How It All Began:
A history of Scholarship on the Representation of Older Adults in German Advertising

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Purpose – Despite the regular output of new research on the representation of older adults in German advertising, most researchers in the field have worked in a vacuum; ignoring previous studies, leading to a very heterogeneous field with limitations in terms of comparability and significance. This paper attempts to raise awareness of the existing original research on the topic and active researchers, by drafting a history of scholarship.

Methodology/approach – This paper employs a mixed method approach, utilising quantitative indicators to systematically examine existing literature, and subsequently enriching the insight with qualitative findings concerning the origination of the research, as well as connections between outputs.

Findings – Research on the topic has a long tradition in Germany and it has inspired contributions from a variety of disciplines. Social Sciences provided the initial contributions to the field; but, over time, Humanities and Arts disciplines appear to have become the main drivers of the discourse. Three discernible phases of research were identified throughout the investigation period – a lag phase (1970s and 1980s), growth phase (1990s) and peak phase (2000s) – and three key authors, namely Gerhard Naegele, Hans Wilhelm Jürgens and Caja Thimm.

Limitations – Due to access restrictions, the cut-off for literature included in the paper is 31 December 2010.

Originality/value – The list of relevant research literature in this paper is the most comprehensive compilation of its kind to date in Germany and, in combination with the history of scholarship, can guide future research in terms of background searches and alignment of work.

Keywords – image of aging, advertising, history of scholarship, Germany

Paper Type – Research paper

Introduction and Purpose

The demographic transition currently underway in the industrialised world, characterised by low birth rates, longer life spans and an increasing proportion of older people, has stimulated an interest in aging and the effects on societies with steadily growing older communities in areas such as politics, health care and marketing. Within the past four decades – since this phenomenon first became apparent – countless studies across the globe have analysed the changing image of old age in different countries and its reflection in the media (for example, Gantz *et al.*, 1980; Zhou and Chen, 1992; Carrigan and Szmigin, 1998; Robinson *et al.*, 2008). In Germany, the population pyramid has seen drastic changes in age structure within the past few decades, with life expectancies on the rise and currently as high as 80.8 years – among the highest in the world (CIA, 2018). Due to these demographic and structural changes, authorities, businesses and the media have called for an increased focus on and representation of older people. As early as 1986, Helmut Sihler – then chairman of the Central Association of the German Advertising Industry (ZAW) – pointed out that advertising, just like society, faces completely new challenges due to the falling birth-rate and general demographic trends. He argued that advertisers must shelve the idea of old age decay and elderly immobility, and instead open up to completely new facets of an older lifestyle (Sihler, 1986).

Considering these circumstances, I have studied the literature on the representation of old age and older adults in advertising and market communications for a variety of academic projects throughout my

academic career. One aspect that has always been conspicuous when engaging with this socially current topic is the lack of interaction and acknowledgement between researchers involved in the field. Despite the specificity of the topic, researchers seem to constantly work in a kind of vacuum – they largely ignore each other. As a result, the field is highly heterogeneous, which in many ways impedes the findings' comparability and makes deduction of long term trends virtually impossible. This is particularly problematic when relying on the analysis of advertising; an investigation object that, due to its dynamic nature, limits insights to a specific point in time (Otrebski, 2015). Overview articles have been suggested as an effective way of raising awareness of developments within research areas in order to streamline subsequent research (Knilli *et al.*, 1983). To the best of my knowledge, no-one has yet provided systematic access to the proposed field. The current paper will therefore open up the existing literature by writing a history of scholarship on the research conducted on the representation of older adults in German advertising. Its purpose is to provide a guide for future researchers regarding existing information and to deliver a better understanding of those people and disciplines involved in the discourse.

A Mixed Methods Approach to a History of Scholarship

According to Knilli *et al.* (1983; 1989), a quantitative investigation of publishing data can be used to draw together a history of scholarship for a specified research field. Knilli *et al.*'s way of looking at history of research, by analysing primarily the frequency and distribution of research output and its attendant indicators, has been cited by both domestic and international scholars as a successful method for generating a source of information on which to base ones' own research (for example, Maigret, 1994; Magnussen and Christiansen, 2000; Köhn, 2005). In their article, Knilli and his colleagues quantitatively examined indicators that they believed to be essential for the assessment of how research areas evolve. Such key indicators include the frequency and distribution of researchers participating in the field, research published over the years, author clusters formed, author roles typified, publishing houses used, etc. However, not all of these indicators are of equal significance. For example, an examination of publishing houses led Knilli *et al.* (1989, p. 20) to a simple ranking of the 'biggest players' in publishing during the investigation period. Although such a list could be useful for future research strategies for literature reviews, a more valuable examination might be the construction of an annotated timeline showing the different stages of research, contributing a frame of reference and a more refined overall understanding of the development of the research topic. For this, Schwender (1989) subsequently took Knilli *et al.*'s quantitative insight and looked at the researchers involved within the field, as well as the research published throughout the investigation period; complementing their findings with additional qualitative insight on the circumstances at the time. In the following, a similar combined approach of quantitative and qualitative examination is applied to the research conducted on the representation of older adults in German advertising.

The search for relevant literature

In order to produce a comprehensive history of scholarship, a systematic search for relevant literature was required. In terms of the types of publication searched for, no restrictions were made; however, for practical considerations the following inclusion/ exclusion criteria were established in advance:

(1) The studies selected had to be available either online or in paper volume at the time of collection. Studies were characterised as sufficiently accessible if they were:
   a. published within the (back) catalogue of a publishing house, where they have undergone an obligatory peer-review process;
   b. published within a peer-reviewed academic journal;
   c. available in the form of an online publication, within an explicit academic context that is likely to reach peers (for example, university homepage, conference site);
   d. available in libraries or institutions that specialise in grey literature; or
   e. straight forwardly obtainable via direct communication with the author (for example, via email).
(2) The studies had to be available either online, or through the services of the *Kooperativer Bibliotheksverbund Berlin-Brandenburg* (KOBV), *Bibliotheksverbund Bayern* (BVB) or *Gemeinsamer Bibliotheksverbund* (GBV), or had to be accessible through research institutions or authors.

The search for relevant literature took place from November 2013 until June 2014. However, limitations emerged due to access restrictions at the German research facilities and libraries, which set the cut-off point at the end of 2010, thus only including research that was made public before 1 January 2011. This, in consequence, restricts the period for which the current history of scholarship could be written. During the search for literature, a total of 51 studies were identified, published between 1975 and 2010; 31 of which were original research. The studies derived from:

(1) A literature search in the databases of the German National Library, the German OPAC of KOBV, BVB and GBV, and institutions that specialise in grey literature in Germany – that is, Bielefeld University, GESIS and Saarland University and State Library. Due to the lack of established and pre-tested search filters, advertising- and age-specific search parameters had to be developed. The advertising-specific search terms selected comprised *alt** and *ält**, representative of German key words such as *Alte*, *Alter*, *Alten*, *Altersbilder*, *Altenbild*, *Altenwerbung*, *Älteren*, *ältere*, etc.; age-specific search parameters included *werb* and *anzeige*, representative of German key words such as *Werbung*, *werben*, *Werbeanzeige(n)*, *Werbespot(s)*, *werblich*, *Printanzeige(n)*, *Werbeanzeige(n)*, *Altenwerbung*, *Anzeige(n)*, *Anzeigenwerbung*, etc. [*N*=7].
(2) Pyramid search, that is, examination of bibliographies and text bodies [*N*=19]; and
(3) person- and media-centred, as well as general online search [*N*=5].

