THE EFFECTS OF DIFFERENT MASTHEAD CARD DESIGNS: COLOUR VS. BLACK-AND-WHITE

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Background

Even a quick overview of the "Summary of Current Readership Research" that Erhard Meier (1999) put together for the last Readership Research Symposium in Florence shows that international print media research primarily makes use of a particular methodological constellation: face-to-face interviews and the recent reading method for determining the number of readers. Among the 62 studies from 49 countries that Meier takes note of, 49 (79 percent) use this particular method constellation. In the interviews, all of the 49 present visual identification and recall aids for the advertising media tested.

Visual aids are used for two purposes:

- They are meant to "identify" individual publications and help distinguish them from others that run a risk of being mixed up with them.
- They are meant to function as a recall aid and to provide associations and key words when single occurrences of reading have to be retrieved from memory.

There are a number of different ways in which recall aids can be designed:

- Recall aids may show the logo of a magazine or newspaper, or they may just give their names in print, using the same font for all publications.
- Several names or logos may be displayed on one sheet, or single cards with just one name or logo may be presented.
- Logos may be printed in colour or in black-and-white.

Especially the last point – the question of whether to use colour or black-and-white – began to be more intensively discussed again in Germany. This is because the number of publications, and especially of magazines, is increasing steeply in this country. This increases the risk of mixing up titles in readership interviews. It is widely feared that, if recall aids designed many years ago are used, correct identification of a title will become difficult for a growing number of people.

For magazine buyers, the situation has also changed continually with the tremendous widening of the magazine sector and the increase in self-service sale of magazines. Many publishing houses therefore gamble on their titles being perceived as brand names and try to increase their magazines' appeal, and thus their recall, by consistently using particular colour codes. These could then be used in the designing of logos on masthead cards to increase the identification that is achieved by this type of visual aid.

International research has not yet found a standard method with regard to the question of black-and-white or colour printing of logos. Erhard Meier's list gives the respective information for 34 of the 49 studies mentioned, which combine recent reading questions with face-to-face interviews:

• 21 use black-and-white printing of logos;

• 13 use colour.

For 14 of the 49 studies, this information is missing, and one study does not use logos at all but shows all titles in the same font.

In Germany, the *Allensbach Media Market Analysis* (AWA) uses black-and-white reproductions of the title logo spread over the complete usable space on masthead cards (105 x 74 mm). In contrast, *Media Analysis*, published by the "Arbeitsgemeinschaft Media-Analyse", presents colour logo reproductions, with the logo placed on the masthead card in the same way as the original logo is placed on the magazine title.

In the fifties and then again in 1972, the Institut für Demoskopie Allensbach carried out two tests of strictly experimental design. In both tests it appeared that the presentation of colour title logos instead of black-and-white ones does not result in different figures for magazine coverage (Tennstädt and Hansen 1982).

There are no publications on more recent experimental tests on this issue in Germany.

Jürgen Wiegand (1995), however, in his report on CAPI in the *Media Analysis*, assumes that colour masthead cards are indispensable to avoid mix-ups.

This assumption, however, is not corroborated by international research results. When they changed from the through-the-book to the recent reading method, the Canadian Print Measurement Bureau tested colour logos against black-and-white ones, with the result that both lead to the same readership figures (Vorster 1991). Donald McGlathery (1993) mentions a test conducted by "Simmons Market Research Bureau", which did not find differences between colour and black-and-white title logos either. And when reproductions of complete title pages are offered as recall aid, it is of little importance whether colour or black-and-white copies are used (Joyce and Napier 1995).

Methods for the Analysis of Logos and Covers and for a Split Ballot Experiment:

In front of this background, the Institut für Demoskopie Allensbach analysed the logos and covers of the 100 publications with the highest coverage in Germany and conducted a broad experiment with colour and black-and-white masthead cards.

(1) Analysing logos and title pages

This analysis looked into the extent to which publishing houses employ colour in the design of the logos and title pages, and the rules they adopt in doing this. The focus of interest is the question of whether magazines and newspapers always use the same colour, at least for the logo. That is to say: we determined whether there is a typical colour code for a title that can can be used in the design of recall aids.

The 100 publications with the highest coverage in the Allensbach Media Market Analysis were investigated: 94 magazines, 3 weekly and 3 daily newspapers. The analysis is based on at least 6 issues for every title, which appeared between July/August 2000 and August/September 2001.

(2) Split ballot experiment with masthead cards in colour and black-and-white design

The experiment comprised 49 magazine titles of various types of popular magazines, among them those devoted to news and politics, TV guides, women's monthlies, fortnightlies and weeklies, and special interest titles on: gardening, motoring, travel and computers (see list in Appendix).

For each title, a masthead card was produced with a black-and-white reproduction of the logo, and another one with the logo in colour. Cards were designed similar to the masthead cards in the *Allensbach Media Market Analysis*. Apart from the use of colour or black-and-white print, the two versions were identical.

