Sprache." *Jahrbuch für Amerikastudien 8*. Eds. Carstensen, Broder and Hans Galinsky. Heidelberg: Carl Winter Universitätsverlag. 11-32.

Carstensen, Broder, Ulrich Busse, and Regina Schmude. 2001. *Anglizismen-Wörterbuch: Der Einfluss des Englischen auf den Deutschen Wortschatz nach 1945*. Berlin: Walter de Gruyter.

Chen, Cheryl Wei-Yu. 2006. "The mixing of English in magazine advertisements in Taiwan". *World Englishes* 25(3): 467-78.

Cheshire, Jenny, and Lise-Marie Moser. 1994. "English as a cultural symbol: The case of advertisements in French-speaking Switzerland". *Journal of Multilingual and Multicultural Development* 15(6): 451-69.

CLEARPOND. Cross-Linguistic Easy-Access Resource for Phonological and Orthographic Neighborhood Densities. Created by Marian, Viorica, James Bartolotti, Sarah Chabal, and Anthony Shook. Northwestern Bilingualism and Psycholinguistics Laboratory. 2012.

<http://clearpond.northwestern.edu> (accessed March 2012).

Cohen, Joel B., and Charles S. Areni. 1991. "Affect and Consumer Behavior." *Handbook of Consumer Behavior*. Eds. Robertson, Thomas S. and Harold H. Kassarjian. Englewood Cliffs, NJ: Prentice-Hall. 188-240.

Cohen, Joel B., Michel Tuan Pham, and Eduardo B. Andrade. 2008. "The Nature and Role of Affect in Consumer Behaviour." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 297-348.

Coltheart, Max, Eileen Davelaar, Jon F. Jonasson, and Derek Besner. 1977. "Attention & Performance VI " *Access to the internal lexicon*. Ed. Dornic, S. Hillsdale, NJ: Erlbaum. 535-55.

Cook, Guy. 2001. *The discourse of advertising*. 2nd ed. London: Routledge.

Corbin, Juliet, and Anselm Strauss. 2014. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.* Thousand Oaks, CA: Sage Publications.

COSMAS II. Corpus Search, Management and Analysis System. © 1991-2010 Institut für Deutsche Sprache, Mannheim.

<http://www.ids-mannheim.de/cosmas2> (accessed March 2012).

Cotter, Colleen. 2003. "Discourse analysis and the media." *The Handbook of Discourse Analysis*. Eds. Schiffrin, Deborah, Deborah Tannen and Heide Hamilton. Malden, MA: Blackwell. 416-36.

Council of Europe. *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Language Policy Unit. Strasbourg: Council of Europe. <http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf> (accessed July 2012).

Crijns, Rogier. 2012. "Werbekommunikation empirisch." *Handbuch Werbekommunikation: Sprachwissenschaftliche und interdisziplinäre Zugänge*. Ed. Janich, Nina. Tübingen: Francke. 321-38.

Crystal, David. 2003. *English as a Global Language*. Cambridge: Cambridge University Press.

De Groot, Annette M. B. 2011. *Language and Cognition in Bilinguals and Multilinguals. An Introduction*. New York: Psychology Press.

De Groot, Annette. M. B. 1992. "Bilingual lexical representation: A closer look at conceptual representations". *Orthography, phonology, morphology, and meaning.* Eds. Frost, Ram and Leonard Katz. Amsterdam: Elsevier Science Publishers. 389-412.

De Mooij, Marieke. 2013. *Global Marketing and Advertising: Understanding Cultural Paradoxes*. 4th ed. Thousand Oaks, CA: Sage Publications.

Desmet, Timothy, and Wouter Duyck. 2007. "Bilingual Language Processing". *Language and Linguistics Compass* 1(3): 168-94.

Diamantopoulos, Adamantios, Marko Sarstedt, Christoph Fuchs, Petra Wilczynski, and Sebastian Kaiser. 2012. "Guidelines for choosing between multi-item and single-item scales for construct measurement: a predictive validity perspective". *Journal of the Academy of Marketing Science* 40(3): 434-49.

Diekmann, Andreas. 2009. *Empirische Sozialforschung. Grundlagen, Methoden, Anwendungen*. 20th ed. Reinbek bei Hamburg: Rowohlt-Taschenbuch-Verl.

Dijkstra, Ton, Mark P.H. Timmermans, and Herbert J. Schriefers. 2000. "On Being Blinded by Your Other Language: Effects of Task Demands on Interlingual Homograph". *Journal of Memory & Language* 42(4): 445-64.

Dijkstra, Ton, and Walter J. B. van Heuven. 1998. "The BIA model and bilingual word recognition." *Localist connectionist approaches to human cognition*. Eds. Grainger, Jonathan and Arthur M. Jacobs. Mahwah, NJ: Erlbaum. 189-225.

------. 2002. "The architecture of the bilingual word recognition system: From identification to decision". *Bilingualism: Language and Cognition* 5(03): 175-97.

Duckworth, David. 1979. "Der Einfluß des Englischen auf den Wortschatz seit 1945." *Fremdwortdiskussion*. Ed. Braun, Peter. München: Wilhelm Fink Verlag. 212-45.

Duden. Bibliographisches Institut GmbH. 2013. "Wie kommt ein Wort in den Duden?". <http://www.duden.de/ueber_duden/wie-kommt-ein-wort-in-den-duden> (accessed on July 5, 2013).

------.   "Apostroph". <http://www.duden.de/sprachwissen/rechtschreibregeln/apostroph> (accessed on May 1, 2013).

Duden. *Deutsches Universalwörterbuch*. 7th ed. 2011. Mannheim: Dudenverlag.

Eastman, Carol M., and Roberta F. Stein. 1993. "Language display: Authenticating claims to social identity". *Journal of multilingual and multicultural development* 14(3): 187-202.

Eckert, Penelope. 1997. "Age as a Sociolinguistic Variable." *The Handbook of Sociolinguistics*. Ed. Coulmas, Florian. Oxford: Basil Blackwell. 151-67.

Eckkrammer, Eva Maria. 2002. "Brauchen wir einen neuen Textbegriff?" *Brauchen wir einen neuen Textbegriff?: Antworten auf eine Preisfrage*. Eds. Fix, Ulla, Kirsten Adamzik, Gerd Antos and Michael Klemm. Frankfurt am Main: Lang. 31-57.

Eco, Umberto. 1972. *Einführung in die Semiotik*. München: Wilhelm Fink Verlag.

Edmonds, Philip, and Graeme Hirst. 2002. "Near-Synonymy and Lexical Choice". *Computational Linguistics* 28(2): 105-45.

Eichstaedt, Jan. 2002. "Das Internet als Medium zur verzerrungsfreien Erfassung von Reaktionszeiten im Rahmen web-basierten Experimentierens". *Zeitschrift für Medienpsychologie* 14(2): 80-83.

Elsen, Hilke. 2008. "Englische Elemente in der Kosmetikwerbung. Deutsche und französische Anzeigen im Vergleich." *Werbung und Werbesprache. Eine Analyse im interdisziplinären Kontext*. Eds. Dumiche, Béatrice and Hildegard Klöden. Vol. Band 40. pro lingua. Wilhelmsfeld: Gottfried Egert Verlag. 87-122.

Endmark AG. "Übersetzt Du noch oder fährst Du schon? Englischsprachige Auto-Claims und ihr Verständnis in der Übersicht (Auszug)". Vierte ENDMARK Claim-Studie. 2013. <http://www.endmark.de/fileadmin/endmark/PDF-Dokumente/Ergebnisauszug_Claim-Studie_2012-13.pdf> (accessed June 13, 2014).

Erling, Elizabeth J. 2007. "Local identities, global connections: affinities to English among students at the Freie Universität Berlin". *World Englishes* 26(2): 111-30.

Eurobarometer. 2012. "Europeans and their languages. Factsheet Germany". European Commission. Reference number 386. Wave EB77.1. Survey 02-03/12. Report 06/12. <http://ec.europa.eu/public_opinion/archives/ eb_special_399_380_en.ht> (accessed December 18, 2014).

