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The Online News Genre through the User Perspective

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Abstract

Online newspapers, having existed on the Internet for a couple of years, are now having similar form and content, starting to shape what could be called a genre. We have analyzed the news sites of nine Swedish local newspapers using a repertoire of genre elements consisting of navigation elements, landmarks, news streams, headlines, search/archives and advertisements. We have also interviewed 153 end users at these newspapers. The objective of this paper is to describe the user's perspective of the online news genre described in terms of the repertoire of genre elements. The results indicate what elements seems to be the better design choice through the user perspective. Due to remaining similarities with the printed edition, the online newspaper genre is still a variant genre.

1. Introduction

Most people have an understanding of how a local newspaper is structured. On the first page the most important news can be found, followed by the local news, the economic news and the sports section. The readers are used to find the TV schedule and the comics at the end and so on. This structure is not always easy to transfer to the online version [1]; [2]; [3]. These differences emerge due to the different constraints and possibilities of the web and printed media. For example, the different sections in the printed editions is often found in the online editions as well, whereas it is somewhat harder to present the most important news online in the same way as in the printed edition. However, since the online newspapers have existed on the Internet for a couple of years now they have to some extent started to have similar layouts, starting to shape what can be called a genre. Presenting updated news throughout the day and giving the audience access to the newspaper archives are examples of features that are special for the online newspaper genre [1].

The audience has also started to use the online newspapers in different ways depending on whether they are subscribers to the printed edition or not. The subscribers use the online edition primarily as a source for updated news during the day. The non-subscribers also use the online edition as their source for local news [4]. The similarity of use by audience groups also contributes to the shaping of a genre.

Genres mediate between communities, creating expectations and helping people to find and create "more of the same" [5]. For example, categorizing a movie as an "action movie" both helps the creators and the audience to define what kind of movie it is and what elements to expect.

Genre has a long history of use in diverse areas, with roots in the study of texts and rhetoric [6], later in the study of modern media [7], and lately in the study of organizations, digital media and digital online media (i.e. [8]; [9]; [10]; [11]; [12]).

We have adopted the concept of "repertoire of genre elements" [7] and we suggest a repertoire of genre elements for online newspapers regarding navigation, structure and layout in this paper. This repertoire consists of six different elements discussed in the literature review (section 2). The proposed elements are navigation elements, landmarks, news stream, headlines, search/archives and advertisements. These elements could be found on the front page of the news sites and most of them are to be found on deeper levels as well.

Boczkowski [13]; [14] discuss the development of online newspapers and the state of the current research, from a historical perspective, requesting more thorough research on news use. van Oostendorp & van Nimwegen [15] study aspects of locating information in online newspapers, focusing on depth versus breadth. Chy & Larosa [16] have studied the general user's preference for a particular news format (online vs. print). Usage trends are also discussed by Aikat [17] but both studies are from a quantitative perspective. To obtain a more

comprehensive picture of the online newspaper genre through the user perspective, we have conducted a qualitative study involving 153 users at nine Swedish local newspapers.

The objective of this paper is to describe the user's perspective of the online news genre described in terms of a repertoire of genre elements.

The online news genre is discussed in section 2. The method used in this study is described in section 3 followed by the news sites from a genre perspective in section 4. In section 5 we describe the user perspective. We discuss the findings in section 6 and section 7 concludes the paper.

2. The online news genre

The notion of genre includes a historical context of genres that have preceded the current ones. This historical context is linked to a key characteristic of a genre: that it is recognized by one or more communities in terms of form, content and purpose [5]; [18]. Most authors share this conceptualization where form and content usually is included, and purpose often is included [8];[9];[19]. For example, one purpose of the first page of a printed newspaper is normally to inform the reader about what news item is considered as having the highest news value. These news items (content) are placed in the top position. Thus the layout of the page (form) affects the interpretation of the content, since the same article switching positions with other articles (content) on the first page, would affect the news value (purpose) of both articles.