Figure 1: Study search and selection process

	Initial hits during the electronic database search: 2,620 (utilising Boolean commands, *step 1)*
1,714 excluded (out of 2,620): <u>reason</u> Title irrelevant for current review question (including duplicate search results)	
	906 titles included for review of table of contents and/ or abstract (excluding duplicates)
704 excluded (out of 906): <u>reasons</u> No examination of the image of old age or older adults in the media (*N*=431) Published after cut-off date (*N*=141) Self-perception of older adults (*N*=74) Descriptive article/ introduction (*e.g.*, editorial) (*N*=58)	
	202 publications included for full review
195 excluded (out of 202): <u>reasons</u> Cites only results from other studies (*N*=71) No specific examination of advertising, but instead unspecified 'media' (*N*=53) Translations/ international adverts analysed (*N*=48) **Previously published (*N*=20)** Excluded publisher (*N*=3)	

21 studies identified from reference list/ body of included studies *(step 2)*

4 studies identified via person- and media-centred search *(step 3)*

2 studies found via online search and enquiries *(step 3)*

2 excluded: failure to obtain copy

1 excluded: failure to obtain copy

Original studies included in the history of scholarship (*N*=31)
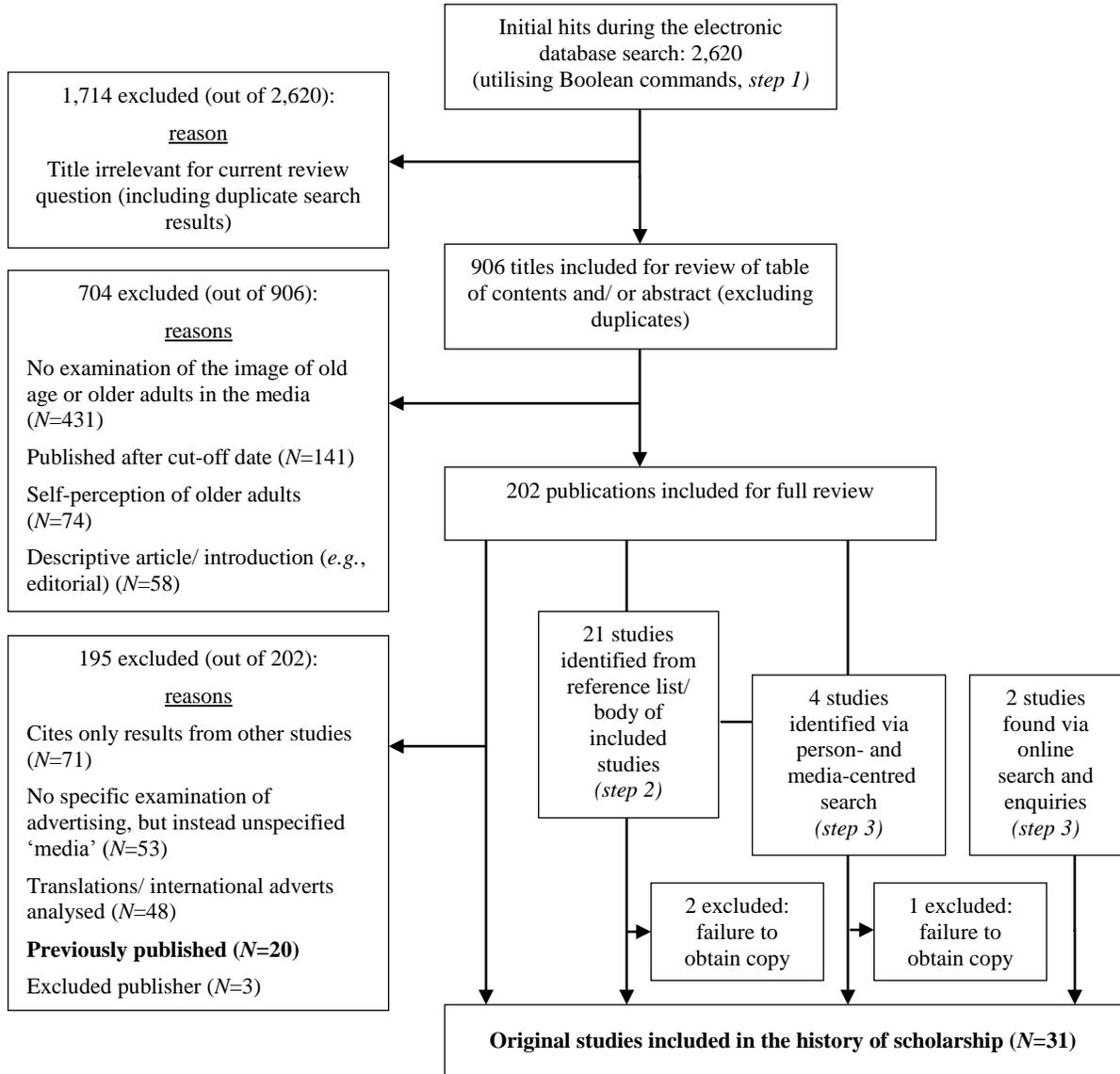
Figure 1 illustrates the search and selection process. With a time lapse of four weeks in between reviews, all searches and subsequent examinations concerning the selection process were repeated, leading to a highly satisfying consistency rate of .98 (intra-reviewer reliability). The publications that deviated were reviewed again after another time lapse of four weeks, resulting in a full consistency with the results of the second review. A list of all original studies included in the history of scholarship, providing an overview of each study's objectives, discipline, sample composition, methodology and citation impact within the field, can be found in the appendix of this paper (*cf.* tables I to III).

Quantitative Findings

Looking at the time distribution, there was an exponential growth in research output, as well as the influx of new authors; with a lag phase from 1975 to 1990, followed by a growth phase for the remainder of the period observed. Whilst nearly two-thirds (62.5%) of the years between 1975 and 1990 passed without any releases – original work or reissued studies – (1977-1979, 1981-1984, 1987, 1989, 1990), only three years (15.0%) between 1991 and 2010 saw no publications on the topic (1993, 1995, 2001); with 1991 and 1992 forming the first noticeable spike in terms of research output, with subsequent

original research and with 1992 being the first year to have more than one original work published. It is also the first time since 1976 that the total number of original works on the topic overtook that of reissued publications.
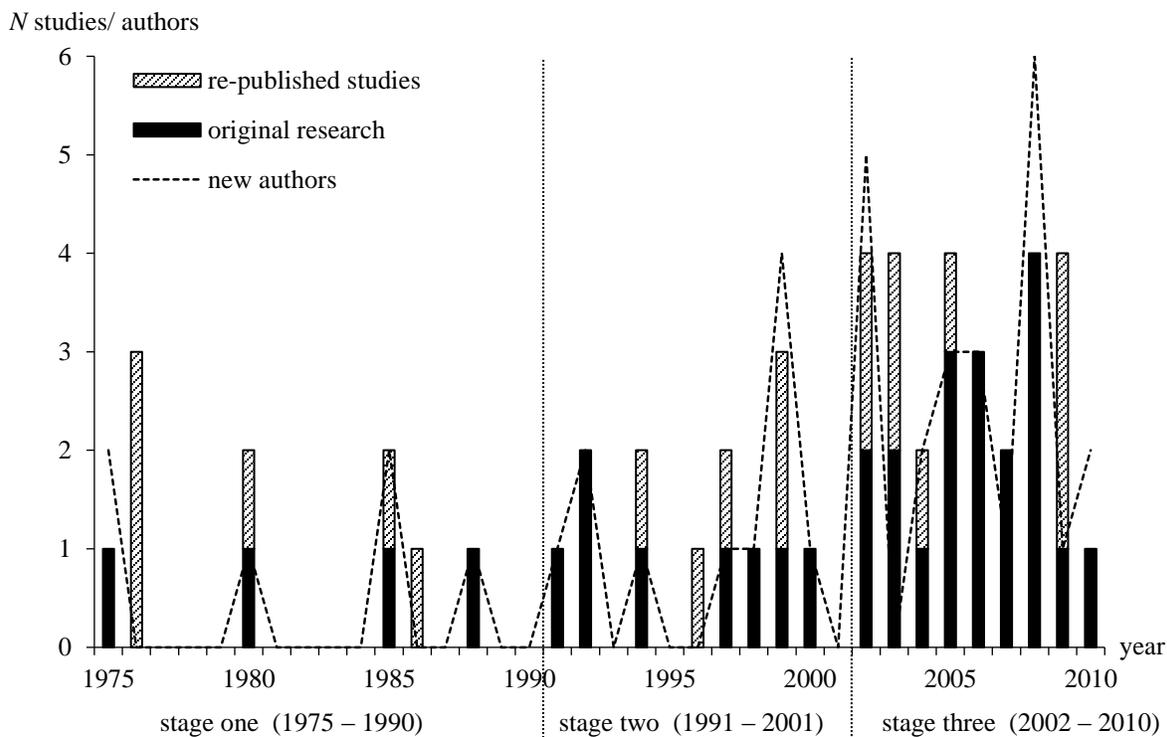