Ewald, Petra. 2012. "Werbekommunikation graphostilistisch. Chapter 1." *Handbuch Werbekommunikation: sprachwissenschaftliche und interdisziplinäre Zugänge*. Ed. Janich, Nina. Tübingen: Francke. 3-15.

Fairclough, Norman. 2001. *Language and Power*. 2nd ed. London: Longman.

Falkner, Wolfgang. 1999. "*Pampers, Sunkist, Whiskas, Swirl*: Semantic Motivation in English trade names used in Germany." *Words, lexemes, concepts – Approaches to the lexicon. Studies in honour of Leonhard Lipka*. Eds. Falkner, Wolfgang and Hans-Jörg Schmid. Tübingen: Narr. 319-30.

Felser, Georg. 2007. *Werbe- und Konsumentenpsychologie*. 3rd ed. Heidelberg: Spektrum Akademischer Verlag.

Fink, Hermann. 1980. "Superhit oder Spitzenschlager: Ein Versuch zur Häufigkeit und Funktion von Anglizismen und "Werbeanglizismen" in deutschen Jugendzeitschriften." *Studien zum Einfluß der englischen Sprache auf das Deutsche.* Ed. Viereck, Wolfgang. Tübingen: Gunter Narr Verlag. 186-212.

------. 1977. ""Texas-look" und "party-bluse". Assoziative Effekte von Englischem im Deutschen". *Wirkendes Wort* 27: 394-402.

------. 1976. "Ein "Starangebot". Englisches im Versandhauskatalog". *Muttersprache* 86: 368-82.

------. 1975. ""Know-how" und "Hifi-Pionier": Zum Verständnis englischer Ausdrücke in der deutschen Werbesprache". *Muttersprache* 85: 186-203.

------. 1968. "Amerikanismen im Wortschatz der deutschen Tagespresse, dargestellt am Beispiel dreier überregionaler Zeitungen (Süddeutsche Zeitung, Frankfurter Allgemeine, Die Welt)." Dissertation. (= Mainzer Mainzer Amerikanische Beiträge 11. 1970).

------. 1963. "Stylistic Aspects of Linguistic Borrowing. A Stylistic View of American Elements in Modern German." *Amerikanismen der deutschen Gegenwartssprache. Entlehnungsvorgänge und ihre stilistischen Aspekte.*

Eds. Carstensen, Broder and Hans Galinsky. Heidelberg: Carl Winter Universitätsverlag. 35- 72.

Fischer, Andreas. 1999. "Graphological Iconicity in Print Advertising. A Typology." *Form Miming Meaning: Iconicity in Language and Literature*. Eds. Nänny, Max and Olga Fischer. Amsterdam: Benjamins. 251-83.

Franzen, Giep. 1994. *Advertising Effectiveness: Findings from Empirical Research*. NTC Publications.

Friedrichsen, Mike. 2010. "Deutschquote für Werbeslogans?" *Focus-Jahrbuch 2010 - Schwerpunkt: Der Stand der Werbewirkungsforschung*. Ed. Koschnick, Wolfgang J. München: FOCUS Magazin Verlag. 589-630.

Fritz, Catherine O., Peter E. Morris, and Jennifer J. Richler. 2012. "Effect size estimates: Current use, calculations, and interpretation". *Journal of Experimental Psychology: General* 141(1): 2-18.

Gallmann, Peter. 1989. "Syngrapheme an und in Wortformen. Bindestrich und Apostroph im Deutschen." *Schriftsysteme und Orthographie*. Eds. Eisenberg, Peter and Günther Hartmut. Tübingen: Niemeyer (= Reihe Germanistische Linguistik 97). 85-110.

Garcia, Ofelia, and Li Wei. 2014. *Translanguaging: Language, Bilingualism and Education*. Basingstoke: Palgrave Macmillan.

García-Yeste, Miguel. 2013. "The presence and roles of English in Swedish print advertising: an exploratory study". *Nordic Journal of English Studies.* 12(1).

Garrett, Peter, and Allan Bell. 1998. "Media and Discourse: A Critical Overview." *Approaches to media discourse*. Eds. Bell, Allan and Peter Garrett. Oxford: Blackwell Publishers Ltd. 1-20.

Gerritsen, Marinel, Catherine Nickerson, Andreu van Hooft, Frank van Meurs, Hubert Korzilius, Ulrike Nederstigt, Marianne Starren, and Roger Crijns. 2010. "English in Product Advertisements in Non-English-Speaking Countries in Western Europe: Product Image and Comprehension of the Text". *Journal of Global Marketing* 23(4): 349-65.

Gerritsen, Marinel, Catherine Nickerson, Andreu Van Hooft, Frank Van Meurs, Ulrike Nederstigt, Marianne Starren, and Rogier Crijns. 2007a. "English in product advertisements in Belgium, France, Germany, the Netherlands and Spain". *World Englishes* 26(3): 291-315.

Gerritsen, Marinel, Catherine Nickerson, Corine van den Brandt, Rogier Crijns, Nuria Dominguez, Frank van Meurs, and Ulrike Nederstigt. 2007b. "English in Print Advertising in Germany, Spain and the Netherlands:

Frequency of Occurrence, Comprehensibility and the Effect on Corporate Image." *The Role of English in Institutional and Business Settings. An Intercultural Perspective*. Eds. Garzone, Giuliana and Cornelia Ilie. Vol. 34. Linguistic Insights - Studies in Language and Communication. Berlin: Peter Lang. 79-98.

Gerritsen, Marinel, Hubert Korzilius, Frank Van Meurs, and Inge Gijsbers. 2000. "English in Dutch Commercials: Not Understood and Not Appreciated". *Journal of Advertising Research* 40(4): 17-31.

Giles, Howard. 1973. "Accent mobility: A model and some data". *Anthropological Linguistics* (15): 87-105.

Glaser, Barney G., and Anselm L. Strauss. 1967. *The discovery of grounded theory: strategies for qualitative research.* Chicago: AldineTransaction.

Goffman, Erving. 1979. *Gender advertisements*. New York: Harper & Row.

Goddard, Angela. 2002. *The Language of Advertising: Written Texts*. 2nd ed. London: Routledge.

Graddol, David. 2006. *English Next. Why global English may mean the end of 'English as a Foreign Language'*. British Council.

Graedler, Anne-Line. 1999. "Where English and Norwegian meet: Codeswitching in written texts." *Out of Corpora: Studies in Honour of Stig Johansson*. Eds. Hasselgard, Hilde and Signe Okserfjell. Amsterdam and Atlanta: Rodopi. 327-43.

Grainger, Jonathan. 1990. "Word Frequency and Neighborhood Frequency Effects in Lexical Decision and Naming". *Journal of Memory & Language* 29: 228-44.

Grainger, Jonathan, and Arthur M. Jacobs. 1996. "Orthographic processing in visual word recognition: A multiple read-out model". *Psychological Review* 103(3): 518.

Grainger, Jonathan, and Walter J. B. van Heuven. 2003. "Modeling letter position coding in printed word perception." *The Mental Lexicon*. Ed. Bonin, Patrick. New York: Nova Science.

Grau, Maike. 2009. "Worlds apart? English in German youth cultures and in educational settings". *World Englishes* 28(2): 160-74.

Green, David W. 1998. "Mental control of the bilingual lexico-semantic system". *Bilingualism: Language and Cognition* 1: 67-81

Grosjean, François. 2001. "The bilingual's language modes." *One Mind, Two Languages: Bilingual Language Processing*. Ed. Nicol, Janet L. Oxford: Blackwell. 1-22.

------. 1982. *Life with two languages. An introduction to bilingualism*. Cambridge: Harvard University Press.

Gumperz, John. 1982. *Discourse Strategies*. Cambridge: Cambridge University Press.

Haarmann, Harald. 1989. *Symbolic values of foreign language use: from the Japanese case to a general sociolinguistic perspective*. Berlin: De Gruyter Mouton.