Questions for measuring readership were also taken from the *Allensbach Media Market Analysis*. We determined the broadest readership, the frequency of reading, and readers per issue.

The experiment was included in two consecutive omnibus surveys with a total of 4,226 interviews. In the representative split sample A (2,116 Interviews) the colour-print masthead cards were presented, and in split B (2.110 Interviews) the corresponding cards in black-and-white were used. Interviews were conducted in March/April and April/May 2001.

Analysing Logos and Title Pages: Results

(1) Use of colour on title pages

Ninety-nine of the 100 print publications with the highest coverage (94 magazines, 6 weekly or daily newspapers according to AWA) use colour on the cover. Most newspapers use at least additional color on their first pages.

Half of the titles (51) choose a uniform colour design of the complete cover and use elements of colour that are repeated on all issues. The following are a selection of the patterns used (individually or in combination):

- the repeated use of a dominant colour, combination of colours or the repeated choice of certain types of colours such as
- earth-coloured hues, pastel shades or especially rich and bright colours (30 titles),
- the choice of always the same background colours (24 titles), or
- the repeated use of a colour frame (9 titles).

(2) Use of colour in logos

The logos of 77 titles have a multi-coloured design; of these, 53 titles present their logo in a frame with its own background colour. 23 titles use logos all in one colour.

Seventy-one titles always print their logo in the same colour design; 23 titles vary the colour design of their logos from issue to issue.

In the symposium, a Power Point presentation will be shown to illustrate examples of the categories in this analysis.

Results of the Split Ballot Experiments Testing Colour and Black-and-White Masthead Cards

The main results are shown in Tables 1 and 2 – first for the broadest readership, and then for readers per issue:

On average no difference appears in the measurement of the broadest readership of the 49 magazines in the analysis, no
matter whether you use colour or black-and-white masthead cards. In both variants, an average of 18.8 percent is computed.

Small differences appear in the coverage of readers per issue. When colour masthead cards are presented, the coverage determined is 6 percent smaller on average (Index 94), as compared to the presentation of black-and-white title logos on masthead cards. Tests for differences in coverage did not yield significant results, neither for broadest readership nor for readers per issue.*

- It is widely assumed that a more complex design of recall aids will primarily enable those who do not read a publication regularly to better identify a title. We have tested whether this is true for the use of colour in title logos, and distinguished between titles that have an above-average share of regular readers and those with a share of regulars below average. No difference appears: In both groups of media the use of colour logos on masthead cards leads to a slightly reduced number of readers per issue.
- Differences do appear between media published at different intervals: For weekly titles, we found a higher number of readers per issue when using colour masthead cards (Index 104), while colour logos as compared to black-and-white lead to clearly reduced reader per issue coverage in titles that appear every two weeks or just once a month or less (Indices 91 and 88).
- This correlation, however, can be largely attributed to a varying use of colour for the magazine logos between issues. Many of the monthly titles in the analysis use different colours from issue to issue, while weekly and fortnightly titles predominantly stick to the same one. Our analysis also distinguishes between titles that always use the same colour and those which vary their colour design. Results show that the effect of colour masthead cards on readers per issue is especially strong for those titles that change their logo colour from issue to issue (Index 91).

Averages for titles		Broadest readership		
	Number of titles	Black-and-white logos %	Colour logos %	Index (black-and-white=100)
All titles	49	18,8	18,8	100
Share of regular readers				
High (above average)	25	18,8	18,8	100
Low (below average)	24	18,9	18,7	99
Publication interval				
Every week	16	25,2	25,7	102
Every two weeks	9	22,7	22,5	99
Every month or less	24	13,2	12,7	97
Colour design of title logo				
Changes from issue to issue	15	17,4	16,7	96
Always the same	34	19,5	19,7	101

Table 1: Broadest Readership Results In Testing Colour Against Black-and-White Masthead Cards

Sample: Population 16 years and older

Averages for titles

Source: Allensbach Archives, IfD-Surveys 7005, 7006

^{*} Tests for the 49 titles yielded three significant differences (at the 95 % level) in broadest readership, and four in readers per issue. The likelhood of three, respectively four, significant results in 49 tests is 45 % and 23 %. The few significant differences found therefore do not represent a statistically significant corroboration for an effect of colour-designed masthead cards on coverage measures.

Table 2: Readers per Issue Results in Testing Colour Against Black-and-White Masthead Cards

Averages for titles

		Readers per issue		
	Number of Titles	Black-and-white logos %	Colour logos %	Index (black-and-white=100)
All titles	49	6,9	6,5	94
Share of regular readers				
High (above average)	25	8,1	7,6	94
Low (below average)	24	5,7	5,4	95
Publication interval				
Every week	16	7,5	7,8	104
Every two weeks	9	9,5	8,7	91
Every month or less	24	5,5	4,9	88
Colour design of title logo				
Changes from issue to issue	15	5,6	5,1	91
Always the same	34	7,5	7,2	95

Sample: Population 16 years and older

Source: Allensbach Archives, IfD-Surveys 7005, 7006

Colour Logos on Masthead Cards Although the Colour of the Logo Changes from Issue to Issue for Many Titles?