Figure 2: Timeline of the research on the representation of older adults in German advertising

A very similar tendency was shown by the entry of new authors. Three quarters (75.0%) of the years up to and including 1990 did not see any new researchers involved with the topic; however, this was only the case for five years between 1991 and 2010 (25.0%). Considered together, the data indicate a first caesura within the research field sometime between the years of 1990 and 1991, where the participation of authors and the output on the topic changed in terms of quantity and distribution.

Knilli *et al.* (1989) regard such a pattern of sudden increase in interest and general change in frequency as a distinctive feature of the evolution of a research topic. They understand this period as a crucial stage in a topic's transition to the mainstream, marked by 'a general interest in secondary literature on [… the subject] which attract[s] many writers.' (p. 15). This transitioning stage can also be found for the research on the representation of older adults in German advertising, with an increased output, and therefore presumed increased interest in existing literature, between 1991 and 2001. This is followed by a distinctive boom of new researchers and publications from 2002 until 2010. During these eight years, more than half of all studies identified were published (54.9%; *N*=28). The boom reached its heretofore zenith in 2008, which saw the highest publication of original work of any of the years (*N*=4), as well as the highest influx of new researchers (*N*=6) throughout the investigation period. Figure 2 visualises these developments, subdividing the overall observation period into three stages.

The first stage (*lag phase*) lasted from the publications of the very first research on the topic, by Horn and Naegele in 1975 and 1976, until 1990; comprising 19.6% (*N*=10) of all publications identified on the topic. With the beginning of stage two, the pattern of activity within the research field, that is, participation of authors and output in terms of frequency and distribution, changed significantly for the first time and the general interest in the topic increased (*growth phase*). At this point in time, so it seems, the examination of the representation of older adults in German advertising emerged from the shadows, transforming from a niche topic to being known to a wider audience, and therefore growing in terms of research output and attraction of new researchers. The second stage lasted for approximately a decade, from 1991 until 2001, and comprised 25.5% (*N*=13) of all output during the observation period; although

still featuring occasional dips in output frequency. It also marked the transition from a time of commencement to a phase when the topic slowly gained momentum. However, it took until the early 2000s, and the beginning of the third stage, for the topic to become a constant in the academic discourse (*peak phase*); marked by high activity in all respects: the conduct of original research, the reissuing of previously published findings and the influx of new authors. 61.3% (*N*=19) of all original and 45.0% (*N*=9) of all re-published studies originated during this stage, and further, 57.5% (*N*=23) of all authors engaged with the topic during this period. Here, the topic quite clearly had successfully reached a wider audience and attracted the attention of sufficient new researchers to gain traction, thus constituting the principal phase of a boom, beginning with 2002 and lasting until 2010. However, the exact point in time where stage three ends remains difficult to determine. Up to and including 2010, a constant stream of output, as well as influx of new authors, can be registered, which argues for a continuous phase. Yet, in 2010 only a single publication was issued; the lowest number since the beginning of the principal boom eight years earlier. Based on the current data sample, which was restricted up to and including 2010, it remains uncertain whether this marks the end of the principal peak, and thus stage three, or if this had just been an outlying data point and the increased interest continued – or even rose – in subsequent years.

Qualitative Findings

In addition to drafting a chronological sequence for the research published and the parties involved, it seems in the interests of a history of scholarship to look also at the circumstances that accompany the conduct of *original* research on the topic over the years. Relevant aspects might be: What sparked the interest? What disciplines were involved? Were there distinctive trends regarding methodology? Who were the key authors?

Lag phase: Humble beginnings in the 1970s and 1980s

Looking at the circumstances surrounding the research during the early years, a distinctive feature pervading stage one was the restriction of the topic to the Social Sciences, and, more specifically, to departments of Social Sciences at academic institutions (*cf.* table I). All four investigations were conducted in the course of university studies, such as graduate and post-graduate projects (Horn and Naegele, 1975; Neufeld, 1988) and dissertations (Hastenteufel, 1980; Dennersmann and Ludwig, 1985). Throughout this phase, content analysis – predominantly geared towards quantitative investigations – was the method of choice, utilised to look primarily at the frequency of older protagonists and identifying age-related indicators within the data samples, which, at the time, exclusively comprised of print advertising.

In terms of key authors, it was Gerhard Naegele who dominated the discourse during these initial years. Together with a university colleague, Naegele conducted the very first research on the topic at the University of Cologne in 1975, and subsequently republished the findings in the form of a book chapter (Naegele, 1986) and three journal articles (Horn and Naegele, 1976a, b, c) [1]. Following his career advancement to a professorship at the University of Applied Sciences Dortmund, he also acted as idea generator and main supervisor for Dennersmann and Ludwig's diploma dissertation (Dennersmann and Ludwig, 1985); successfully promoting the findings' subsequent publication as a journal article the following year (Dennersmann and Ludwig, 1986). Therefore, Naegele was actively involved in over two-thirds (*N*=7) of the total output on the topic during this early stage, making him indisputably a key figure in the development of the research topic in Germany. His output has also been the most cited within the discipline throughout the whole observation period. Moreover, his dichotomy of *old age-inclusive advertising* – promotion targeting diverse age groups, including but not limited to older adults – and *old age-exclusive advertising*– targeting first and foremost older adults as consumers – has been adopted and adapted by many researchers throughout the decades (Dennersmann and Ludwig, 1985; Thimm, 1998; Gast, 2000; 2002; Jäckel *et al.*, 2002; Röhr-Sendlmeier and Ueing, 2004; Horn, 2006; Femers, 2007; Boos, 2008; Burgert and Koch, 2008). Finally, his approach to the topic has inspired directly-linked follow-up research, namely those by Dennersmann and Ludwig (1985) and by Röhr-Sendlmeier and Ueing (2004), thus forming one of only two lines of research regarding the topic in Germany until the end of 2010.

