DESIGN FOR DESTINY: THE CASE OF CROATIAN NEWSPAPERS

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ABSTRACT

Print is one of the industries that make intensive use of the country’s resources: raw materials, energy, water. Besides the fact that as a main resource it uses paper, the production of which can affect the environment, a lot of components that enable printing process, from prepress to postpress, contain harmful substances. This paper examines the accordance of business practice with the general principles of sustainable development in several most prominent newspaper publishing houses from the perspective of quality and quantity. The aim of this paper is to give an insight into the parameters of their work which are important for sustainable development by basing it on a comparative analysis of the data on daily edition and the efficiency analysis of the graphic design of front pages. In that sense, eco-efficiency would be a matter of shifting budgets from the waste column to the design column. The solution lies in using more creativity and less materials.

Keywords: newspaper, sustainability, resources, printing, gestalt

1. INTRODUCTION

Negative influence on the environment has always been one of the key features of graphic industry. Print is one of the industries that make intensive use of the country’s resources: raw materials, energy, water. Besides the fact that as a main resource it uses paper, the production of which can affect the environment, a lot of components that enable printing process, from prepress to postpress, contain harmful substances. When dealing with the problem of pollution and its regulation special emphasis is put on water pollution. Waste colours, harmful ingredients of rinsing baths and other fluids are being discarded into water or sent as waste to industrial-waste dumps, which causes severe environment damage and pollution. Other resources such as different kinds of paper and other printing pads are not being properly taken care of neither, which leaves us with the conclusion that waste management is not rationalized in a satisfactory manner. Huge amounts of “waste” could be recycled and used in production process more than just once. In the last couple of years graphic design facilities are under increasing pressure to satisfy local (national) and global ecological standards. Graphic companies are therefore reconsidering ecologically more acceptable printing procedures and methods and are looking for all chances and ways of reducing costs by reducing pollution and similar initiatives.
From the point of view of graphic design a better achievement of the communicative goal – transmitting ideas and messages to the target group by changing the world of the recipient – is also one of the methods of coming to terms with the goals of sustainable development.

This paper examines the accordance of practical work with the general principles of sustainable development in several most prominent newspaper publishing houses from the perspective of quality and quantity. The aim of this paper is to give an insight into the parameters of their work which are important for sustainable development by basing it on a comparative analysis of the data on daily edition and the efficiency analysis of the graphic design of front pages.

In that sense, eco-efficiency would be a matter of shifting budgets from the waste column to the design column. The solution lies in using more creativity and less materials.

2. THEORETICAL BACKGROUND

Big newspapers have a big problem. They have declining circulations, and their fundamental business model of journalism financed by advertising is endangered [2]. On the other hand, the pressure of social responsibility towards the goals of sustainable development is growing. There is no widespread consensus or agreement within the business community on the particular goals to be pursued by ecologically-sensitive design. Some argue that Green Design and pollution prevention should be pursued solely to reduce costs [3]. Others focus on particular strategies, such as the implementation of industry-wide ISO standards, and develop goals specifically for these strategies. To practice environmentally conscious business means to pay attention to the content of paper pulp and entire growth and use cycle - recommendations given by Forest Stewardship Council. [4]. Another approach is to direct attention to a particular environmental problem, such as waste and global warming, or a particular media, such as air and water pollution, where non-renewable or toxic materials are exchanged for materials that can be easily recycled, reused, and do not pose a threat to people or the environment. "Energy reduction" strategies recommend to lessen the amount of energy (often produced by creating pollution or merely putting a strain on available resources) required to produce, distribute, operate, service, or dispose of products or use of tools as Life Cycle Analysis1.

Taking into consideration that it is not in the interest of the newspaper industry to lose its target customer or even a whole market by limiting and reducing production capacities or by introducing a new business policy, which would have negative effects on the customer, one of the basic strategies of newspaper houses is adding new contents to their products. Some newspaper publishers thus started publishing books and/or adding various little gifts for their readers as a supplement to newspapers or magazines. However, presentation of news remains the main duty of the newspaper. Each edition of a newspaper presents the institution’s version of what is important to communicate on a given day. Consequently, the basic strategy of publishing houses should be to focus on creativity by adding more value to the user’s experience. This way fewer people would ignore messages transmitted by the newspaper’ [5]. The real challenge for them is the question how the effectiveness of newspaper design can be increased. Newspaper designers are trying to promote visual communication as fundamental for newspaper design. They are trying to get the message across that everything that is visual in a newspaper, from the paper and typeface selection to the way pictures or graphics are used, conveys meaning and tells a story. Audiences interact with news texts on different timescales [6]. An individual news story may be scanned in less than a second or read in a matter of seconds.