Hahn, Alexander, and Inga Wermuth. "SLOGAN TRENDS 2011: Global. Total. Radikal". Slogans.de, 2011. <http://www.slogans.de/studie2011.php> (accessed December, 2012).

Haley, Eric. 2012. "Involvement." *Advertising Theory*. Eds. Rodgers, Shelly and Esther Thorson. New York: Routledge. 120-31.

Harris, Richard Jackson, Ruth E. Sturm, Michael L. Klassen, and John I. Bechtold. 1986. "Language in Advertising: A Psycholinguistic Approach". *Current Issues and Research in Advertising* 9(1-2): 1-26.

Haugen, Einar. 1950. "The Analysis of Linguistic Borrowing". *Language* 26(2): 210-31.

Heredia, Robert R. 1997. "Bilingual memory and hierarchical models: A case for language dominance". *Current Directions in Psychological Science* 6: 34-39.

Heredia, Robert R., and Jeffrey M. Brown. 2006. "9 Bilingual Memory." *The Handbook of Bilingualism*. Eds. Bhatia, Tej K. and William C. Ritchie: Wiley.

Hermerén, Lars. 1999. *English for sale: A Study of the Language of Advertising*. Lund: Lund University Press.

Hernandez, Arturo E., Ping Li, and Brian MacWhinney. 2005. "The emergence of competing modules in bilingualism". *Trends in Cognitive Sciences* 9: 220-25.

Hieronimus, Fabian. 2003. *Persönlichkeitsorientiertes Markenmanagement. Eine empirische Untersuchung zur Messung, Wahrnehmung und Wirkung der Markenpersönlichkeit*. Frankfurt am Main: Lang.

Hilgendorf, Suzanne K. 2007. "English in Germany: contact, spread and attitudes". *World Englishes* 26(2): 131-48.

Hornikx, Jos, Frank van Meurs, and Robert-Jan Hof. 2013. "The Effectiveness of Foreign-Language Display in Advertising for Congruent versus Incongruent Products". *Journal of International Consumer Marketing* 25(3): 152-65.

Hornikx, Jos, and Daniel J. O'Keefe. 2011. "Conducting Research on International Advertising: The Roles of Cultural Knowledge and International Research Teams". *Journal of Global Marketing* 24(2): 152-66.

------. 2009. "Adapting consumer advertising appeals to cultural values: A meta-analytic review of effects on persuasiveness and ad liking". *Communication Yearbook* 33: 38-71.

Hornikx, Jos, Frank van Meurs, and Anja de Boer. 2010. "English or a Local Language in Advertising?". *Journal of Business Communication* 47(2): 169-88.

Hornikx, Jos, Frank van Meurs, and Marianne Starren. 2007. "An Empirical Study of Readers' Associations with Multilingual Advertising: The Case of French, German and Spanish in Dutch Advertising". *Journal of Multilingual & Multicultural Development* 28(3): 204-19.

Hsu, Jia-Ling. 2008. "Glocalization and English Mixing in Advertising in Taiwan". *Journal of Creative Communications* 3(2): 155-83.

Janich, Nina. 2013. *Werbesprache ein Arbeitsbuch*. 6th ed. Tübingen: Narr.

Janiszewski, Chris. 2008. "Goal-Directed Perception." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 393-418.

Jones, Christopher R.M., and Russel H. Fazio. 2008. "Associative Strength and Consumer Choice Behaviour." *Handbook of Consumer Psychology.* Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 437-60.

Jones, Rodney H. 2010. "Creativity and discourse". *World Englishes* 29(4): 467-80.

Kachru, Braj B. 1986. *The Alchemy of English: The Spread, Functions, and Models of Non-Native Englishes*. Chicago: University of Illinois Press.

------. 1985. "Standards, codification and sociolinguistic realism: The English language in the Outer Circle." *English in the world: teaching and learning the language and literatures*. Eds. Quirk, Randolph, Henry G. Widdowson and Yolande Cantu. Cambridge: Cambridge University Press. 11-30.

Kachru, Yamuna, and Larry E. Smith. 2009. "The Karmic cycle of world Englishes: some futuristic constructs". *World Englishes* 28: 1-14.

Kahle, Lynn R., and Guang-Xin Xie. 2008. "Social Values in Consumer Psychology." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis

P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 275-85.

Kamwangamalu, Nkonko M. 1992. "'Mixers' and 'mixing': English across cultures". *World Englishes* 11(2-3): 173-81.

Kardes, Frank R., Steven S. Posavac, Maria L. Cronley, and Paul M. Herr. 2008. "Consumer Inference." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 165-91.

Keitz, B. v. , S. Gunawardena, M. Hallemann, and F. Händler. 2007. "Wirkung des Anzeigenformats: Case Study Nivea Beauté". *Planung & Analyse* Jg. 34(Heft 5): 54-57.

Kellerhals, Ursina. 2008. *There's no better way to fly": die Wirkung englischer Slogans in der Deutschschweizer Anzeigenwerbung*. Zürich/Chur: Rüegger.

Kelly-Holmes, Helen. 2005. *Advertising as Multilingual Communication*. New York: Palgrave MacMillan.

------. 2010. "Global marketing and language." *The Handbook of Language and Globalization*. Ed. Coupland, Nikolas. Oxford: Wiley-Blackwell. 476-90.

Kerremans, Daphné, Susanne Stegmayr, and Hans-Jörg Schmid. 2012. "The NeoCrawler: identifying and retrieving neologisms from the internet and monitoring on-going change." *Current methods in historical semantics,*. Eds. Allan, Kathryn and Justyna A. Robinson. Berlin: De Gruyter Mouton. 59-96.

KMK: Kultusministerkonferenz."Fremdsprachen in der Grundschule – Sachstand und Konzeptionen 2013". 2014. <http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2013/2013_10_17-Fremdsprachen-in-der-Grundschule.pdf> (accessed February 12, 2014)

------. "Allgemeines zum fremdsprachlichen Unterricht". <http://www.kmk.org/bildung-schule/allgemeine-bildung/faecher-und-unterrichtsinhalte/fremdsprachen.html> (accessed February 12, 2014)

Köcher-Schulz, Barbara. 2000. "Was leisten Anzeigen in Wochen- und Monatsmagazinen". *Transfer —Werbeforschung & Praxis* 45(2): 16-17.

Koll-Stobbe, Amei. 1994. "English in code-alternations: towards an integrated study of code-switching". *World Englishes* 13(2): 203-14.

Kress, Gunther, and Theo van Leeuwen. 2006. *Reading Images. The Grammar of Visual Design*. 2nd ed. New York: Routledge.

Kroeber-Riel, Werner, Peter Weinberg, and Andrea Gröppel-Klein. 2009. *Konsumentenverhalten*. 9th ed. München: Vahlen.

Kroll, Judith F., and Erika Stewart. 1994. "Category interference in translation and picture naming: Evidence for asymmetric connections between bilingual memory representations". *Journal of Memory and Language* 33(2): 149.

Kroll, Judith F., and Natasha Tokowicz. 2005. "Models of bilingual representaion and processing: Looking back and to the future." *Handbook of bilingualism: Psycholinguistic approaches*. Eds. Kroll, Judith F. and Annette M. B. De Groot. New York: Oxford University Press. 531-53.

Kroll, Judith F., Janet G. Van Hell, Natasha Tokowicz, and David W. Green. 2010. "The Revised Hierarchical Model: A critical review and assessment". *Bilingualism: Language and Cognition* 13(03): 373-81.

Krosnick, Jon A., Charles M. Judd, and Bernd Wittenbrink. 2005. "The Measurement of Attitudes." *The Handbook of Attitudes*. Eds. Albarracin, Dolores, Blair T. Johnson and Mark P. Zanna. London, New York: Psychology Press. 21-78.

Krugman, Dean M., and Jameson L. Hayes. 2012. "Brand Concepts and Advertising." *Advertising Theory*. Eds. Rodgers, Shelly and Esther Thorson. New York: Routledge. 434-48.