Growth phase: Gaining traction and recognition throughout the 1990s

For the second stage, it was first and foremost the influx of new disciplines, such as Anthropology, Media and Communications Studies and Design Studies, that drove and shaped the research throughout

the 1990s. With the new academic backgrounds, a diversification in form of new approaches ensued (*cf.* table II). Unlike during stage one, these were largely qualitative in nature, such as the typology employed by Jürgens (1994), Lohmann (1997) and Heine *et al.* (1999), as well as methods utilised by Tews (1991), Spieß (1992) and Gast (2000). These qualitative approaches contributed different findings to the discourse, primarily focussing on identifying and describing older stock characters in advertising instead of purely assessing frequency and distribution of, for example, occurrences or social roles. Stage two also saw the first research focussing on television as a source medium for sample composition (Spieß, 1992; Jürgens, 1994; Gast, 2000).

The extended interest did, however, not end with the influx of new academic disciplines. Commercial research facilities, such as market research bodies, also entered the scene and started to conduct investigations on the topic (Tews, 1991; Ueltzhöffer, 1992). It seems, with the beginning of the 1990s, the topic had overcome its boundaries of being niche and had managed to attract enough interest to qualify for discussion in front of a wider audience – for example, symposiums such as the congress *Unsere Gesellschaft wird älter* ('Our society is growing older') in 1991 in Hamburg (Ueltzhöffer, 1992) – and to secure funding from research foundations and non-academic bodies. Accordingly, Spieß (1992), Jürgens (1994) and Thimm (1998) appear to be the first to have been awarded substantive grants for their respective research projects on the representation of older people within advertising.

Finally, national and international events related to the topic shaped this period in time and evidently had a notable impact on the influx of new authors and conduct of new research. Particularly noteworthy were the 'European year of the elderly & solidarity between generations', initiated by the European Union in 1993, and the 'International Year of Older Persons 1999', proclaimed by the United Nations. In the course of these, a wide variety of conferences took place throughout Germany, run by religious and political organisations, which sparked several publications (Ueltzhöffer, 1992; Jürgens, 1994; Gast, 2000).

Throughout the growth phase, two authors could be identified as key players, who particularly influenced the development of the topic. The first, Hans Wilhelm Jürgens, who published his original monograph in 1994; subsequently re-issuing his findings in an academic journal (Jürgens, 1996), and speaking at several (inter-)national conferences on the topic (for example, Jürgens, 1997; 1999). Jürgens also acted as main supervisor and examiner for Lohmann's PhD. Lohmann's work was submitted at the Christian-Albrechts-University Kiel in 1992 and, finally, published as a monograph in 1997 (Lohmann, 1997). Jürgens (1994) subsequently built his own research upon Lohmann's PhD findings, expanding her insight based on print advertising to 'the electronic media'. His anthropological point of view distinctively shaped the discourse throughout the 1990s, and his typological approach influenced subsequent investigations (Horn, 2006; Frohriep *et al.*, 1999), thus founding the second existing line of research on the topic until 2010 [2].

The second key author emerging from stage two was Caja Thimm, whose research was the first to focus on the textual elements within advertising (Thimm, 1998). Although not sparking any directly linked follow-up research, her publications have been cited regularly throughout the observation period, making her output one of the few influential works within the discourse in Germany up to and including 2010 (for example, Röhr-Sendlmeier and Ueing, 2004; Femers, 2007; Boos, 2008).

Peak phase: Principal boom in the 2000s

Unlike the previous stages, the peak phase seems less distinctive in its development and characteristics. An increased number of academic journal issues and edited volumes specifically targeted at, or at least open to, the topic of older adults in the media seemed to be the final indicator of permanent establishment within the academic discourse (for example, Hartung, 2005; Meyer-Hentschel and Meyer-Hentschel, 2006).

Throughout the 2000s, there was still a continuous influx of various academic disciplines shaping the principal boom phase of the topic, with new entrants including Theology, English Linguistics, Marketing and Art History. For the first time, however, Media and Communications Studies clearly dominated the contribution of original research to the discourse. Despite this dominance and the primary use of methods already employed by previous studies, most authors did not structure their research in a manner that aligned their investigations with other work. Only Röhr-Sendlmeier and Ueing (2004) and Horn (2006) conducted their works in a way that allowed for comparison, thus contributing to the two established lines of research. The few variants in method during stage three were all but one (Löffler, 2006)

qualitative in nature, making the principal phase of boom, like its predecessor, shaped primarily by qualitative work.

In terms of new lines of enquiry for the investigations, it was Kessler *et al.* (2010), who introduced the analysis of production aspects, that is, camera angle and framing, to enrich the findings regarding the representation of older adults in German advertising. This recognition of further features for analysis and the conduct of longitudinal studies (Willems and Kautt, 2003; Meißner, 2005; Burgert and Koch, 2008) were the main contributions to the topic during this period. Based on the data sample, no clear key author could be distinguished for this stage. The overall numbers of citations remained low throughout the observation period; with over one third not (yet) being referenced at all (*cf.* table III).

Conclusion and Summary of Findings

This paper has established an initial history of scholarship, based on a quantitative investigation of publishing data, enriched with qualitative information regarding the respective circumstances at the time in order to provide an overview of, as well as offering new insights into, the field of research. This mixed approach has proven to be suitable in providing a rich dataset for drafting a history of scholarship and thus opening up the existing literature and delivering a better understanding of the information sources, as well as people and disciplines involved in the discourse.

With respect to the investigations on the representation of older adults in German advertising, this paper brought to light that research on the topic has a long tradition and that the matter has inspired contributions from a variety of disciplines from the Humanities and Arts, to Business Studies and the Social Sciences. It has been seen that the Social Sciences provided the initial contributions to the field; but, over time, the Humanities and Arts disciplines appear to have become the main drivers of the discourse. Three discernible phases of research were identified throughout the investigation period, and it would be of interest to determine whether this pattern can be found in other areas of research in Germany, or in other countries that have an established body of research within the field, such as the U.S.

For future investigations into the representation of older adults in advertising, an active acknowledgement, and maybe even a more explicit alignment to previous works, is recommended. This will help to promote a more structured approach to the field and, consequently, will produce more significant findings in the long run. It remains to be seen in future overview articles whether the lack of integration of the research output has changed since 2010 and who will have emerged as a key author in stage three (2002-2010). Table IV summarises the key findings of the three stages at a glance.

Table IV: Development of the research on the representation of older adults in German advertising

	stage one	stage two	stage three
period	1975-1990	1991-2001	2002-2010
phase	lag	growth	peak
description	commencement	turning point	mainstream
characteristics	- intermittent and below average output by/ involvement of authors - scholarly interest only - conduct of original research restricted to students/ junior academics - reissues outnumber original work - research focus on frequency - first line of research found (Horn and Naegele, 1975; Dennersmann and Ludwig, 1986)	- increased interest in the topic, with reduced slumps regarding output and authors - interest in topic spreads from academia to politics and commerce - funding awarded to the research topic - occurrence of symposiums - first investigation dedicated to advertising copy - expansion of research interest to stock characters - second line of research found (Jürgens, 1994; Lohmann, 1997)	- continuous influx of new authors and output of research - Media and Communications Studies as main contributor of knowledge - only very few new lines of enquiry - first longitudinal studies
methodology	- content analysis - quantitative research predominant	- primarily content analysis and typology - qualitative research predominant	- primarily content analysis - qualitative research predominant
key author(s)	Gerhard Naegele	Hans Wilhelm Jürgens Caja Thimm	*pending further investigation*

Notes

[1] For his book, Naegele combined his own findings from the mid-1970s with those of Dennersmann and Ludwig and appended the chapter to the second edition of his book on consumption behaviour of socially deprived older people (*Konsumverhalten sozial schwacher älterer Menschen*).