A number of studies have drawn on visual analysis approach to critically investigate multimodal communication in traditional hard-copy newspapers (e.g. Kress and Van Leeuwen, 1998; Macken-Horarik, 2003) and websites (e.g. Kok, 2004; Lemke, 1999, 2002).

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1 Life Cycle Analysis is a process in which a product's or building's potential impact on energy consumption, air and water pollution, and the solid waste level is calculated at the development stage so that design revision can occur to reduce these impacts.
3. RESEARCH DESIGN AND METHODOLOGY

The research consists of two parts. We combined quantitative and qualitative approaches in order to understand the research problem better: comparison of the daily production of newspaper publishing houses with the basic categories relevant for sustainable development: use of natural resources, waste management and design efficiency, so as to enable a better communication with target public.

A sample of ten newspaper companies was used to gather data about their daily production. For the purpose of the first part of research, authors made a list of eight categories they would examine. In the first part, in order to determine the differences between ten publishing houses in use of resources and waste management, data were gathered regarding their daily edition, sale, format, paper, colours and techniques used. All data date back to March 2009.

In the second part, front page visual analysis of four major newspapers is done. We used a critical method established by Smith [7] to examine how well newspaper design complies with the principles of visual organization known as gestalt. In this examination, the text was a newspaper front page. Common graphic elements such as headlines, body copy and photos have been examined to find instances where they display the gestalts of similarity, proximity, continuation, closure, symmetry, figure-ground and isomorphism.

**Headlines**

One gestalt observed in the headlines is similarity – or perhaps more appropriately, a lack of similarity. Size and boldness of headlines are used to grade the news, larger or boldest headlines associated with more important news. When headlines are of equal size and weight, the reader is to assume the corresponding stories are of equal importance. Eye-tracking studies indicate the dominant photo is the main entry point into the page [7], so if the large headline indicates the designers expect the reader to enter the page at this location, they may find it is a secondary point of eye movement after the reader is attracted to Photo No.1.

The gestalt of symmetry also comes into play in the use of headlines. When the headline and its accompanying story create a symmetrical package, the tendency of the reader is to perceive the two as belonging together. Proximity is a given in headlines in that they are always located directly on top of their stories.

**Body Copy**

The two gestalts evident in body copy are similarity and continuation. Most body copy in a given newspaper is set in the same size and font, so variations in the body copy typically do not occur and, unlike the headlines, it does not differentiate the news. However, some newspaper will vary the size and/or font in specialized areas of body copy such as photo captions or special features stories. Continuation is evident in the justified alignment of columns. A justified column means that each line of type is of equal length.

**Photos**

The gestalt of figure-ground suggests that when viewers look at a visual field, they will subconsciously identify a figure and everything else becomes a ground. The largest element within the frame of the visual field is typically perceived as the figure and the readers would then tend to enter the page at this point. The principle of closure is also evident in photos in the form of cropping. Cropping allows photographers to focus attention on the important elements in the scene.

4. RESULTS AND DISCUSSION OF FINDINGS

In Croatia, as the first part of this research confirms, there are huge disproportion between number of newspaper copies published and sold (Table 1.). In some cases, only a third of daily edition have actually been sold. The newspaper companies do not collect unsold copies, so their destiny is not known to us. It is necessary to search for methods that would ensure the waste-reducing measures at all phases of production and enable the greenest possible destiny for newspaper materials.

In terms of average number of pages, it is obvious that larger newspaper companies publish more pages than smaller ones. This is one of the methods of adding more value for the same price, which
larger publishers as opposed to the smaller ones can afford themselves. At the same time, more pages means more waste that publishing houses should take care of.

In terms of paper weight, paper quality, ink and printing methods research reveals almost identical data for all ten companies. Offset technique is surely the most cost-effective technique for such large editions, so we can presume that the choice of paper and colour is in terms of economic efficiency the most advantageous for the Croatian market.