As a genre changes, form, content and purpose might change. Computer mediation is seen by Shepherd and Watters [8] as a force towards change, where a genre moving from one medium to another first becomes replicated trying preserve content, structure (form) and purpose, then changes to a variant, utilizing the medium more. Then it may change dramatically into an emergent genre, where its roots as a replicated genre are not obvious. Furthermore, they observe that new genres may be created in the new medium [8]. Their description of a variant genre corresponds to the Eriksen & Ihlström [1] description of online newspaper development, having moved from solely using news from the printed edition, to utilizing the possibilities of news updates during the day.

Looking at a genre in itself, it may be seen at different hierarchical levels [6]. At one level there is the newspaper, with its overall purpose and its structure of parts (form), each containing a type of content, for example the sports section. In the sports section there might be a news stream (genre element), conveying recent news (purpose), consisting of a heading and a time stamp (content), presented as a table of contents (form). Thus, the online paper could be decomposed into a repertoire of elements with a hierarchical structure. Then, it could be

possible to examine whether elements used in the genre have common form and content, and whether the design purpose of an element coincides with the user perspective.

However, the division into elements depends on the perspective. For instance, a layout perspective will divide an online page into one set of elements, and an interactivity perspective in another, the relation between the divisions not necessarily being hierarchical. The perspective of actors may also differ, e.g. the purpose of the producer may or may not correspond to the user perspective. Here, we will use decomposition into genre specific elements, of online newspapers, and web specific elements for interacting with the paper, from human-computer interaction.

From HCI, we find **navigation elements** associated with the web page and with the browser. Menus, navigation bars, and breadcrumb trails [20], are examples of navigation elements of a web page. Kahn [21] presents three kinds of support for navigation present in a normal web browser. These are the title and URL of the document, and the URL of the destination link. A company logotype can serve as a **landmark**, indicating where in the web site the page is, if used on the same place in all documents of the web site. Typographical cueing, like headings is another example of landmarks [20].

However, online newspapers also have genre specific elements. Eriksson and Ihlström [1] identify the **news stream** that presents recent stories ordered by publishing time and the headlines that are used to present stories of highest general interest. The **archives**, furthermore, with its **search** possibilities are, together with the news stream, examples of distinguishing differences between the online paper and the print edition. **Advertisements**, finally, are included in this analysis, since they cover a lot of space in the printed edition, and to a great extent are what currently brings revenue to the online edition [22].

In the rest of the paper we refer to a repertoire of genre elements compiled in the section above. These elements are; navigation elements, landmarks, news stream, headlines, search/archives and advertisements. In table 1 we present the elements, and their design purpose based on the literature review and in table 3 we present the position and form of the elements.

Table 1. Design purpose of genre elements

| Element | Design purpose |
|----------------|-------------------------------------------------------------------------------------------------------|
| Navigation | provide help to get from one part of the paper to another and give an overview of the content |
| Landmarks | show what part of the paper the reader currently views and the path they have taken through the paper |
| News stream | present recent news items according to time |
| Headlines | present news items of highest general interest |
| Search/archive | provide search possibilities on the news site and in the archives |
| Advertisements | present the advertisers message to the audience |

3. Method

A series of semi-structured interviews were carried out with the users of 9 newspapers belonging to Citygate (see table 2), an association of newspapers that are making joint web solutions. The newspapers are located from Halmstad in the south of Sweden to Umeå in the north (approximately 1200 kilometers distance) and could be seen as representatives for the Swedish local online newspapers. The URL:s, the daily average circulation of the printed newspaper, unique visitors online per day and the number of staff at their Internet divisions are presented in table 2 below. In the rest of the paper we refer to the newspapers by their numbers in table 2.