Kupper, Sabine. 2007. *Anglizismen in deutschen Werbeanzeigen. Eine empirische Studie zur stilistischen und ökonomischen Motivation von Anglizismen*. Frankfurt am Main: Lang.

Lachmann, Ulrich. 2002. *Wahrnehmung und Gestaltung von Werbung*. 2nd ed. Hamburg: Gruner + Jahr.

Leech, Geofrey. 1966. *English in Advertising: A linguistic Study of Advertising in Great Britain*. London: Longman.

Leiner, Dominik. J. (2013). SoSci Survey (Version 2.3.05) [Computer Software]. Available from <https://www.soscisurvey.de>

Leiss, William, Stephen Kline, and Sut Jhally. 1990. *Social Communication in Advertising: Persons, Products & Images of Well-being*. London: Routledge.

Leppänen, Sirpa. 2007. "Youth language in media contexts: insights into the functions of English in Finland". *World Englishes* 26(2): 149-69.

Linke, Angelika, Markus Nussbaumer, and Paul R. Portmann. 2004. *Studienbuch Linguistik*. 5th ed. Tübingen: Niemeyer.

Loken, Barbara, Lawrence W. Barsalou, and Joiner Christopher. 2008. "Categorization Theory and Research in Consumer Psychology: Category Representation and Category-Based Inference." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 133-63.

Luna, David, Dawn Lerman, and Laura A. Peracchio. 2005. "Structural Constraints in Code-Switched Advertising". *Journal of Consumer Research* 32(3): 416-23.

Luna, David, and Laura A. Peracchio. 2005. "Advertising to Bilingual Consumers: The Impact of Code-Switching on Persuasion". *Journal of Consumer Research* 31(4): 760-65.

------. 2001. "Moderators of Language Effects in Advertising to Bilinguals: A Psycholinguistic Approach". *Journal of Consumer Research* 28(2): 284-95.

Lund, Adam and Mark Lund. 2013. Laerd Statistics. SPSS Tutorials and Statistical Guides. © 2013 Lund Research Ltd.

<https://statistics.laerd.com/> (accessed November 24, 2014).

Mackey, William Francis. 1967. *Bilingualism as a world problem. E.R. Adair memorial lectures*. Montreal: Harvest House.

Mäder, Ralf. 2005. *Messung und Steuerung von Markenpersönlichkeit: Entwicklung eines Messinstruments und Anwendung in der Werbung mit prominenten Testimonials*. Wiesbaden: Dt. Univ.-Verlag.

Mahootian, Shahrzad. 2012. "Repertoires and Resources: Accounting for Code-mixing in the Media." *Language Mixing and Code-Switching in Writing: Approaches to Mixed-Language Written Discourse*. Eds. Sebba, Mark, Shahrzad Mahootian and Carla Jonsson. Routledge Critical Studies in Multilingualism. New York, Oxon: Taylor & Francis. 192-211.

Mantonakis, Antonia, Bruce W.A. Whittlesea, and Carolyn Yoon. 2008. "Consumer Memory, Fluency, and Familiarity." *Handbook of Consumer Psychology*. Eds. Haugtvedt, Curtis P., Paul M. Herr and Frank R. Kardes. New York: Psychology Press. 77-102.

Marcel, Anthony J. 1983. "Conscious and unconscious perception: Experiments on visual masking and word recognition". *Cognitive Psychology* 15: 197-237.

Martin, Elizabeth. 2008. "Language-Mixing in French Print Advertising". *Journal of Creative Communications* 3(1): 49-76.

------. 2007. "“Frenglish” for sale: multilingual discourses for addressing today's global consumer". *World Englishes* 26(2): 170-90.

------. 2002. "Mixing English in French advertising". *World Englishes* 21(3): 375-402.

------. 1998. "The Use of English In Written French Advertising: A Study of Code-Switching, Code-Mixing, and Borrowing in a Commercial Context". *Studies in the Linguistic Sciences* 28 (1): 159-84.

McClelland, James L., and David E. Rumelhart. 1981. "An interactive activation model of context effects in letter perception: I. An account of basic findings". *Psychological Review* 88(5): 375-407.

McQuarrie, Edward F., and Barbara J. Phillips. 2012. "A Rhetorical Theory of the Advertisement." *Advertising Theory*. Eds. Rodgers, Shelly and Esther Thorson. New York: Routledge. 227-40.

Mick, David Glen. 1992. "Levels of Subjective Comprehension in Advertising Processing and Their Relations to Ad Perceptions, Attitudes, and Memory". *The Journal of Consumer Research* 18(4): 411-24.

Mitchell, Andrew A. 1986. "The Effect of Verbal and Visual Components of Advertisements on Brand Attitudes and Attitude Toward the Advertisement". *Journal of Consumer Research* 13(1): 12-24.

Mitchell, Andrew A. 1981. "The Dimensions of Advertising Involvement". *Advances in Consumer Research* 8(1): 25-30.

Moraldo, Sandro M. 2008. "Sprachkontakt und Mehrsprachigkeit: Zur Anglizismendiskussion in Deutschland, Österreich, der Schweiz und Italien - Editorial." *Sprachkontakt und Mehrsprachigkeit: Zur Anglizismendiskussion in Deutschland, Österreich, der Schweiz und Italien*. Ed. Moraldo, Sandro M. Heidelberg: Winter. 9-36.

Morris, Jon D. 2012. "Theories of Emotion and Affect in Marketing Communications." *Advertising Theory*. Eds. Rodgers, Shelly and Esther Thorson. New York: Routledge. 85-104.

Moser, Klaus, and Matthias Spörrle. 2012. "Werbekommunikation aus psychologischer Sicht." *Handbuch Werbekommunikation. Sprachwissenschaftliche und interdisziplinäre Zugänge*. Ed. Janich, Nina. Tübingen: Francke. 423-36.

Mullen, Alex. 2013. "The Bilingualism of Material Culture? Thoughts from a Linguistic Perspective". *HEROM* 2(1): 21-43.

Myers, Greg. 1994. *Words in ads.* London: Edward Arnold.

Myers-Scotton, Carol. 2006. *Multiple voices. An introduction to bilingualism*. Malden, MA: Blackwell.

Neumann, Peter. 2003. *Markt- und Werbepsychologie*. Band 2: Praxis. 2nd ed. Gräfelfing: Fachverlag Wirtschaftspsychologie.

Nöth, Winfried. 1975. *Semiotik. Eine Einführung mit Beispielen für Reklameanalysen*. Tübingen: Niemeyer.

NRW, QUA-LIS. "Qualitäts- und UnterstützungsAgentur - Landesinstitut für Schule: Englisch in der Grundschule - Inhaltsübersicht". 2014. <http://www.schulentwicklung.nrw.de/cms/angebote/egs/angebot-home/englisch-in-der-grundschule-inhaltsuebersicht.html> (accessed February 12, 2014).

O'Guinn, Thomas C., and Albert M. Muñiz, Jr. 2004. "The Polit-Brand and Blows Against the Empire: The Collectively Approved Brands of the New-New Left." *Advances in Consumer Research.* Eds. Kahn, Barbara and Mary Frances Luce. Vol. 31. Provo, UT: Association for Consumer Research 100.

Onysko, Alexander. 2007. *Anglicisms in German: Borrowing, Lexical Productivity, and Written Codeswitching*. Berlin: Walter de Gruyter.

Osgood, C.E., G. Suci, and P. Tannenbaum. 1957. *The measurement of meaning*. Urbana, IL: University of Illinois Press.

Otsuji, Emi, and Alastair Pennycook. 2010. "Metrolingualism: Fixity, fluidity and language in flux". *International Journal of Multilingualism* 7(3): 240-54.

Paradis, Michel. 2004. *A Neurolinguistic Theory of Bilingualism*. Amsterdam: John Benjamins.

Pavlenko, Aneta. 2009. *The bilingual mental lexicon: interdisciplinary approaches.* Bristol: Multilingual Matters.

Percy, Larry. 2012. "The Role of Emotion in Processing Advertising." *Advertising theory*. Eds. Rodgers, Shelly and Esther Thorson. New York: Routledge. 69-84.