[2] In cooperation with Frohriep and Lohmann, Jürgens re-published a 'mash-up' of his own and Lohmann's studies from the early 1990s. Despite the appearance of the visual examples used, no new data was analysed according to the data composition stated (Frohriep *et al.*,1999, pp. 117, 119).

References

Boos, L. (2008), *Grau oder Großartig? Die kommerzielle Inszenierung von Alter: Altersbilder und Identifikationsangebote. Eine empirische Fallstudie zu Alterskonzepten in der strategischen Kommunikation*, University of Munster, Munster.

Burgert, C. and Koch, T. (2008), "Die Entdeckung der Neuen Alten? Best-Ager in der Werbung", in Holtz-Bacha, C. (Ed.), *Stereotype? Frauen und Männer in der Werbung*, Springer VS, Wiesbaden, pp. 155-175.

Buschmann, G. (2003), "Das Menschenbild (in) der Werbung. Beobachtungen eines Theologen zu einem Kapitel Medienanthropologie 2002", *medien + erziehung. Zeitschrift für Medienpädagogik*, Vol. 47 No. 4, pp. 48-57.

Carrigan, M. and Szmigin, I. (1998), "The usage and portrayal of older models in contemporary consumer advertising", *Journal of Marketing Practice: Applied Marketing Science*, Vol. 4 No. 8, pp. 231-248.

CIA – Central Intelligence Agency (2018), "The World Factbook. Country Comparison. Life Expectancy Comparison. Life Expectancy at Birth. Date of Information 2017", available at https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html (accessed 7 July 2018).

Dennersmann, U. and Ludwig, R. (1985), "Altenrelevante Aspekte der Werbung", unpublished master's thesis, Fachhochschule Dortmund, Dortmund.

Dennersmann, U. and Ludwig, R. (1986), "Das gewandelte Altenbild in der Werbung – Ergebnisse einer neueren Studie aus dem Jahre 1985", *Zeitschrift für Gerontologie*, Vol. 19 No. 5, pp. 362-368.

Femers, S. (2007), *Die ergrauende Werbung. Altersbilder und werbesprachliche Inszenierungen von Alter und Altern*, Springer VS, Wiesbaden.

Frohriep, S., Jürgens, H.W. and Lohmann, R. (1999), "Das Bild des Alters in der Werbung", in Dienel, H.-L., Foerster, C., Hentschel, B. and Kübler, C. (Eds.), *Späte Freiheiten. Geschichten vom Altern. Neue Lebensformen im Alter*, Prestel Verlag, Munich, pp. 115-120.

Gantz, W., Gartenbert, H.M. and Rainbow, C.K. (1980), "Approaching invisibility: the portrayal of the elderly in magazine advertisement", *Journal of Communication*, Vol. 4, pp. 56-60.

Gast, W. (2000), "Werbezielgruppe 50+: Das Corega-Tabs-Syndrom. Vorwissenschaftliche Polemik eines Betroffenen", in Richter, G., Riecke, J. and Schuster, B.-M. (Eds.), *Raum, Zeit, Medium – Sprache und ihre Determinanten. Festschrift für Hans Ramge zum 60. Geburtstag*, Hessische Historische Kommission Darmstadt, Darmstadt, pp. 711-719.

Gast, W. (2002), "Die Ausgegrenzten. Wahrnehmung der Medien- und Werbeangebote durch die 50+-Generationen – eine Problemskizze", *medien praktisch Zeitschrift für Medienpädagogik*, Vol. 1, pp. 9-13.

Hartung, H. (2005), *Alter und Geschlecht. Repräsentation, Geschichten und Theorien des Alter(n)s*, transcript, Bielefeld.

Hastenteufel, R. (1980), *Das Bild von Mann und Frau in der Werbung. Eine Inhaltsanalyse zur Geschlechtsspezifität der Menschendarstellung in der Anzeigenwerbung ausgewählter Zeitschriften unter besonderer Berücksichtigung des alten Menschen*, University of Bonn, Bonn.

Heine, A., Knigge, M. and Schmidt-Ruhland, K. (1999), *Gestaltung und Positionierung seniorengerechter Produkte. Image: Das Alter im Bild oder das Bild vom Alter*, Berlin University of the Arts, Berlin.

Horn, L. (2006), *Generation 50+ in der Werbung: Visuelle Stereotypen in der Printwerbung*, VDM, Munster; also, unpublished master's thesis at the HTW Berlin, Germany, in 2005.

Horn, M. and Naegele, G. (1975), "Gerontologische Aspekte der Werbung", working paper, University of Cologne, Germany.

Horn, M. and Naegele, G. (1976a), "Gerontologische Aspekte der Anzeigenwerbung. Ergebnisse einer Inhaltsanalyse von Werbeinseraten für ältere Menschen und mit älteren Menschen", *Zeitschrift für Gerontologie*, Vol. 9 No. 6, pp. 463-472.

Horn, M. and Naegele, G. (1976b), "Methoden der Anzeigenwerbung für ältere Menschen und mit älteren Menschen. Ergebnisse einer Analyse von Werbeinseraten", *Soziale Sicherheit*, Vol. 4, pp. 24-34.

Horn, M. and Naegele, G. (1976c), "Der alte Mensch und die Werbung", *Verbraucher Rundschau*, Vol. 1, pp. 2-12.

Imdahl, I. (2008), "Werbung kennt reife Frauen nicht", *planung & analyse*, Vol. 4, pp. 26-29.

Jäckel, M., Kochhan, C. and Rick, N. (2002), "Ist die Werbung aktuell? Ältere Menschen als 'Werbeträger'", in Willems, H. (Ed.), *Die Gesellschaft der Werbung. Kontexte und Texte. Produktionen und Rezeptionen. Entwicklungen und Perspektiven*, Westdeutscher Verlag, Wiesbaden, pp. 675-690.

Jürgens, H.W. (1994), *Untersuchung zum Bild der älteren Menschen in den elektronischen Medien*, Unabhängige Landesanstalt für das Rundfunkwesen, Kiel.

Jürgens, H.W. (1996), "Ältere Menschen in deutschen TV-Sendungen – Zerr- oder Spiegelbild?", *Medien + Erziehung*, Vol. 40 No. 5, pp. 267-270.

Jürgens, H.W. (1997), "Zum Bild älterer Menschen in den elektronischen Medien", in Bundesministerium für Familie, Senioren, Frauen und Jugend (Ed.), *Das Alter in den Medien. Muß es ein Zerrbild sein?*, BfFSFJ, Bonn, pp. 57-61.

Jürgens, H.W. (1999), "Inkompetent und skurril? Zum Altenbild im Fernsehen – ein Ländervergleich USA – Japan – Deutschland", in Kuratorium Deutsche Altershilfe (Ed.), *Überhört und übersehen? Ältere in Hörfunk und Fernsehen*, Internationaler Medienkongress, Cologne, pp. 105-107.

Kessler, E.-M., Schwender, C. and Bowen, C.E. (2010), "The portrayal of older people's social participation in German prime-time TV advertisements", *Journal of Gerontology: Social Sciences*, Vol. 65B No. 1, pp. 97-106.

Knilli, F., Schwender, C., Grundelsheimer, E. and Weisser, E. (1983), "Aspekte der Entwicklung zu einer visuellen Kultur am Beispiel des Comics. Der Stand der Comicforschung in der Bundesrepublik", *Communications*, Vol. 9 No. 2/3, pp. 149-190.

Knilli, F., Schwender, C., Grundelsheimer, E. and Weisser, E. (1989), "Some Aspects of the Development Towards a Visual Culture. The Example of Comics", in Zielinski, S. and Matzker, R. (Eds.), *Germanistische Medienwissenschaft. Teil 3: Comicforschung in der Bundesrepublik Deutschland 1945-1984*, Peter Lang, Bern, pp.13-46.