Table 2. The online newspapers in the study

| Nr | Newspaper/ www | Average circ. | Unique visitors | Staff |
|----|-----------------------|---------------|-----------------|-------|
| 1 | www.ekuriren.se | 33.000 | 3500 | 6 |
| 2 | www.hallandsposten.se | 32.500 | 2400 | 4-5 |
| 3 | www.nerikes.se | 69.000 | 8000 | 5 |
| 4 | www.nt.se | 49.900 | 4000 | 3-4 |
| 5 | www.stonline.se | 38.600 | 1100 | 2-3 |
| 6 | www.unt.se | 62.100 | 9000 | 6-7 |
| 7 | www.vlt.se | 47.600 | 7000 | 4-5 |
| 8 | www.vk.se | 45.000 | 10000 | 6 |
| 9 | www.corren.se | 67.300 | 5000 | 8 |

The web sites of all nine papers were analyzed according to the repertoire of genre elements compiled from the literature review in section 2. The main focus of our web site analysis was on the front page. To analyze the use of landmarks, we have analyzed the news sites two levels down from the front page.

The differences and similarities of the nine news sites are presented in section 4. These results is used to further elucidate the user perspective on the online news genre described in section 5, since the users are from nine newspapers with different form and use of the genre elements on their news sites.

Parts of the interview guide were constructed to match the repertoire of elements. From the interviews we derive the user perspective on each element, revealing whether the user perspective matches the design purpose.

We planned to interview 21 users at each newspaper. To get a good sample of respondents we asked the newspapers to automatically present a questionnaire (as a pop-up window) when an individual visited the news site, as well as to have two advertisements in the printed edition of the paper. The pop-up window was shown from 3-7 days and we had 60-240 answers from users at each newspaper. The selection was made out of four different criteria; 1) gender, 2) age, 3) Internet usage and 4) education. There was a decline of 3-4 respondents that did not show up for the interview at each newspaper, giving us a total of 153 respondents. Since we have as much as 153 respondents we also present some quantitative figures despite the qualitative nature of the study.

The interview session started with a standard usability test using the think-aloud technique [23] for about 10-15 minutes. The following semi-structured interview is the main source for the user perspective. The interviews were carried out using a semi-structured interview guide [24] in order to get answers to the same questions from all respondents. The interviews took place in front of the computer in order for the user to show us how they performed tasks in the news site and for the users to relate to when answering our questions. The interviews were recorded using audio recording equipment. We asked 53 interview questions grouped into 5 different themes. In this paper we mainly focus on questions related to the theme "navigation, layout and structure". Each interview lasted about 45-50 minutes.

In order to analyze the collected data, patterns were identified in the transcribed material [25]. The patterns include issues raised repeatedly during the interviews or opinions that kept re-appearing and can be described as commonly found views.

Quotations from the respondents are used to elucidate the different parts in the result. All quotations are translated from Swedish, thus the wording is not exact, but the message and style is preserved as closely as possible.

4. The news sites from a genre perspective

In our analysis we have decomposed the front pages of the newspapers into the repertoire of genre elements. We illustrate the elements of two front pages, where paper 2 (figure 1) has tried to retain the newspaper form for the headlines and newspaper part labels from the printed edition, whereas the web layout of paper 6 (figure 2) most markedly differs from the printed newspaper genre.



Figure 1. Front page of paper 2, February 22nd 2001



Figure 2. Front page of paper 6, March 14th 2001

We have identified four different **navigation element** forms (see figure 1, 2, 3 and 4); menus, bars, tabs and breadcrumb trails (e.g. index/sports/tennis). Moreover, all papers utilized banners as navigation elements. Paper 4 (figure 3 and 4) had vertical tabs as navigation elements. The content of the tabs was shown when moving the pointer over them. When showing the content under the tabs, the news stream was hidden.



Figure 3. Vertical navigation tabs at paper 4 (not showing tab content)



Figure 4. Vertical navigation tabs at paper 4 (showing tab content)

All papers had their logotype as a **landmark** in the top left or top centered position, on all pages. Sometimes, landmarks worked as navigation elements, and vice versa.