<table>
<thead>
<tr>
<th>EDITION</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
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<tbody>
<tr>
<td>90.000</td>
<td>95.000</td>
<td>15.000</td>
<td>160.000</td>
<td>55.000</td>
<td>12.000</td>
<td>35.000</td>
<td>42.000</td>
<td>10.000</td>
<td>9.000</td>
<td></td>
</tr>
</tbody>
</table>

| SALE     | 65.000 | 70.000 | 5.000 | 130.000 | 40.000 | 4.000 | 22.000 | 26.000 | 4.000 | 3.500 |

| FORMAT   | 29 x 42 | 28 x 39 | 29 x 42 | 22.5 x 30 | 29 x 42 | 29 x 42 | 29 x 42 | 29 x 42 | 29 x 42 | 29 x 42 |

| PAGES    | 64 | 64 | 48 | 64 | 64 | 40 | 56 | 32 | 48 | 48 |

| P. WEIGHT | 42.5 | 45 | 45 | 45 | 42.5 | 45 | 45 | 42.5 | 45 | 45 |

<table>
<thead>
<tr>
<th>INK</th>
<th>SUN CHEMICAL, SIEGWERK</th>
<th>SUN CHEMICAL, SIEGWERK</th>
<th>SUN CHEMICAL, SIEGWERK</th>
<th>SUN CHEMICAL, SIEGWERK</th>
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<tr>
<td>PRINT</td>
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Table 1. Daily production data of ten major newspaper companies

In the second part, the front page visual analysis of three common graphic elements is done for four major newspaper front pages on the date 18.3.2009. (Table 2.) The analysis is done to examine how well newspaper design complies with the principles of visual organization known as gestalt. Research reveals that gestalt principles are evident in newspaper no 2. It is the only design which uses symmetry to visually tie related elements together. The other three newspaper’s front pages compile with some of the principles, but others are not incorporated. It is especially evident in newspaper number 1. and number 4., where asymmetrical layout violates good gestalt. Perhaps this is done in the name of balance under the assumption that when too much symmetry is employed, the page is too much in balance ant thus not very stimulating.
### Headlines – similarity, symmetry, proximity

<table>
<thead>
<tr>
<th></th>
<th>Displays the largest and boldest headline at the lower left of the page, next to Photo no.1. which is not related to this headline. The headline and its accompanying story create an almost symmetrical package. Gestalt principle is especially evident in the grading of the news through a dissimilarity of headline size and weight.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Displays the largest and boldest headline at the upper left of the page. There are three photographs of approximately equal sizes on the page, two of them are related to the headline and create a symmetrical package.</td>
</tr>
<tr>
<td>3</td>
<td>Displays the largest and boldest headline at the upper left of the page. There are four photographs of approximately equal sizes on the page which are not related to the headline. The headline and its accompanying story create an almost symmetrical package.</td>
</tr>
<tr>
<td>5</td>
<td>Displays the largest and boldest headline at the upper left of the page, on the top of Photo No.1. which is related to it. The headline, photo and its accompanying story create a symmetrical package.</td>
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</tbody>
</table>

### Body Copy- similarity, continuation

<table>
<thead>
<tr>
<th></th>
<th>Each body copy in a given newspaper is set in the different size and font, so variations in the body copy typically do occur for each story. Continuation is not evident in the justified alignment of columns.</th>
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<tbody>
<tr>
<td>2</td>
<td>Each body copy in a given newspaper is set in the different size but fonts belong to the same family, so variations in the body copy typically do not occur for each story. Continuation is not evident in the justified alignment of columns.</td>
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</table>

### Photos – figure/ground, closure

<table>
<thead>
<tr>
<th></th>
<th>The largest element within the frame of the visual field is perceived as the figure even though it is not related to the headline. It is positioned next to the main headline. The principle of closure is evident in photo No.1 in the form of cropping.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>There are three photos of equal size on the main page, so nothing is perceived as the figure. Two of them are related to the headline. The principle of closure is not evident in the form of cropping.</td>
</tr>
<tr>
<td>3</td>
<td>There are four photos of equal size on the main page, so nothing is perceived as the figure. The principle of closure is not evident in the form of cropping.</td>
</tr>
<tr>
<td>5</td>
<td>The largest element within the frame of the visual field is perceived as the figure and it is related to the main headline. The principle of closure is evident in photo No.1 in the form of cropping.</td>
</tr>
</tbody>
</table>

Table 2. The front page visual analysis of three common graphic elements

### 4. CONCLUSION

The authors recognize that this study is limited due to the type and size of data. Results are not to be generalized; they are merely indicators of the problems that should be subjected to further research. A larger and extended study would improve the possibility to draw general conclusion of the results. The methods of research need to be tailored for this particular topic. The study reveals similar printing and
design characteristics for all ten newspaper companies. The data collected did not show any particular case which would indicate a difference or special sustainability concern. This means that there is a lot of green options and possibilities to explore. Therefore, results generated by the study may be best applied as a snapshot of the actual situation and as a challenge for further research. Theoretical and practical evidence show that sustainability defines our era, which implies that newspapers need to consider environmental impact and change the way they design and create value.

6. REFERENCES