Köhn, S. (2005), *Traditionen visuellen Erzählens in Japan. Eine Paradigmatische Untersuchung der Entwicklungslinien vom Faltschirmbild zum narrativen Manga*, Kulturwissenschaftliche Japanstudien 2, Harrassowitz Verlag, Wiesbaden.

Koll-Stobbe, A. (2005), "Forever young? Sprachliche Kodierung von Jugend und Alter", in Hartung, H. (Ed.), *Alter und Geschlecht. Repräsentationen, Geschichten und Theorien des Alter(n)s*, transcript, Bielefeld, pp. 237-252.

Kühne, B. (2005), "Wrinkled…Wonderful? Eine semiotische Erkundung neuer Altersbilder in der Werbung", in Hartung, H. (Ed.), *Alter und Geschlecht. Repräsentationen, Geschichten und Theorien des Alter(n)s*, transcript, Bielefeld, pp. 253-274.

Kühne, B. (2007), "Ganz schön alt. Zum Bild des (weiblichen) Alters in der Werbung. Eine semiotische Betrachtung", in Pasero, U., Backes, G.M. and Schroeter, K.R. (Eds.), *Altern in Gesellschaft. Ageing – Diversity – Inclusion*, Springer VS, Wiesbaden, pp. 77-110.

Lohmann, R. (1997), *Images of Old Age in German and American Print Media: Empirical Investigations into Defining Principles and Patterns of Visual Representation*, Shaker, Aachen; also, doctoral thesis at the Christian-Albrechts-University Kiel, Germany, in 1992.

Löffler, H. (2006), "Wo sind sie denn? Auf der Suche nach Senioren in der Anzeigenwerbung", in Meyer-Hentschel, H. and Meyer-Hentschel, G. (Eds.), *Jahrbuch Seniorenmarketing 2006/2007*, Deutscher Fachverlag, Frankfurt a.M., pp. 121-133.

Magnussen, A. and Christiansen, H.-C. (2000), *Comics and Culture. Analytical and Theoretical Approaches to Comics*, Museum Tusculanum Press / University of Copenhagen, Copenhagen.

Maigret, E. (1994), "La reconnaissance en demi-teinte de la bande dessinée", *Réseaux. Communication –Technologie – Société*, Vol. 12 No. 67, pp. 113-140.

Meißner, J. (2005), "Demografische Veränderungen im Spiegel der Werbung", in Hartung, H. (Ed.), *Alter und Geschlecht. Repräsentationen, Geschichten und Theorien des Alter(n)s*, transcript, Bielefeld, pp. 155-175.

Meyer-Hentschel, H. and Meyer-Hentschel, G. (2006), *Jahrbuch Seniorenmarketing 2006/2007*, Deutscher Fachverlag, Frankfurt a.M.

Naegele, G. (1986), *Konsumverhalten sozial schwacher älterer Menschen. Möglichkeiten und Grenzen einer altenspezifischen Verbraucherpolitik*, Arbeitsgemeinschaft der Verbraucher e.V., Bonn.

Neufeld, H. (1988), *Die Rolle des älteren Menschen in der Werbung*, Universität des 3. Lebensalters, Frankfurt a.M.

Otrebski, D.A. (2015), "Greying societies. The value of looking at the growing elderly population through the looking glass of media studies", *New Vistas*, Vol. 1 No. 2, pp. 4-9.

Robinson, T., Gustafson, B. and Popovich, M. (2008), "Perceptions of negative stereotypes of older people in magazine advertisements: comparing the perceptions of older adults and college students", *Ageing & Society*, Vol. 2, pp. 233-251.

Röhr-Sendlmeier, U.M. and Ueing, S. (2004), "Das Altersbild in der Anzeigenwerbung im zeitlichen Wandel", *Zeitschrift für Gerontologie und Geriatrie*, Vol. 37 No. 1, pp. 56-62.

Schwender, C. (1989), "Qualitative Auswertung verschiedener Stichproben aus Zeitschriftenartikeln 1945-1985", in Zielinski, S. and Matzker, R. (Eds.), *Germanistische Medienwissenschaft. Teil 3: Comicforschung in der Bundesrepublik Deutschland 1945-1984*, Peter Lang, Bern, pp. 75-104.

Schwender, C. (2009), "Alter als audio-visuelles Argument in der Werbung", in Petersen, T. and Schwender, C. (Eds.), *Visuelle Stereotype*, Herbert von Halem, Cologne, pp. 79-94.

Sihler, H. (1986), "Werbung 2000. Konsequenzen der demographischen und gesellschaftlichen Entwicklung", *Marketing Journal*, Vol. 19 No. 3, pp. 224-230.

Spieß, B. (1992), "Frauenbilder in der Fernseh-Werbung. Gefangen zwischen alten Leitbildern und neuen Rollenvorstellungen", in Bundeszentrale für politische Bildung (Ed.), *Frauenbilder im Fernsehen. Band 312*, BfpB, Bonn, pp. 91-108.

Tews, H.P. (1991), *Altersbilder. Über Wandel und Beeinflussung von Vorstellungen vom und Einstellungen zum Alter*, KDA, Cologne.

Thimm, C. (1998), "Sprachliche Symbolisierung des Alters in der Werbung", in Jäckel, M. (Ed.), *Die umworbene Gesellschaft. Analysen zur Entwicklung der Werbekommunikation*, Westdeutscher Verlag, Wiesbaden, pp. 113-140.

Ueltzhöffer, J. (1992), "Ältere im Spiegel der Gesellschaft. Wandel von Selbstbildern und Lebensstilen, neue Ansprachen in der Werbung", *forum demographie und politik*, Vol. 1, pp. 49-60.

Vennemann, A. and Holtz-Bacha, C. (2008), "Mehr als Frühjahrsputz und Südseezauber? Frauenbilder in der Fernsehwerbung und ihre Rezeption", in Holtz-Bacha, C. (Ed.), *Stereotype? Frauen und Männer in der Werbung*, Springer VS, Wiesbaden, pp. 76-106.

Walter, H. (2006), "Altersbilder", *Journal für Psychologie*, Vol. 14 No. 2, pp. 178-192.

Willems, H. and Kaut, Y. (2003), *Theatralität der Werbung*, Walter de Gruyter, Berlin.

Zhou, N. and Chen, M. (1992), "Marginal life after 49: a preliminary study of the portrayal of older people in Canadian consumer magazine advertising", *International Journal of Advertising*, Vol. 11, pp. 343-354.