All of the newspapers had a special **news stream** for the most recent news in a form of a heading for each article marked with a timestamp. Some (e.g. paper 3, 6 and 9) had categorized their news stream according to different sectors, e.g. domestic, international, sports, economics etc., in a table of contents (TOC). All online papers added news items during the day and presented them in different ways. Often, the articles in the news stream were a selection of news received from various sources, such as the Swedish Telegram Bureau. Some articles, often their own material, were also added during the day to the headlines section with or without a timestamp.

Regarding the **headlines**, most of the newspapers published headlines in their middle frames. Some papers positioned news articles due to importance (e.g. paper 2, 4 and 8) and other papers used size of headlines, amount of text or pictures to indicate the importance of news (e.g. paper 3 and 6). Paper 9 deviated from the genre form of the headlines, by adding content during the day to the headlines section in temporal order, rather than ordering by importance, marking it with a timestamp. Thus, making it a hybrid genre element combining the headlines and the news stream elements.

Only papers 1, 2, 6, 8 and 9 had a **search/archives** element (see table 3), either through a search element on the first page, or through a link to a search page. The search facility was the only way to search the archives, however searching the news of today could be carried out in other ways, for example by navigation. The amount of time that the news articles were available for search by the users varies from one to three months.

The navigation elements were sometimes mixed with **advertisements**, also presented as banners.

In table 3 below we summarize the nine news sites in terms of form and content, i.e. navigation elements, landmarks, news stream, headlines, search/archives and advertisements. We describe the location of each genre element on the first pages of the news sites. For some elements we also describe their form, whereas the form of the remaining elements is described above.

Table 3. The repertoire of elements described in terms of position and element form on the first page

| Nr | Navigation elements |
|----|------------------------------------------------------------------------------------------|
| 1 | Right: menu, Top: drop-down menu, Bottom: bar |
| 2 | Left: menu Top: tabs, breadcrumb trail |
| 3 | Top: bar, Left :menu |
| 4 | Left: vertical tabs, Top: bar |
| 5 | Left: menu |
| 6 | Bottom: Bar |
| 7 | Left: menu |
| 8 | Left: menu |
| 9 | Left: menu , Top: bar |
| Nr | Landmarks |
| 1 | Middle: caption below the logotype |
| 2 | Top: tabs changing colors, Left: bold font in menu, Top middle: bread crumb trail |
| 3 | Right: caption next to the logotype |
| 4 | Left: caption below the logotype |
| 5 | Right: sometimes a caption next to the logotype, but not consequently used |
| 6 | Left: the news stream is changed to a list of news related to the section chosen |
| 7 | Top middle: caption |
| 8 | Left: TOC changes into a list of news related to the section chosen with a caption above |
| 9 | Left: indicator in menu, Mid top: caption |
| Nr | News stream |
| 1 | Top mid-left |
| 2 | Top right |
| 3 | Mid left |
| 4 | Mid below headlines |
| 5 | Top right divided into a TOC |
| 6 | Left divided into a TOC |
| 7 | Mid: top-left |
| 8 | Top mid-right |
| 9 | Mid bottom below headlines divided into a TOC |
| Nr | Headlines |
| 1 | Mid right |
| 2 | Mid top |
| 3 | Top and below news stream |
| 4 | Mid top |
| 5 | Top mid |
| 6 | Mid top |
| 7 | Mid below news stream |
| 8 | Top mid-left |
| 9 | Mid center |

| Nr | Search/ archives |
|----|--------------------------------------------------------------------|
| 1 | None |
| 2 | None |
| 3 | In left TOC, link to a search page |
| 4 | In top bar, link to search page |
| 5 | Left TOC, link to search page |
| 6 | Top frame, right of the logo-type, search element |
| 7 | None |
| 8 | Bottom left TOC, search element |
| 9 | None |
| Nr | Advertisements |
| 1 | Right: small banner |
| 2 | Top: small banner , Right: small banner Middle: below headlines |
| 3 | Top: banner, Right: small banners |
| 4 | Top: banner, Right: small banners. |
| 5 | Top: banner Right: small banner |
| 6 | Top: banner |
| 7 | Top: banner Right: small banner |
| 8 | Top: banner Right: small banner |
| 9 | Top: banner Right: small banner |

