

Genres and the Web: Is the personal home page the first uniquely digital genre?

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Abstract

Genre conventions emerge across discourse communities over time to support the communication of ideas and information in socially and cognitively compatible forms. Digital genres frequently borrow heavily from the paper world even though the media are very different. This research sought to identify the existence and form of a truly digital genre. Preliminary results from a survey of user perceptions of the form and content of web home pages reveal a significant correlation between commonly found elements on such home pages and user preferences and expectations of type. Results suggest that the personal home page has rapidly evolved into a recognizable form with stable, user-preferred elements and thus can be considered the first truly digital genre.

Keywords

Digital genres, WWW, home pages, user testing.

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INTRODUCTION

One of the important determinants of acceptance and use of any document type is the role it plays in supporting a discourse community. Many familiar document types have evolved over decades or even centuries of use to give rise to the highly conventional forms that are instantly recognized as being of a type or genre. Detective stories, scientific articles, newspapers, catalogs etc. are all forms of document that have identifiable elements, rules of form, and content supporting both production and consumption - the basic determinants of a discourse genre. Reiffel (1999) describes how the highly stylized form of mathematics writing serves the community of scholars in this domain well. Conformance with genre conventions enhances memorability of discourse (van Dijk and Kintsch, 1983) and leads to greater user satisfaction (Bazerman, 1988). Researchers in the area of hypermedia and web

design have noted that user orientation and navigation is contingent on the user's perception of such rules in the information space and therefore the lack of genre conventions in the digital world is a potentially significant source of user difficulty (Dillon and Vaughan 1997). Typically, genres are assumed to be slow-forming with fuzzy boundaries, often emerging only over generations of producers and consumers, and proving resistant to change. The genre form is highly tied to the behavior of its users too (e.g., Reiffel's mathematicians use the digital versions for access but tend to print these out as traditional articles when it comes to reading; van Dijk and Kintsch note that scientific articles represent a model of good research procedure as much as a convention of reporting). In the digital domain many existing paper-based conventions are adopted in the hope that such familiarity of form will leverage user comprehension e.g., web versions of such paper formats as newspapers and magazines frequently adhere so closely to type that users can rely on their experiences with physical newspapers to guide interaction, to locate sections of interest and to browse the available information. However, it is unlikely that merely inheriting genre conventions from the paper world will support adequate design of new information types that the digital world enables since such inheritance usually fails to offer equivalent affordance in a different medium. Perhaps more importantly, such mimicking paper tends to underutilize the power of the new medium to provide innovative information structures. It is therefore intriguing to note how and when the first true digital genres will emerge i.e., information spaces that do not have paper equivalents on which they may be modeled yet which manifest genre properties of conventional form, features and organization. Orlikowski and Yates (1994) pointed to the widespread diffusion of digital technologies as being a source of new genres in organizations, and Watters and Sheperd (1997) suggest digital broadsheets might be emerging as a genre, but we believe that the first unique digital genre has arrived in the form of the personal home page.

Home pages as a digital genre

Home pages contain personalized information about people that is self-selected and maintained. Furthermore, home pages have no obvious paper equivalent. As such, the personal home page might be thought of as highly idiosyncratic and lacking common form. Yet it appears that the exact opposite is really the case. As the growth of home pages has increased, the genre characteristics of the form have begun to take shape. We examined over 100 home pages and could identify a high degree of similarity between many of them. We then sought to test how others saw such pages. The results indicate that the home page has evolved rapidly into a form that meets many of the criteria of a genre.

METHOD

The present authors examined more than 100 personal home pages located by informal search of two home page resources *The PeoplePlace* [www.tiac.net/users/domvon] and *Personal Pages Worldwide* [www.utexas.edu/world/personal]. From the sample of 100 pages we identified a list of elements (here defined as features and components of the pages such as email addresses, external links, graphics etc.) and counted each element's frequency of occurrence across the sample. Home pages were defined as belonging to a named individual who was not advertising or selling a business or service and whose

information content primarily related to him/herself. Thus we ruled out standardized personal pages from companies and universities listing their staff and faculty but included pages of such people if their personal homepages were distinct from the organizations' standard listings. The resulting set of elements found on such pages was categorized by the authors and this cauterized element list, together with the percentage of pages manifesting each element category, is listed in Table 2. While ranking elements by the number of pages on which they are found is a straightforward process, we felt that the class of graphical elements required a further categorization. It was clear from initial examinations of homepages that the number of graphics (a term which includes photographs) present on a page noticeably affected the 'look and feel'. Thus we clustered the graphics category into 3 broad frequency groups ranging from pages with 1-4 graphics, pages with 5-9 and pages with 10 or more graphics. Frequency of graphics in the sample was thus clustered into these three groupings e.g., from Table 2 it can be seen that 52% of pages contained 1-4 graphics, 31% of pages contained 5-9 graphics, and 17% contained 10 graphics or more. We divided the final ranking of elements into 3 broad groups: the 5 most commonly occurring elements, the 5 least commonly occurring elements, and the remainder. Then we created eight experimental home pages that mixed and matched these groups of elements systematically. Each page shared the same color of background and basic text, and all pages contained a title, creation and last updated dates, and internal links to 'other' virtual pages. Onto this basic outline we added five further elements per page in the following manner to create four 'common-element' pages and four 'uncommon-element pages'. Each of the four 'common element' pages received 5, 4, 3 or 2 of the most common elements. The 'uncommon element pages received 5, 4, 3, or 2 of the least common elements. Total number of elements per page was then controlled by adding randomly selected elements from the remainder list as needed to the pages with less than 5 additional target elements in their design (e.g., the page with 2 of the additional most common elements also received 3 of the remainder elements to make up its 5 additions; the page receiving the 3 least common elements received 2 remainder elements to give it 5 additions and so forth). In this way, we formed a partial continuum of commonality for the pages ranging from a page with the 5 most common elements, to a page with the 5 least common elements in their design (leaving out pages with only 1 or 0 most/least common elements).