Peressotti, Francesca, Roberto Cubelli, and Remo Job. 2003. "On recognizing proper names: The orthographic cue hypothesis". *Cognitive Psychology* 47: 87–116.

Petty, Richard E., and John T. Cacioppo. 1986. "The Elaboration Likelihood Model of Persuasion." *Advances in Experimental Social Psychology*. Ed. Berkowitz, Leonard. Vol. 19. New York: Academic Press. 123-205.

Pfitzner, Jürgen. 1978. *Der Anglizismus im Deutschen. Ein Beitrag zur Bestimmung seiner stilistischen Funktion in der heutigen Presse*. Amerikastudien/American Studies. Eine Schriftreihe. Eds. Galinsky, Hans,

Gerhard Hoffmann and Günter Moltmann. Vol. 51. Stuttgart: J.B. Metzlersche Verlagsbuchhandlung.

Piller, Ingrid. 2006. "Advertising as Multilingual Communication". *Journal of Sociolinguistics* 10(2): 272-77.

------. 2003. "Advertising as a Site of Language Contact". *Annual Review of Applied Linguistics* 23: 170-83.

------. 2001. "Identity Construction in Multilingual Advertising". *Language in Society* 30(1): 153-86.

Platen, Christoph. 1997. *«Ökonymie». Zur Produktnamen-Linguistik im Europäischen Binnenmarkt*. Tübingen: Niemeyer.

Pörksen, Uwe. 1988. *Plastikwörter: die Sprache einer internationalen Diktatur*. Stuttgart: Klett-Cotta.

Polenz, Peter von. 1978. Geschichte der deutschen Sprache. 9th ed. Berlin: De Gruyter.

Poplack, Shana. 1987. "Contrasting patterns of code-switching in two communities." *Aspects of Multilingualism: Proceedings from the Fourth Nordic Symposium on Bilingualism*. Eds. Erling, Wande, Jan Anward, Bengt Nordberg, Lars Steensland and Mats Thelander. Uppsala: Borgströms. 51-77.

Puntoni, Stefano, Bart De Langhe, and Stijn M. J. Van Osselaer. 2009. "Bilingualism and the Emotional Intensity of Advertising Language". *Journal of Consumer Research* 35(6): 1012-25.

QUA-LIS NRW. "Qualitäts- und UnterstützungsAgentur - Landesinstitut für Schule: Englisch in der Grundschule - Inhaltsübersicht". 2014. <http://www.schulentwicklung.nrw.de/cms/angebote/egs/angebot-home/englisch-in-der-grundschule-inhaltsuebersicht.html> (accessed October 15, 2014).

Rastle, Kathleen. 2007. "Chapter 5: Visual word recognition " *The Oxford handbook of psycholinguistics*. Ed. Gaskell, Mark Gareth. Oxford: Oxford University Press. 71-87.

Riehl, Claudia Maria. 2004. *Sprachkontaktforschung eine Einführung*. Tübingen: Narr.

Rodgers, Shelly, and Esther Thorson. 2012. *Advertising theory*. New York: Routledge.

Romaine, Suzanne. 1989. *Bilingualism*. Oxford: Blackwell.

Römer, Christine. 2012. "Werbekommunikation lexikologisch." *Handbuch Werbekommunikation. Sprachwissenschaftliche und interdisziplinäre Zugänge*. Ed. Janich, Nina. Tübingen: Francke. 3-15.

Römer, Ruth. 1968. *Die Sprache der Anzeigenwerbung*. Düsseldorf: Schwann.

Rotzoll, Kim B. 1985. "Advertisements." *Discourse and Communication. New Approaches to the Analysis of Mass Media Discourse and Communication*. Ed. Dijk, Teun A. van. Berlin: De Gruyter. 94-105.

Runkehl, Jens. 2011. *www.werbesprache.net. Sprachliche und kommunikative Strukturen von Bannerwerbung im Internet*. Frankfurt am Main: Lang.

Russell, James A., and Albert Mehrabian. 1977. "Evidence for a three-factor theory of emotions". *Journal of Research in Personality* 11: 273-94.

Saussure, Ferdinand de. 1966. Ed. Charles Bally and Albert Sechehaye, in collaboration with Albert Riedlinger. Transl. by Wade Baskin. 1st ed. New York: McGraw-Hill Book Company.

Schiemichen, Susanne. 2005. *¨Das "fremde Bekannte" über die Verwendung von Fremdsprachen in Werbeanzeigen deutschsprachiger Publikumszeitschriften*. Norderstedt: Books on Demand.

Schierl, Thomas. 2001. *Text und Bild in der Werbung: Bedingungen, Wirkungen und Anwendungen bei Anzeigen und Plakaten*. Köln: Halem.

Schütte, Dagmar. 1996. *Das schöne Fremde. Anglo-amerikanische Einflüsse auf die Sprache der deutschen Zeitschriftenwerbung*. Opladen: Westdt. Verlag.

Schumann, David W., Michael R. Kotowski, Ho-Young (A.) Ahn, and Curtis P. Haugtvedt. 2012. "The Elaboration Likelihood Model. A 30-Year Review." *Advertising theory*. Eds. Rodgers, Shelly and Esther Thorson. New York: Routledge. 51-68.

Schwarz, Norbert, and Gerald L. Clore. 1988. "How do I feel about it? The information function of affective states." *Affect, cognition and social behaviour: New evidence and integrative attempts*. Eds. Fiedler, Klaus and Joseph P. Forgas. Toronto: C.J. Hogrefe. 44-63.

Scollon, Ron, and Suzie Wong Scollon. 2003. *Discourses in Place: Language in the Material World*. London: Routledge.

Sebba, Mark. 2013. "Multilingualism in written discourse: an approach to the analysis of multilingual texts". *International Journal of Bilingualism* 17(1): 97-118

------. 2012a. "Orthography as social action: Scripts, spelling, identity and power." *Orthography as Social Action: Scripts, Spelling, Identity and*

Power. Eds. Jaffe, Alexandra, Jannis Androutsopoulos, Mark Sebba and Sally Johnson. Berlin, Boston: De Gruyter Mouton. 1-20.

------. 2012b. "Researching and Theorising Multilingual Texts." *Language Mixing and Code-Switching in Writing: Approaches to Mixed-Language Written Discourse*. Eds. Sebba, Mark, Shahrzad Mahootian and Carla Jonsson. Routledge Critical Studies in Multilingualism. New York, Oxon: Taylor & Francis. 1-26.

Seidlhofer, Barbara, Angelika Breiteneder, and Marie-Luise Pitzl. 2006. "English as a lingua franca in Europe: Challenges for applied linguistics". *Annual Review of Applied Linguistics* 26: 3-34.

Shannon, Claude E., and Warren Weaver. 1949. *The mathematical theory of communication*. Urbana, Illinois: University of Illinois Press.

Simons, Daniel J., and Christopher Chabris. 1999. "Gorillas in our midst: Sustained inattentional blindness for dynamic events". *Perception* 28(9): 1059-74.

SINUS Markt- und Sozialforschung GmbH. "The Sinus-Milieus® in Germany". Heidelberg, 2014. <http://www.sinus-institut.de/en/solutions/sinus-milieus. html> (accessed February 10, 2014).

Slogometer®. "Das Ranking der Werbesprache". Slogans.de. Die Datenbank der Werbung. founded by Hahn, Alexander and Wermuth, Inga <http://www. slogans.de/slogometer.php?Year=-9> (accessed September 9, 2014).

Spitzmüller, Jürgen. 2013. *Graphische Variation als soziale Praxis: Eine soziolinguistische Theorie skripturaler ›Sichtbarkeit‹*. Berlin: De Gruyter.

------. 2012. "Floating ideologies: Metamorphoses of graphic 'Germanness'." *Orthography as Social Action: Scripts, Spelling, Identity and Power*. Eds. Jaffe, Alexandra, Jannis Androutsopoulos, Mark Sebba and Sally Johnson. (Language and Social Processes 3). Berlin: De Gruyter Mouton. 255-88.