5. The user perspective

Half of the respondents perceived the web sites as a newspaper while the other half did not. The result was evenly spread among the newspapers. To a large extent, the differences were experienced as emerging from the physical characteristics of the paper and online paper. Some quotations from the respondents, indicating the referring newspaper by the number in the parenthesis:

"A newspaper is a buddy of mine. Internet are in color" (4)

"I would not like to take the computer into bed with me" (2)

"It does not smell newspaper" (2)

"The paper is too big, it is even difficult to read at the breakfast table. If I had had the computer at the table, I am sure I would have read it there" (8)

The structure of the newspaper was perceived as mirroring the printed newspaper's structure by almost half of the respondents. One third did not think so whereas the rest did not answer the question or had no opinion. Most respondents of paper 2 and 5 agreed that the structure was similar while most of the respondents of paper 3 and 4 were of the opposite opinion.

Overview/ Navigation elements

More than half of the respondents thought that they got an overview of the contents of the online paper. They used different page elements, such as menus, navigation bars, headlines, captions, and colors for this. However, the page form, the position of the elements at some news sites made them less effective. At paper 6, only one third of the respondents felt that they got an overview, at paper

6 the navigation bar was placed at the bottom of the page. At paper 4, many of the respondents stated that they did not get a proper overview. The navigation aid at paper 4 was vertical tabs, which didn't show content before moving the pointer over them. Some respondents at paper 4 did not recognize the vertical navigation tabs at all and were surprised when they did encounter them by accident. At the papers 2, 7 and 8 most people felt that the paper gave a satisfying overview. Some of these differences can be illustrated by the following citations.

"I think I get a good overview on what is at the site, because of the tabs which are in an eye-catching position" (2)

"I never discovered this navigation at the bottom of the page. Never. I arrived in Uppsala in september-98 and each time I have had to think about on how I did the last time" (6)

"I think that if one uses the web site often, one surely gets a good overview. If one learn what is under the tabs" (2)

More than half of the respondents considered it easy to find previously visited pages, and very few found it difficult. Mainly, they used the back button of the browser, but many also returned to the first page to start from "the beginning". The search function (when provided) and the menus were also used for this purpose. The result was evenly spread among the papers.

"It is easy to go back, I just use the back button" (3)

"I find it difficult. I try to find in the headings, I use the links" (4)

"Either I click my way back, or I go to the start page and restart from there" (9)

"I use the search function as much as possible" (2)

Landmarks

Only one third of the respondents could tell their position on the web site but as much as about one fourth of the respondents found it important to know their position. Most respondents that knew their position in the web sites were from papers 2, 3, 6, 7 and 8 and most that did not know were from papers 4 and 9 (see table 2 for a list of landmarks at the papers). The most common elements they looked for were URL, captions, markings in the menus, tabs etc as illustrated in the quotations below;

"I look in the URL" (3)

"I look at the tabs, one can see on the marking what thing one has done last" (2)

"I look at the captions to see where I am in the structure" (1)

Very few of the respondents could see which way they have taken through the structure of the web site when moving from one page to another. Most of them looked in the URL trying to get this information. Other ways was looking at captions, different colors etc. Many respondents at paper 2 recognized this path as color schemes and a breadcrumb navigation aid at each page

support it. Some respondents at paper 3 did also recognize it mainly through the URL.

"The color marks show me what path I have taken" (2)

"I look at the breadcrumb navigation aid" (2)

News stream

Most respondents (approximately 80 %) recognized the news stream. They used the label "latest news", used by some papers, and the timestamp for this. But they also recognized new articles due to form, when they were positioned in a top position; at the top of the page, at the top of a news stream or at the top of the headlines. When timestamps were used, some readers used those to differentiate new articles from older articles. Paper 3 presented an "L" below the timestamp in their news stream to indicate that it was local news from the newspaper.