The masthead card serves to identify a publication that appears periodically, not to identify a particular issue of that publication. The card should therefore only contain elements that return with every issue. This also applies to colour. Our analysis of the logos of the 100 print titles with the highest coverage according to AWA found 29 titles using logos in varying colours. In these cases, the colour of the logo printed on masthead cards can only be decided arbitrarily. In our experiment with masthead cards, we mostly chose red as a colour that draws people's attention.

The split ballot experiment showed that lower coverage figures for titles varying their logo colour were measured if colour instead of black-and-white cards were presented. This could possibly be traced back to some confusion in respondents, who associate a colour other than the one chosen for the card with a given title. For titles that stick to the same one, the logo colour on the masthead card is the same as the one respondents associate with the title. The more so, cards may confuse people when there is a discrepancy.

The Geo Family and ADAC titles

The causes for the differences in the coverage measured cannot be determined by the split ballot test alone. Primarily the question of whether the more complex information contained on colour masthead cards helps to avoid mix-ups of titles remains open.

We have therefore tested an additional variant of the masthead card for two titles that run an especially high risk of being confused with others. The two titles are *ADAC reisemagazin* and *Geo special*, both travel magazines with 6 issues a year, each on a special subject. *ADAC reisemagazin* appears in the corporate design of the mother title *ADAC motorwelt*, the magazine of Germany's largest automobile association. Circulation of the monthly *ADAC motorwelt* is some 13 Mio. circulation of the travel magazine is about 230,000. *Geo special* (circulation about 120,000) is one of three magazines in the core family of *Geo* titles. Covers are designed according to unified rules, but each "family member" has its own logo colour as a distinctive feature. The mother title is the monthly *Geo* with a circulation of about 400,000. For both *ADAC reisemagazin* and *Geo special*, we also tested masthead cards that gave a short text explaining explicitly the danger of mixing up the title in question with its mother title.

Table 3: Masthead cards in colour have an effect similar to those with additional text to avoid mix up

ADAC reisemagazin and Geo special

	Colour logo on masthead card (black-and-white = 100)	Masthead card with additional text (without text = 100)	
	Index	Index	
Broadest readership	95	90	
Readers per issue	86	90	

Sample: Population 16 years and older

Source: Allensbach Archives, IfD-Surveys 7005, 7006

Both test versions,

• masthead cards showing logos in colour and

• masthead cards showing additional text that explicitly indicates the mother title is not meant, used instead of cards without such text,

lead to effects in the same direction.

We conclude from this that, in this special case, both logos in colour and additional text enhance identification of the title and help avoid mix-ups.

Summary and Discussion

- Whether you present masthead cards in colour or black-and-white is of little significance to coverage results.
- For the vast majority of titles, there are no indications that mix-ups can be avoided by using masthead cards in colour design. This, however, we conclude from the small differences in the results of coverage measures; we have no method for quantifying mix-ups.
- There is a basic practical problem in the apparently easy task of designing masthead cards similar to the colour design of magazine covers. A considerable share of titles vary their colour design from issue to issue. Our experiment with masthead cards supports the assumption that logos in a colour arbitrarily decided may lead to confusion in these cases.
- Among the titles tested, two were chosen that follow the corporate design rules of magazine families. It is assumed that for such titles, logo colour is an especially important factor in correctly identifying titles. Aside from colour, we also tested, for these two cases, the effect of additional text on the masthead card explaining the danger of mixing up the title in question with its mother title. The test shows that colour logo and additional text have similar effects.
- Results suggest that black-and-white designed masthead cards should continue to be used for AWA. Only features that recur from issue to issue should be used for designing logos on masthead cards. Logo colour is not among these for all magazine titles. If colour is of special value for recognizing a title, and if the risk of mix-ups is especially high, additional text on masthead cards may be used in some circumstances.

Appendix

Magazine Titles Used in Split Ballot Experiment Testing Colour Masthead Cards Against Black-and-White

Focus Der Spiegel Stern	Brigitte Freundin Für Sie	Auto Bild Auto Motor und Sport ADAC motorwelt
Hörzu	Allegra	GeoSaison
Super tv	Amica	Merian
TV Hören und Sehen	Brigitte Young Miss	ADAC reisemagazin
TV klar	Burda Mode + Magazin	Geo Special
TV neu	Cosmopolitan	*
	Petra	Geo
TV Movie	Vogue	National Geographic Deutschland
TV Spielfilm		
TV Today	Essen & Trinken	Computer Bild
	Meine Familie & ich	Chip
Freizeit Revue		PC Welt
Glücks Revue	Eltern	
Das Neue Blatt	Eltern for family	Börse online
Neue Post	Familie & Co	WirtschaftsWoche
		Capital
Bild der Frau	Flora	DM
	Mein schöner Garten	

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