Appendix

Table I: Original research published during the first stage (1975 – 1990)

study	discipline	objectives		sample						method(s)	cited by[i]
		aims / research questions	*research aspect(s)*	*media type(s)*	*media selected*	*def. of 'old'*	*selection process*[ii]	*size*[iii]	*investig. period*		
Horn, M. and Naegele (1975)	Sociology	Investigate the current image of old age in advertising. How are older people represented? Is there a difference between adverts targeting older customers and those that target all ages?	activities frequency presentations/ types products role prominence social interaction	print media (newspapers, magazines)	Bild am Sonntag Bunte Frau im Spiegel Das Goldene Blatt Heim und Welt HÖRZU Stern	-	visual and/ or textual old age cues	694[d] 236[a]	01/ - 03/ 1975	content analysis	9
Hastenteufel (1980)	Psychology	Investigate the differences between the sexes and gender stereotypes in current advertising; with special attention to older people and their representation in the visual component of print advertising.	frequency mood presentations/ types products social interaction	print media (magazines)	October 1975: every magazine with a run ≥ 50,000 per trimester in Germany Additionally, every issue from 1975 of: ADAC, Brigitte, Eltern, HÖRZU, Neue Revue, Vital 1st issues in April and October 1977 of every magazine with a run ≥ 1,000,000 per trimester in Germany	60+	visual old age cues; formal aspects	125[a]	1975; 1977	content analysis	5
Dennersmann and Ludwig (1985)	Social Pedagogy	Identify the current image, as well as changes to the representation of older adults since Horn and Naegele's study ten years earlier.	activities coding of old age frequency intra-media comparison presentations/ types products role prominence social interaction	print media (magazines)	Das Goldene Blatt HÖRZU Neue Revue Stern	40+	visual and/ or textual old age cues	746[d] 299[a]	02/ - 05/ 1985	content analysis	5
Neufeld (1988)	Social Gerontology	Examine and document the roles of older people in current advertising. To what extent has advertising adapted to the changing demography? What trends are already apparent in the textual and visual representation? Does the image of older characters in advertising reflect reality?	frequency presentations/ types products social interaction	print media (newspapers, magazines, catalogues) TV (unspecified)	Bunte HÖRZU Stern (*only magazines are specified*)	60+	formal aspects	701[u] *mag. ads only*	01/1987 - 06/1988	content analysis	5

Table II: Original research published during the second stage (1991 – 2001)

study	discipline	objectives		sample						method(s)	cited by[i]
		aims / research questions	*research aspect(s)*	*media type(s)*	*media selected*	*def. of 'old'*	*selection process[ii]*	*size[iiii]*	*investig. period*		
Tews (1991)	practice	No clear aim for the analysis stated.	presentations/ types	print media (unspecified)	-	-	-	1[a]	-	unspecified	4
Spieß (1992)	Media and Comm.	Examine current portrayals of women, including older women, in TV commercials. Are the results of women's movements, emancipation and individualisation processes during the 70s and 80s perceivable in advertising?	presentations/ types	TV (public service broadcasting, commercial channels)	ARD ZDF RTL Sat.1 Tele5 *(text indicates that this is only an excerpt)*	-	formal aspects	3[a]	1990; 1991	content analysis	4
Ueltzhöffer (1992)	practice	Explore changes in self-images and lifestyles of older adults, as well as ways of representing and targeting older people in advertising.	presentations/ types	print media (unspecified)	-	55+	-	4[a]	-	unspecified	1
Jürgens (1994)	Anthropology	Investigate the current image of older people in electronic media. How are older adults represented within different television content – incl. commercials – of private and public broadcasters in Schleswig-Holstein? Are older people adequately reflected?	frequency presentations/ types	TV (public service broadcasting, commercial channels)	ARD ZDF Pro7 RTL Sat.1	60+	visual old age cues formal aspects	86[u]	06/01/ - 24/02/ 1993 *daytime program*	content analysis, typology	6
Lohmann (1997)	Anthropology	Study 1 (S1) Examine societal perceptions of health and aging based on the content of contemporary advertisements found in German and American magazines particularly designed for older readers. Study 2 (S2) Analyse the use of older models in print adverts found in a variety of popular German magazines.	activities frequency intra-media comparison presentations/ types products social interaction	print media (magazines)	S1 Autark: Journal für Senioren, Mature Outlook, Modern Maturity, Sechzig Na Und?, Zenit S2 Bunte, Das Goldene Blatt, Das Neue, Das Neue Blatt, Der Spiegel, Frau im Spiegel, Neue Post, Neue Revue, Quick, Stern	55+	visual old age cues	S1 806[u] *Ger. ads only* S2 797[u]	*only provided for S1:* 1989 - 1991	content analysis, typology	6
Thimm (1998)	Media and Comm.	Illustrate, by means of selected German, Italian and American examples from print media, different current old age-related advertising trends. Investigate the adequate linguistic symbolisation and language in print advertising with regard to older people.	presentations/ types	print media (newspapers, magazines)	Die Zeit FAZ ZeitMagazin Bild der Frau Der Spiegel Stern	-	-	ca 9[a]	1996; 1997	language analysis	7

study	discipline	aims / research questions	research aspect(s)	media type(s)	media selected	age	selection process	size	investig. period	method(s)	cited by[i]
Heine *et al.* (1999)	Design Studies	Examine the current image of old age in the context of commercial advertising. How are older adults represented? How do companies advertise for and with older people? What is the context between the product and older adults as target group?	presentations/ types	print media (newspapers, magazines)	Berliner Zeitung, Bild am Sonntag, FAZ, Handelsblatt, Die Zeit Apothekenrund-schau, Brigitte, Das Beste, Das Goldene Blatt, Der Spiegel, fifty, Fit & Fünfzig, Konpress, Lenz, MAX, modern maturity, rtv, Stern *(text indicates that this is only an excerpt; 'over 50 titles')*	50+	visual and/ or textual old age cues	-	-	typology	1
Gast (2000)	Media and Comm.	No clear aim for the analysis stated. However, Cost per Mille (CPM), as well as youth-orientation are being addressed as general frame.	presentations/ types	print media (magazine) TV (public service broadcasting)	*(print unspecified)* TV ZDF	50+	formal aspects	print 1[a] TV 13[u]	23/07/ 1999 *7pm* *(print unspecified)*	unspecified	2

Table III: Original research published during the third stage (2002 – 2010)

study	discipline	objectives		sample						method(s)	cited by[i]
		aims / research questions	*research aspect(s)*	*media type(s)*	*media selected*	*age*	*selection process[ii]*	*size[iiii]*	*investig. period*		
Gast (2002)	Media and Comm.	No clear aim for the analysis stated. Several topics are addressed (CPM, youth-orientation and old age taboo); however, none are set out explicitly to guide the analysis.	presentations/ types	print media (unspecified)	-	50+	-	1[a]	sometime in the early 1990s	unspecified	2
Jäckel *et al.* (2002)	Sociology	Examine the reasons why the increasingly important target group of older people is still addressed rarely in advertising. What value do they receive in contemporary adverts? What should they receive with regard to (future) advertising?	presentations/ types	print media (newspaper, magazine)	Die Zeit Focus *(text indicates that this is only an excerpt)*	50+	-	3[a]	*only provided for one advert:* 15|18 Jan 2001	unspecified	3
Buschmann (2003)	Theology	Investigate the image of mankind in the media from a media-anthropological point of view. What images are conveyed by the media? Explored with regard to advertising in print media as an example.	presentations/ types	print media (magazines)	Der Spiegel	-	-	-	2002	content analysis	1
Willems and Kautt (2003)	Sociology	Write a 'visual sociology', *i.e.,* examine the various representations and walks of lives of older adults as constructed by advertising. Illustrate that there is more to the image of old age than negative connotations.	presentations/ types	print media (magazines) TV (public service broadcasting,	print Brigitte Max Playboy Stern	-	visual old age cues; formal aspects for print adverts	-	print 1970 - 2001 TV	frame analysis	3