"It has something to do with the latest being on the top of the page. The most important things are on the top" (9)

"The most outstanding is what has happened most recently. It is being presented in that order and it that is clearly shown" (9)

"It is the latest that has been published, there are no timestamps on the ordinary articles" (2)

"The latest news are very brief, the most important and very compressed" (6)

Headlines

Many respondents mentioned the size of headlines and the amount of text as the main tool for the newspapers to indicate the importance of the article together with the position on the page. The general opinion was that the layout is different online than in the printed edition. The absence of pictures contributed to the general feeling that all articles had the same value. When a picture was presented the article immediately got the status of importance. Some respondents considered that the article placed on top of the page was the most important one, even if it had a timestamp. Thus, the news valuation was not seen as evident, as illustrated by the following citations:

"All news here has the same size, regardless if there is a kitten in a tree or a severe accident has occurred" (7)

"One has to decide for oneself, what's is important" (1)

"One has to search for what's interesting and then read the articles" (2)

"On the net, I feel that there are few big news items, and many small" (2)

However, there were different opinions regarding whether this was good or bad.

"One doesn't have to get irritated when unimportant stuff cover half the first page as they sometimes do in the printed edition" (2)

"I don't know if is good or bad that one has to decide the importance of the news oneself" (8)

"They select at the paper what they think one is interested in and publish it prominently. It can happen that the little article says more than the big one" (5)

Search/ archives

More than half of the respondents stated that it was easy to find what they search for on the web sites. Almost one fifth found it easier on the web where twice as many found it easier in the printed edition. Most respondents that found it difficult were from papers 3 and 6 and most ones that found it easy were from papers 2, 7 and 8.

"It is much more difficult to find things on the web. I think that they have complicated things with advanced technology. It's someone making this, who is good at making homepages, but it is not user friendly" (4)

"I find things more easily here on the web, because here at least I have some search tools" (8)

"I miss the function to search directly. One has to go elsewhere to search" (2)

"If one has read the paper for years, then one finds, it's not like that on the net" (6)

Advertisements

Most respondents could clearly differentiate between advertisement and editorial material, and some respondents noticed that there were fewer advertisements in the online paper.

"It is very clear what is advertisements, but at the same time one is a bit cowardly about clicking on these things" (8)

"It is not as many advertisements as in the printed paper" (4)

However, many respondents expressed a clear lack of interest in the advertisements as illustrated in the quotations below.

"One doesn't notice the advertisements, they are there but one doesn't look at them" (9)

"One has almost learned not to notice the advertisements" (2)

6. Discussion

The differences and similarities of the news sites, in terms of the repertoire of genre elements, are discussed from the user perspective in this section.

Overview/ Navigation elements

The design purpose of the navigation elements is to provide a sense both of being able to move around in the news site, and an overview of the contents of the site (table 1). Even though more than half of the respondents considered themselves as having a good overview of the news sites we think that it is alarming that almost half of them does not. Several elements, and element forms contribute to a good or bad overview. At papers 2, 7 and 8, with the most positive view from the respondents, standard labels were used for the newspaper parts, as are used in printed papers. Furthermore, these papers used a standard left-hand navigation, they all had the news

stream in a top position, and their headlines had similarities with the printed edition. In contrast paper 6 had an unusual bottom navigation, and paper 4 had an unusual left vertical navigation. In addition, paper 6 had a headlines section differing from a printed paper. However, both papers had a news stream in a top position. Consequently, our results indicate that the genre form for navigation (left-hand or top navigation) together with standard labels and newspaper style headlines gives the user the best overview.