------. 2007. "Staking the claims of identity: Purism, linguistics and the media in post-1990 Germany1". *Journal of Sociolinguistics* 11(2): 261-85.

------. 2005. *Metasprachdiskurse: Einstellungen zu Anglizismen und ihre wissen-schaftliche Rezeption*. Berlin: De Gruyter.

Stiven, Agnes B. 1936. *Englands Einfluss auf den deutschen Wortschatz*. Zeulenroda: Sporn.

Stöckl, Hartmut. 2012. "Werbekommunikation semiotisch." *Handbuch Werbekommunikation. Sprachwissenschaftliche und interdisziplinäre Zugänge*. Ed. Janich, Nina Janich. Tübingen: UTB Francke. 243–62.

------. 2011. "Multimodale Werbekommunikation – Theorie und Praxis". *Zeitschrift für angewandte Linguistik*: 5-32.

------. 2009. "The Language-Image-Text – Theoretical and Analytical Inroads into Semiotic Complexity". *AAA Arbeiten aus Anglistik und Amerikanistik* 34(2): 203–26.

------. 2008. "Werbetypographie. Formen und Funktionen." *Werbung – grenzenlos. Multimodale Werbetexte im interkulturellen Vergleich (= Sprache im Kontext 31)*. Eds. Bendel, Sylvia and Gudrun Held. Frankfurt a. Main: Lang. 13–36.

Störiko, Ute. 1995. "*Wir legen Word auf gutes Deutsch*": *Formen und Funktionen fremdsprachiger Elemente in der deutschen Anzeigen-, Hörfunk- und Fernsehwerbung*. Viernheim: Cubus-Verl.-Ges.

Takashi, Kyoko. 1990. "A sociolinguistic analysis of English borrowings in Japanese advertising texts". *World Englishes* 9(3): 327-41.

Tavassoli, Nader T. 1999. "Temporal and Associative Memory in Chinese and English". *Journal of Consumer Research* 26(2): 170-81.

Thomas, Michael S. C., and Walter J. B. van Heuven. 2005. "Computational models of bilingual comprehension." *Handbook of bilingualism: Psycholinguistic approaches*. Eds. Kroll, Judith F. and Annette M. B. De Groot. Oxford: Oxford University Press. 202-25.

Thomason, Sarah Grey. 2001. *Language Contact: an Introduction.* Edinburgh: Edinburgh University Press.

Tomasello, Michael. 1999. *The Cultural Origins of Human Cognition*. Cambridge, MA: Harvard University Press.

Ustinova, Irina P. 2008. "English and American Culture Appeal in Russian Advertising". *Journal of Creative Communications* 3(1): 77-98.

------. 2006. "English and emerging advertising in Russia". *World Englishes* 25(2): 267-77.

Van Heuven, Walter J. B. 2005. "Bilingual interactive activation models of word recognition in a second language." *Second language writing systems*. Eds. Cook, Vivian J. and Benedetta Bassetti. Clevedon: Multilingual Matters. 260-88.

Van Heuven, Walter J. B., Ton Dijkstra, and Jonathan Grainger. 1998. "Orthographic Neighborhood Effects in Bilingual Word Recognition". *Journal of Memory & Language* 39(3): 458.

Van Leeuwen, T. 2005. *Introducing Social Semiotics*. London: Routledge.

Van Meurs, Lex, and Mandy Aristoff. 2009. "Split-Second Recognition: What Makes Outdoor Advertising Work?". *Journal of Advertising Research* 49(1): 82-92.

Vasta, Nicoletta. 2005. ""Profits & Principles: Is There a Choice?" The Multimodal Construction of Shell's Commitment to Social Responsibility and the Environment in and across Advertising Texts." *Identity, Community, Discourse: English in Intercultural Settings*. Eds. Cortese, Giuseppina and Anna Duszak. Bern: Peter Lang. 431-54.

Viereck, Wolfgang. 2004. "Britisches Englisch und Amerikanisches Englisch/ Deutsch." *Sprachgeschichte. Ein Handbuch zur Geschichte der deutschen Sprache und ihrer Erforschung*. Eds. Besch, Werner, Anne Betten, Oskar Reichmann and Stefan Sonderegger. 2nd ed. Vol. 1-4. Berlin: De Gruyter. 3317-30.

------. 1980. "Zur Thematik und Problematik von Anglizismen im Deutschen." *Studien zum Einfluß der englischen Sprache auf das Deutsche*. Ed. Viereck, Wolfgang. Tübingen: Gunter Narr Verlag. 9-24.

Waller, Gregor, Daniel Süss, and Markus Bircher. "Die Markenpersönlichkeit als psychologischer Faktor der Markenwirkung. Überprüfung des Markenpersönlichkeitsinventars nach MÄDER mittels konfirmatorischer Faktorenanalyse". Hochschule für Angewandte Psychologie Zürich (Forschungsbericht zur Projektphase Juni bis Dezember 2006). Zürich, 2007.

Waller, Gregor, Daniel Süss, Markus Bircher, Isabelle Bolt, Sybille Studer, and Claudia Wüest Krummenacher. "Die Markenpersönlichkeit: Entwicklung eines Instrumentes zur Analyse von Markenkommunikation und Markenbeziehungen". Hochschule für Angewandte Psychologie Zürich (Forschungsbericht zur Projektphase 2004). Zürich, 2005.

Weinreich, Uriel. 2011. *Languages in Contact: French, German and Romansh in twentieth-century Switzerland*. Amsterdam: Benjamins.

------. 1964. *Languages in Contact. Findings and Problems* 8th ed. The Hague: Mouton.

------. 1953. *Languages in Contact*. The Hague: Mouton.

Wendelken, Peter. 1967. "Der Einfluss es Englischen auf das heutige Werbedeutsch". *Muttersprache* 77: 289-308.

Wetzler, Dagmar. 2006. *Mit Hyperspeed ins Internet: zur Funktion und zum Verständnis von Anglizismen in der Sprache der Werbung der Deutschen Telekom*. Frankfurt am Main: Lang.

Wustmann, Gustav. 1891. *Allerhand Sprachdummheiten: Kleine deutsche Grammatik des Zweifelhaften, des Falschen und des Hässlichen. Ein Hilfsbuch für alle die sich öffentlich der deutschen Sprache bedienen*. Leipzig: F. W. Grunow.

Wyer Jr, Robert S. 2002. "Language and Advertising Effectiveness: Mediating Influences of Comprehension and Cognitive Elaboration ". *Psychology & Marketing* 19(7-8): 693-712.

Yang, Wenliang. 1990. *Anglizismen im Deutschen: am Beispiel des Nachrichten-magazins Der Spiegel*. Tübingen: Niemeyer.

Zaichkowsky, Judith Lynne. 1985. "Measuring the involvement construct". *Journal of Consumer Research*: 341-52.

Zenner, Eline, Dirk Speelman, and Dirk Geeraerts. 2013a. "Cognitive Sociolinguistics meets loanword research: Measuring variation in the sucess of anglicisms in Dutch." *Cognitive Linguistics - The Quantitative Turn: The Essential Reader*. Ed. Janda, Laura A. Berlin: De Gruyter. 251-94.

------. 2013b. "Macro and micro perspectives on the distribution of English in Dutch: A quantitative usage-based analysis of job ads". *Linguistics* 51(5): 1019-64.

Zielke, Achim. 1991. *Beispiellos ist beispielhaft oder: Überlegungen zur Analyse und zur Kreation des kommunikativen Codes von Werbebotschaften in Zeitungs- und Zeitschriftenanzeigen*. Paffenweiler: Centaurus-Verlags-gesellschaft.

Zindler, Horst. 1959. "Anglizismen in der deutschen Pressesprache nach 1945". Dissertation. Kiel, 1959.