					commercial channels)	TV ARD ZDF Pro7 RTL Sat.1				1985 - 1995; 09 - 16/11 1996 *5pm-8pm* for public service br. *7pm -11pm* for com. ch.		
Röhr-Sendlmeier and Ueing (2004)	Psychology	Comparative study looking at how the image of old age is currently represented and has developed in print advertising since the 1970s; thus, how the image has changed in an aging society. Examine whether advertising can bridge the gap between scientific knowledge regarding old age and the still existing old age stereotypes within society.	activities coding of old age frequency presentations/ types products role prominence social interaction	print media (newspapers, magazines)	Bild am Sonntag Bild der Frau HÖRZU Stern	50+	visual and/ or textual old age cues	364[u]	11/1999 - 01/2000	content analysis	1
Koll-Stobbe (2005)	English Linguistics	Explore the current meanings of youth and old age and their changes since the mid-20th century. Argue that the general concepts of youth and old age are semantically blurred, hence can be readjusted.	coding of old age presentations/ types	TV (unspecified)	-	50+	-	2[a]	2003; 2004	lexicology / language analysis	2
Kühne (2005)	Design Studies	Explore signs (*i.e.,* semiotic signs) that show a more complex, more realistic and more positive image of old age; in particular with regard to older females.	presentations/ types	print media (poster, newspaper)	-	50+	visual old age cues	1[a]	10/2003	semiotics	2
Meißner (2005)	Art History	Analyse different print adverts with older characters, which illustrate as examples the advertising practice in West Germany after 1945. The investigation period is divided into three phases, based on the respective economic developments of the time.	presentations/ types	print media (newspapers, magazines)	*unspecified apart from one:* Für Sie	50+	-	-	1945 - early 1990s	unspecified	2
Horn, L. (2006)	Media and Comm.	Identify and comprehensively describe visual stereotypes of old age and their characteristics in business communication. In what way – *i.e.*, roles and constellations – are older adults represented in current advertising? Have they changed since Lohmann's findings ten years earlier? What characteristic attributes do older characters possess? What products are advertised with them?	coding of old age presentations/ types role prominence	print media (magazines)	Capita, Der Spiegel, EURO, Focus, Für Sie, GEO, Neon, Tina, Zuhause Wohnen Jahrbücher der Werbung 2003 & 2004	50+	visual and/ or textual old age cues; formal aspects	30[a]	2002 - 2005	typology	2
Löffler (2006)	Marketing	Investigate the use of older people in current advertising. How and how often is old age represented in advertising in print media with a pronounced older readership? Which industries have already discovered older adults and target them? Who are	frequency presentations/ types products social interaction	print media (magazines)	7 Tage, ADAC Motorwelt, Auf einen Blick, Bild der Frau, BdF – Schlank und fit, Brigitte, Brigitte Woman, Bunte, Das Goldene Blatt, Das	45/ 50+	visual and/ or textual old age cues	*ca.* 5,500[u]	-	unspecified	3

		the typical older characters in (print) advertising?			Neue, Das neue Blatt, Der Spiegel, Die Aktuelle, Die neue Frau, Echo der Frau, Fernsehwoche, Focus, Frau im Spiegel, Frau mit Herz, Freizeit-Revue, Funkuhr, Geo, Go Longlife!, Gong, Heim und Welt, HÖRZU, Impulse, Lenz, Manager Mag., Mein schöner, Garten, Men's Health Bestlife, My Life, Neue Post, Neue Revue, Neue Welt, Neue Woche, Reader's Digest, Schöner Wohnen, Stern, Super Illu, TV Hören und Sehen, TV Spielfilm, Wirtschaftswo., Woche der Frau						
Walter (2006)	Pedagogy	Identification and discussion of manifest and latent aspects of contemporary images of old age in advertising.	presentations/ types	print media (poster)	-	60+	visual old age cues	1[a]	2004	psychoanalysis/ in-depth hermeneutics analysis	0
Femers (2007)	Media and Comm.	Investigate textual stereotypes regarding older characters, as well as how they correspond to visual representations and vice versa. How is age and aging linguistically represented in advertising? Is it possible to elucidate linguistic stereotypes with regard to older characters? If so, which ones exist in current advertising and how do they connote old age? What linguistic and stylistic means are used to verbally construct old age with regard to social meaning?	presentations/ types products	print media (newspapers, magazines)	Tagesspiegel, Bild am Sonntag ADAC-MZ, Brandeins, Bunte, Capital, Chrismon, Cicero, Das neue Blatt, Douglas-KM, Euro, Fit for fun, Freizeitrevue, Impulse, Junge Karriere, mobil DB-KM, Neue Post, Prisma, rtv, TV 14, TV direkt, TV Movie, TV-Spielfilm, Wertpapier-das Börsenjournal *(text indicates that this is only an excerpt)*	-	visual and/ or textual old age cues	440[a]	2005; 2006	content analysis (focus on language analysis)	1
Kühne (2007)	Design Studies	Explore signs (*i.e.,* semiotic signs) that show a more complex, more realistic and more positive image of old age; in particular with regard to older females. Illustrate these 'new signs' with the help of contemporary advertising.	coding old age presentations/ types	print media (unspecified)	-	50+	visual old age cues	3[a]	2001; 2003	semiotics	1
Boos (2008)	Media and Comm.	Identify currently existing (commercial) thought patterns regarding old age, their importance and designs. Examine trends that have arisen from these patterns with regard	coding of old age frequency intra-media comparison mood	print media (magazines)	Bunte Der Spiegel Neue Post	50+	visual and/ or textual old age cues	431[d] 251[a]	08/2005 - 01/2006	content analysis	0

		to future commercial advertising strategies. Investigate to what extent these patterns deal with and relate to social reality.	presentations/ types products role prominence								
Burgert and Koch (2008)	Media and Comm.	Examine how older males and females are represented in advertising and how they have changed over 20 years. What role stereotypes and states of health are shown? What products are promoted with older adults and how did these change over time? To what extent does advertising design respond to the physical limitations and needs of older adults as target audience?	frequency presentations/ types products	print media (magazines)	Bunte Der Spiegel Stern	50+	visual and/ or textual old age cues; formal aspects	604[u]	1987 - 2006	content analysis	0
Imdahl (2008)	practice	No clear aim for the analysis stated.	presentations/ types	print media (unspecified)	-	50+	-	1[a]	-	unspecified	0
Vennemann and Holtz-Bacha (2008)	Media and Comm.	Comparative study exploring the current portrayal and changes to the representations of women, including older women, in TV spots.	presentations/ types	TV (public service broadcasting, commercial channels)	ARD ZDF RTL Sat.1	-	formal aspects	28[a]	one week in spring 2007 *5pm-8pm*	content analysis	0
Schwender (2009)	Media and Comm.	Investigate old age-specific arguments in TV commercials – *i.e.,* old age characteristics that are used in advertising. How are these arguments utilized?	coding of old age frequency role prominence	TV (public service broadcasting, commercial channels)	ARD ZDF Kabel1 Pro7 RTL Sat.1 RTL2 VOX	65+	visual old age cues; formal aspects	35[a]	29/08/ - 11/09/ 2005 *6pm - 11pm*	content analysis	0
Kessler *et al.* (2010)	Media and Comm,, Gerontology	Investigate the portrayal of older people's social participation in TV advertising according to a set of theoretically meaningful indicators from communication studies and gerontology. Are the reflections adequate?	frequency role prominence social interaction	TV (public service broadcasting, commercial channels)	ARD ZDF Kabel1 Pro7 RTL RTL2 Sat.1 VOX	60+	visual old age cues; formal aspects	33[a]	29/08/ - 11/09/ 2005 *6pm-11pm*	content analysis	0

[i]   Citations throughout the investigation period. This includes possible references to re-publications of the same research findings.

[ii]   Inclusion/ exclusion criteria, besides age, that determines the sample composition

[iii]   The sample sizes documented comprise the number of old age-relevant German advertising within the respective samples. In cases where the sample size was not specified with regard to old age-relevance, no information was coded.

a = adjusted, *i.e.* only distinct adverts/ no duplications

d = including duplications

u = unspecified whether sample includes only distinct adverts