The position of the menu, at the bottom, at paper 6, was not effective for navigation. Many of the respondents did not recognize the menu at all, and were surprised when they found it since it consisted of links to parts of the site they have never encountered earlier when visited the web site. Furthermore, the vertical tabs of paper 4, also being an unconventional form, were not effective. It is not only unconventional, but also rather advanced, technically, and it might be advisable to avoid such complicated non-genre elements at a web site aimed at a broad audience. Thus, in addition to not being good forms for giving overview, these are also not good navigational forms. Interestingly the horizontal tabs of paper 2, were effective, however, this can be explained since these tabs are very similar to horizontal navigation bars common in web page design in general. Looking at table 2, most papers have menus on the left, and/or at the top, thus the placement at the bottom conflicts with the genre convention and this could explain why it is less effective for navigation.

We were surprised to find that so many of the respondents returned to the front page to "start over" when they were looking for something else instead of using the navigation elements. Most of them used the logotype (which is clickable on all nine news sites) for this purpose or simply used the back button until they reach the front page again. This might indicate that the first page is central to provide overview in the online newspaper genre.

Landmarks

The design purpose of the landmark elements was to give the audience a sense both of their position in the news site, and of the path they have taken through the news site. As much as one fourth of the respondents found it important to know their position in the news site, while only one third could tell their position in the paper.

Many of the respondents were looking in the URLs for information of their position in the web site or information of the way they have taken through the web site, some explaining that it is out of habit. Almost all news sites in this study were using dynamic html-pages which makes it very hard or almost impossible to get that information. It appears that this is an element common at other web sites, but which is not used in the online newspaper genre.

It seems that the form used in papers 6 and 8, where the left hand news stream and left hand TOC respectively, changed into a list of news related to the section chosen, gave a good clue to the position in the news site. The color changing tabs combined with the bold font in the left-hand menu at paper 2 also seems to be good landmarks. Furthermore, the clear captions used in papers 3 and 7, consistently placed at the same position on all pages, were also good landmarks. In contrast, paper 4 had an indistinct caption placed below the logotype to the left, and paper 9 had a small red dot in the left hand menu indicating the position, and many respondents did not recognize these landmarks.

There was a clear majority of respondents from paper 2 that could tell the way they have been through the web site and also knew their position in the web site. Paper 2 (see table 2) is providing three alternative ways for this purpose, and is the only news site that provides a breadcrumb trail which is highly recommended by Nielsen [20].

News stream

In general, the respondents recognize and appreciate the news stream, which corresponds to the previous finding that the audience uses the online edition for news updates [4]. This also corresponds to the design purpose. The defining features, which the users associate with the news stream, are the time stamp, the short headings, and the position high on the page, and also the label "latest news".

We can see that in the three cases (paper 6, 7 and 9) when the news stream is divided into a TOC, the respondents also used it as a navigational element. This gives the news stream two purposes, both to present recent stories due to publishing time and to support the navigation of the news site.

Since most of the newspapers in our study are using material from other sources (telegrams) in their news streams, dividing the news stream into a TOC, or marking the headings with an "L" as paper 9, helps the users to differentiate between the paper's own material and material from other sources.

Headlines

All nine newspapers present their headlines in the top-mid position on their front pages. The use of layout to mark the importance of news differed between the papers in the study, ranging from almost no markers, to the use of headline size, images, and amount of text. In general the respondents thought that there was a difference from the printed paper. When they disagreed with the news valuation of the printed paper, they liked the lack of markers. Thus, the readers use the genre conventions from the printed paper to judge news value. This can be illustrated by the headlines section of paper 9, where news items were added in temporal order instead of by news value. Some readers interpreted these news items as being more important due to their position.

Search/archives

From the user perspective, ease of searching was not associated with presence of or form of the search element. Most respondents that found searching difficult was from papers 3 and 6 which do provide a search facility. There are several explanations for this. Firstly, the search facilities were mainly designed for searching in the news archives and at some news sites the articles did not end up in the archives until the day after they have been published. Secondly, there seems to be no genre convention for online papers for the position or form of a search element, in our study it was more common not to provide a search facility. Instead it seems that most respondents navigate the paper when searching for something. Also, navigating instead of using a search function would explain why paper 6 was seen as difficult to find things in, since, as mentioned before, it had the navigation element in the bottom frame. However, since the search elements did not work as they should have done according to the design purpose derived from the literature, our conclusions regarding what role its form had for the users perception of it, are inconclusive.