VI. Appendix

A. German Brand Personality Dimensions (Mäder 2005, 115)

DIMENSION	Facet	Item (*my translation*)
ATTRAKTIVITÄT	**Extravaganz**	extravagant, elegant, glamourös, chic
(*attractiveness*)	(*extravagance*)	(*extravagant, elegant, glamourous, fashionable*)
	Ästhetik	ästhetisch, charismatisch, unwiderstehlich, geschmackvoll
	(*aesthetics*)	(*aesthetic, charismatic, irresistible, tasteful*)
	Erotik	sinnlich, bezaubernd, rassig
	(*eroticism*)	(*sensuous, enchanting, hot-blooded*)
VERLÄSSLICHKEIT	**Kompetenz**	kompetent, verantwortungsvoll, sicher, solide, präzise, professionell
(*reliability*)	(*competence*)	(*competent, responsible, secure, respectable, accurate, professional*)
	Integrität	vertrauenswürdig, ehrlich, wertvoll, dezent
	(*integrity*)	(*trustworthy, honest, valuable, discreet*)
TEMPERAMENT	**Dynamik**	progressiv, dynamisch, zeitgemäss, aktiv, aufstrebend, revolutionär
(*temperament*)	(*dynamics*)	(*progressive, dynamic, contemporary, active, aspiring, revolutionary*)
	Kreativität	einfallsreich, unkonventionell, pfiffig;
	(*creativity*)	(*inventive, offbeat, imaginative*)
STABILITÄT		unschlagbar, unverfälscht, zeitlos, einprägsam, erfolgreich, bekannt
(*stability*)		(*invincible, genuine, timeless, memorable, successful, established*)
NATÜRLICHKEIT		natürlich, naturnah, frisch
(*naturalness*)		(*natural, close-to-nature, fresh*)

B. Stimuli for language decision study

1. Stimuli of English origin and their features: Table A1
2. Stimuli of German origin (fillers) and their features: Table A2
3. Language choices for individual stimuli: Table A3

Table A1

Stimuli of English Origin and Their Features

Stimuli	Cues	Frequency	Neighbourhood size	Duden entry
AWARD	no cues	high	no neighbours	yes
BABY	strong cues	high	small	yes
BEAUTY	strong cues	medium	no neighbours	yes
BETTER	no cues	low	large	no
BOOTH	vague cues	low	small	no
CARD	vague cues	medium	small	no
CHAT	no cues	low	small	yes
CHECK	no cues	medium	small	yes
CITY	strong cues	high	no neighbours	yes
CLOUD	vague cues	low	no neighbours	no
COFFEE	vague cues	low	no neighbours	no
COOL	vague cues	medium	small	yes
CRAZY	strong cues	medium	no neighbours	yes
DEAL	vague cues	medium	small	yes
DOOR	vague cues	low	small	no
DREAM	vague cues	medium	no neighbours	no
ENJOY	strong cues	low	no neighbours	no
EVENT	no cues	medium	no neighbours	yes
FIGHT	vague cues	medium	no neighbours	yes
FOLLOW	strong cues	low	no neighbours	no
FREAK	vague cues	low	small	yes
FRIEND	no cues	low	no neighbours	no
GROW	strong cues	low	small	no
HIGH	strong cues	high	no neighbours	yes
HOME	no cues	medium	large	no

Table A1

Stimuli of English Origin and Their Features

Stimuli	Cues	Frequency	Neighbourhood size	Duden entry
HOUSE	vague cues	high	small	yes
IMAGE	no cues	high	no neighbours	yes
JOKE	no cues	low	small	yes
JURY	strong cues	high	small	yes
KING	no cues	high	large	yes
LIFE	no cues	high	small	no
LIGHT	vague cues	medium	small	yes
LIKE	no cues	medium	large	no
LIVING	no cues	medium	no neighbours	no
LOVE	no cues	high	small	no
MAKE	no cues	low	large	no
NEXT	no cues	medium	small	no
NIGHT	vague cues	high	small	no
OFFER	no cues	low	small	no
PART	no cues	medium	large	yes
PARTY	strong cues	high	small	yes
POWER	no cues	high	small	yes
SCHOOL	vague cues	high	small	no
SCOUT	strong cues	low	no neighbours	yes
SHIRT	strong cues	low	small	yes
SHORTS	strong cues	low	small	yes
SHOW	strong cues	high	small	yes
SINGLE	no cues	high	small	yes
SLOW	strong cues	low	small	yes
SNACK	strong cues	low	small	yes
SNOB	strong cues	low	no neighbours	yes
SOFT	no cues	medium	small	yes
SORRY	strong cues	medium	no neighbours	yes
SOUND	vague cues	high	small	yes
SPRAY	strong cues	low	no neighbours	yes
STORY	strong cues	high	small	yes

Table A1

Stimuli of English Origin and Their Features

Stimuli	Cues	Frequency	Neighbourhood size	Duden entry
TICKET	no cues	medium	small	yes
TIME	no cues	high	small	no
TOAST	vague cues	low	no neighbours	yes
TRAVEL	no cues	medium	no neighbours	no
TREND	no cues	high	no neighbours	yes
VERY	strong cues	medium	small	no
VOTING	no cues	low	no neighbours	yes
WHITE	strong cues	medium	small	no
WORLD	no cues	high	no neighbours	no
WRITE	vague cues	low	small	no

Note: Cues are treated as strong when stimuli contain *-W*, *-Y*, *-GH,* or *SH-*, *SN-*, *WH-*. Stimuli that contain *C-*, *WR-*, or *-GH-*, *-OO-*, *-EA-*, *-OA-*, *-OU-* are treated as having vague cues. The remaining stimuli are considered to contain no English graphemic cues.
Stimuli that occur in the COSMAS II frequency classes 8 to 11 are regarded as highly frequent, those that belong to classes 12 to 14 as being of medium frequency, and those that occur in classes 15 to 18 as having a low frequency.
Stimuli with 8-13 cross-linguistic neighbours are treated as having a large neighbourhood, those with 2 to 6 neighbours are ranked as having a small neighbourhood. Words without neighbours are marked accordingly.

Table A2

Stimuli of German Origin (Fillers) And Their Features

Stimuli	Cues	Neighbourhood
ALLES	no cues	small
BEERE	no cues	small
CREMIG	English cues	no neighbours
DEIN	German cues	large
DOOF	English cues	large
ERFOLG	no cues	no neighbours
FRISCH	German cues	small
HEER	English cues	large
JETZT	German cues	no neighbours
LEBEN	no cues	no neighbours
LECKER	German cues	no neighbours
LERNEN	no cues	no neighbours
LINEAL	English cues	small
MEER	English cues	large
MEHR	German cues	small
MOOS	English cues	large
NATUR	no cues	small
PREIS	German cues	small
SCHON	German cues	no neighbours
SEELE	English cues	small
SPAREN	no cues	small
TEEREN	English cues	no neighbours
VIEL	no cues	small
ZEIT	German cues	small

Note: Stimuli that contain *-EE-*, *-OO-*, *C-*, or *-EA-* are treated as featuring English cues. Stimuli that contain *-SCH*, *-CK-*, *-EI-*,*-H-*, or *-Z-* are treated as featuring German cues. The remaining stimuli are considered to contain no cues.
Stimuli of German origin with 6 to 15 cross-linguistic neighbours in English are treated as having a large neighbourhood, those with 1 to 5 neighbours are ranked as having a small neighbourhood. Words without neighbours are marked accordingly.