Regarding access to the archive of the news sites, since only five out of nine papers provide it, this is an element that is not yet fully adopted by the online newspaper genre.

Advertisements

There seems to be no problem for the respondents to differentiate between editorial and advertisement material. From the user point of view, the advertisements are not very interesting, and as some respondents mentioned, they avoid them. This disagrees with the design purpose of providing the audience with the messages of the advertiser. Advertisements have the same form and position at all papers, as banners in the top right position, thus having a genre form and position. This form thus seems to work well in differentiating it from editorial material, but less well to fulfill its design purpose. Furthermore, we believe that the use of navigational elements as banners, mixed with the advertisements, might be questionable, if the users avoid clicking on, and even looking at the advertisements.

Several things in the study points at the importance of the front page of the news sites. For example, many respondents returned to the front page to "start over" when looking for something else and used the news stream (on the front page) as a navigation element. Instead of browsing through the printed newspaper, the users scroll the front page to get an overview of the contents of the news site.

From the user perspective, the online newspaper still to some extent resembles the printed paper. Differences between the printed and online edition are to some extent associated with physical characteristics, like its smell, and being able to move it around. Regarding the genre elements, the form of headlines, in particular, is close to

the style used in the printed edition, as well as the use of text and few images. However, the news streams, the updates of the headlines during the day, and the archives with its search possibilities exploits the new capabilities of the web medium, making the online edition correspond to a variant genre, but not yet being an emergent genre, using the framework of Shepherd and Watters [8].

7. Conclusions

Since the newspapers, despite their similarities, have some different forms, the differences have revealed what elements seem to be the better design choice, from the user perspective, and whether the better elements have genre or non genre forms.

For **navigation elements** our results indicate that it is better to follow the genre convention of left or top menus than to deviate and for example use a bottom menu or a unusual technically advanced menu. It is important in the online newspaper genre design to provide good structure and overview from the front page, since scrolling the front page is comparable to browsing a printed paper. Most of the respondents return to the first page, when looking for something new, which further strengthens this argument.

There seems to be no special genre convention regarding **landmarks**, but breadcrumbs, color markings and clear headings seem to be good candidates for the purpose. Since one fourth of the respondents expressed that it is important to know their position in the news site, this might be an important issue for the online news genre. One way to compensate for the lack of navigation support through the URLs which was the element most respondents tried to use for this, could be to provide a breadcrumb trail at each page which could serve as a navigation element, which was highly appreciated at paper 2.

The **news stream**, a typical genre element having similar form at the news sites, is well recognized by the readers as presenting recent news. It also seems that news streams linked to particular sections may be used as navigational elements, to reach the section. Since space is always a limited resource on news web pages, this is a feature that the genre might want to exploit. However, this demands that related articles belonging to the same category are presented together with the article in a section.

In the online newspaper genre, the form ranges from having very few markers to resemble the printed edition. If the online papers do want to convey news value in the **headlines** section, our results indicate that they should use conventional markers from the printed newspaper genre; size of headlines, use of images and amount of text.

The **search/archive** element is mainly designed for searching the archives at the newspapers in our study. This is also one of the design purposes of this element.

But to search for items in the news site, the respondents to a large extent navigate, since the search element did not function well for this purpose. Our results though indicate that a good search function could help the readers. In our study, no form emerged as genre specific.

Regarding **advertisement**, the current form of banners, placed to the right and top, are seen as uninteresting and something that the readers avoid, which indicates that the papers could benefit from experiments with alternatives. We also recommend that the advertisements should not be mixed with navigation elements.

We can by this conclude that through the user perspective, the online newspaper is a variant genre.

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