Table A3

Language Choices for Individual Stimuli

Stimuli	Group 1		Subset of group 2	
	Total of German evaluations	Total of English evaluations	Total of German evaluations	Total of English evaluations
ALLES	51	0	51	0
AWARD	0	51	0	51
BABY	3	48	10	41
BEAUTY	0	51	0	51
BEERE	47	4	48	3
BETTER	1	50	2	49
BOOTH	0	51	0	51
CARD	0	51	0	51
CHAT	0	51	2	49
CHECK	0	51	4	47
CITY	1	50	1	50
CLOUD	0	51	0	51
COFFEE	0	51	0	51
COOL	2	49	6	45
CRAZY	1	50	0	51
CREMIG	48	3	46	5
DEAL	0	51	1	50
DEIN	50	1	51	0
DOOF	50	1	45	6
DOOR	0	51	0	51
DREAM	0	51	2	49
ENJOY	0	51	1	50
ERFOLG	51	0	51	0
EVENT	0	51	3	48
FIGHT	1	50	0	51
FOLLOW	0	51	1	50
FREAK	0	51	2	49
FRIEND	0	51	1	50
FRISCH	51	0	51	0

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Table A3

Language Choices for Individual Stimuli

Stimuli	Group 1		Subset of group 2	
	Total of German evaluations	Total of English evaluations	Total of German evaluations	Total of English evaluations
GROW	0	51	0	51
HEER	45	6	48	3
HIGH	0	51	2	49
HOME	0	51	0	51
HOUSE	0	51	1	50
IMAGE	0	51	2	49
JETZT	51	0	50	1
JOKE	0	51	0	51
JURY	10	41	11	40
KING	0	51	1	50
LEBEN	51	0	51	0
LECKER	50	1	51	0
LERNEN	51	0	49	2
LIFE	0	51	2	49
LIGHT	0	51	2	49
LIKE	0	51	1	50
LINEAL	47	4	48	3
LIVING	0	51	0	51
LOVE	0	51	1	50
MAKE	0	51	0	51
MEER	50	1	49	2
MEHR	50	1	51	0
MOOS	50	1	45	6
NATUR	50	1	50	1
NEXT	0	51	0	51
NIGHT	0	51	1	50
OFFER	2	49	0	51
PART	0	51	2	49
PARTY	1	50	8	43

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Table A3

Language Choices for Individual Stimuli

	Group 1		Subset of group 2	
Stimuli	Total of German evaluations	Total of English evaluations	Total of German evaluations	Total of English evaluations
POWER	0	51	2	49
PREIS	51	0	50	1
SCHON	51	0	49	2
SCHOOL	0	51	0	51
SCOUT	0	51	1	50
SEELE	51	0	50	1
SHIRT	0	51	3	48
SHORTS	1	50	6	45
SHOW	2	49	1	50
SINGLE	5	46	4	47
SLOW	0	51	0	51
SNACK	3	48	1	50
SNOB	9	42	13	38
SOFT	0	51	1	50
SORRY	0	51	2	49
SOUND	0	51	1	50
SPAREN	50	1	51	0
SPRAY	1	50	3	48
STORY	0	51	3	48
TEEREN	47	4	49	2
TICKET	5	46	15	36
TIME	0	51	1	50
TOAST	4	47	8	43
TRAVEL	1	50	0	51
TREND	13	38	19	32
VERY	0	51	0	51
VIEL	51	0	51	0
VOTING	0	51	0	51
WHITE	1	50	0	51

Table A3

Language Choices for Individual Stimuli

Stimuli	Group 1		Subset of group 2	
	Total of German evaluations	Total of English evaluations	Total of German evaluations	Total of English evaluations
WORLD	2	49	0	51
WRITE	0	51	0	51
ZEIT	51	0	50	1

Note. The table contains all 90 stimuli (German and English) in alphabetical order.

A. Stimuli for advertising effectiveness study

1. Mock advertisement for travel insurance agency

    a. English-mixed version *SECURE*

    b. German version *SEKUR*

2. Mock advertisement for web portal

    a. English-mixed version *CITY SCENE*

    b. German version *STADTSZENE*

3. Mock advertisement for hotel chain

    a. English-mixed version of *LUXELIA*

    b. German version of *LUXELIA*

4. Mock advertisement for soft drink

    a. English-mixed version of *ZISCH'S*

    b. German version of *ZISCH'S*

1. Mock advertisement for travel insurance agency
    a. English-mixed version *SECURE*

1. Mock advertisement for travel insurance agency

  b. German version *SEKUR*

2. Mock advertisement for web portal

    a. English-mixed version *CITY SCENE*

2. Mock advertisement for web portal
   b. German version *STADTSZENE*

3. Mock advertisement for hotel chain
   a. English-mixed version of *LUXELIA*

SUMMER OFFER
-30%
in ausgewählten Hotels*

LUXELIA
HOTELS & RESORTS

Dive into the world.

Wie sieht Ihr Urlaubstraum aus?

Sightseeing, Shoppingtour und aufregendes Nachtleben?
LUXELIA Hotels & Resorts machen Cityliebhaber glücklich.

Sie träumen von Ruhe und Entspannung in luxuriöser Atmosphäre?
Lassen Sie sich in LUXELIA Hotels & Resorts verwöhnen und genießen
Sie das umfangreiche Relaxangebot.

Mit LUXELIA Hotels & Resorts sind Sie immer am Ort Ihrer Träume.

* Unsere Sommerangebote für 2014 finden Sie auf www.luxelia.de

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3. Mock advertisement for hotel chain
    b. German version of *LUXELIA*

SOMMERANGEBOT
-30%
in ausgewählten Hotels*

LUXELIA
HOTELS & RESORTS

Tauche ein in die Welt.

Wie sieht Ihr Urlaubstraum aus?

Stadtbesichtigung, Einkaufsbummel und aufregendes Nachtleben?
LUXELIA Hotels & Resorts machen Städteliebhaber glücklich.

Sie träumen von Ruhe und Entspannung in luxuriöser Atmosphäre?
Lassen Sie sich in LUXELIA Hotels & Resorts verwöhnen und genießen
Sie das umfangreiche Erholungsangebot.

Mit LUXELIA Hotels & Resorts sind Sie immer am Ort Ihrer Träume.

* Unsere Sommerangebote für 2014 finden Sie auf www.luxelia.de

4. Mock advertisement for soft drink

    a. English-mixed version of *ZISCH'S*

4. Mock advertisement for soft drink
    b. German version of *ZISCH'S*

A. CD with additional digital information

CONTENT

1 Study on Language Decisions
 * Statistical Analysis:
   * Data_Participant_Characteristics_Both_Groups.sav
   * Data_Word_Features.sav
   * Syntax_Group-specific_Analyses.sps

 * Questionnaire:
  * Online_Questionnaire_Language_Decision.pdf
  * Paper_Questionnaire_Language Decision.pdf
  * Stimuli_Presentation_Time_Restricted_Setting.pdf

2 Study on Advertising Effects
 * Statistical Analysis:
  * Syntax_Analyses.sav
  * Data_Short_Format.sav
  * Data_Long_Format_Regression.sav
  * Data_Influence_Comprehension_Long_Format.sav
  * Index1_Codebook_Long_Format.pdf

 * Questionnaire Versions:
  * 1-Questionnaire_Advertising_Effects.pdf
  * 2-Questionnaire_Advertising_Effects.pdf
  * 3-Questionnaire_Advertising_Effects.pdf
  * 4-Questionnaire_Advertising_Effects.pdf
  * 5-Questionnaire_Advertising_Effects.pdf
  * 6-Questionnaire_Advertising_Effects.pdf
  * 7-Questionnaire_Advertising_Effects.pdf
  * 8-Questionnaire_Advertising_Effects.pdf

* Pretest:
  * Interview_Pretest_D65m.pdf
  * Interview_Pretest_C62w.pdf
  * Interview_Pretest_N38w.pdf

 * Mock Advertisements:
  * Mock_Ad1_SECURE.tif
  * Mock_Ad1_SEKUR.tif
  * Mock_Ad2_CITYSCENE.tif
  * Mock_Ad2_STADTSZENE.tif
  * Mock_Ad3_LUXELIA_E.tif
  * Mock_Ad3_LUXELIA_D.tif
  * Mock_Ad4_ZISCH'S_E.tif
  * Mock_Ad4_ZISCH'S_D.tif
  * Not_Used_FARAYS_E.tif
  * Not_Used_FARAYS_D.tif
  * Not_Used_GOLDNEST_E.tif
  * Not_Used_GOLDNEST_D.tif
  * Not_Used_MEINSTIL.tif
  * Not_Used_MYSTYLE.tif

If the CD is missing or if you are reading a digital version of this thesis, please contact me via e-mail (stephanie.rech@gmx.net) for further information. I will be happy to provide additional material upon request.