THE SURVEY

Fifty-seven students in three graduate level classes in Information Science participated. All subjects were presented with the print-outs of the pages and independently ranked them from 1-8 in order of preference as a personal home page design. This provided our preference ranking in Table 1. After the ranking exercise, subjects read the list of elements originally identified by the authors and were asked to select as many of those as they thought should be included in any good personal home page. Subjects were free to add further suggestions for inclusion. These data provided us with an estimate of appropriateness of elements which are not based solely on preference, a distinction commonly made in genre analysis.

RESULTS

Data consisted of a set of rankings of the 8 test pages, and a set of selections from the total list of features. These are treated separately in the present section. Table 1 shows the mean and raw scores obtained by each of the pages in the ranking exercise. The Q column ranks pages objectively according to the quantity of common/rare elements on the page, i.e., Page D had a Q rank of 1, since it contained the maximum number of most-common elements; Page A had a Q rank of 8 since it contained the maximum number of least-common elements etc. Hence the Q column represents what might be called the 'ranked continuum of commonality'. The mean user ranking of each page is recorded in the M column. A Spearman's Rho (rank-order correlation) indicates the correlation between Q score and user ranking is statistically significant ($r=0.95$, $d.f.=6$, $p<.01$). In other words, there is a very good fit (over 90% variance explained) between user preferences and the presence or absence of common/rare elements.

#	Q	M	1st	2nd	3rd	4th	5th	6th	7th	8th
D	1	2.1	30	7	13	2	2	1	2	
B	2	3.6	7	14	7	7	10	10	2	
G	3	3.5	7	10	11	13	9	7		
E	4	4.0	3	9	11	15	8	8		3
H	5	5.0	4	8	4	7	6	13	5	10
C	6	4.5	5	8	8	6	8	9	9	4
F	7	6.6	1		3	1	8	5	21	18
A	8	6.7		1		6	6	4	18	22

Table 1: User Rankings for Test Pages

USERS' SELECTIONS OF TYPICAL ELEMENTS FOR A HOME PAGE

The second part of the survey consisted of subjects' ratings of the list of elements earlier found on 100 homepages. Subjects were instructed to select from the list those elements they believed *should* be on a typical personal homepage. In this way we were seeking to identify the level of agreement among users of the what constituted the typical element set (if any) of a personal home page independent of preference for a complete design. Subjects were not limited in their choices to any set amount and were free to add extra features or elements that they felt appropriate. Table 2 shows the elements that subjects selected in an ordered list from most to least selected, and a comparison of occurrence rates (expressed as percentages) of these selections with the frequency of occurrence in the initial sampling.

Element	Total (of 57)	Total by %	% found on initial sampling
Title	55	96	71
E-mail address (M*)	49	86	82
Update date	48	84	39
Table of contents (L**)	42	74	11
Create date	41	72	20
External links (M)	39	68	72
Welcome message (M)	38	67	51
1-4 Graphics (M)	34	60	52
Photographs	32	56	42
Brief bio (M)	32	56	49
Text-only option (L)	26	46	2
5-9 Graphics	22	39	31
Site map	14	25	4
Guestbook (L)	11	19	16
Lists	9	1	33
Animation	8	14	37
Tables	7	12	37
Frames (L)	7	12	11
Sound	7	12	5
Image map	5	9	4
Counter	2	4	39
Advertisements	0	0	33
10 or more Graphics (L)	0	0	17
Back to top button	1		
Thumbnails of images	1		

* /** Denotes inclusion in the most-used (M) /least-used element (L) exercise **Table 2.**
Subjects selections of appropriate features and original sample findings.

While the subjects ratings for use of Table of Contents is noticeably higher than its occurrence in typical pages in our original sample, there is a statistically significant positive correlation between features selected by the subjects and the frequency of features that appear on existing pages (Pearson's product moment coefficient, $r=0.56$, $d.f.=21$, $p<.01$). From this we may conclude that users' ideas of what a personal home page should contain are broadly agreed upon, and that these ratings reflect existing home page contents on the Web.

CONCLUSIONS

Personal home pages on the web seem to have evolved very quickly into a standard form that share many common elements and features. This commonality is expected by users and there is very broad agreement between users in this sample as to what a home page should contain. Added to this, users' preferences for home page designs correlate positively with the presence or absence of these key common elements. The present data are constrained by our original sample and the use of local respondents thus a necessary next step is to widen the selection of both sample. However, the shared matching of expectation and preference across this community of users suggests that the personal home page might be the first unique digital information genre. If so, then genre emergence can be seen as more rapid than previously thought from studies in the paper and verbal discourse domain. Indeed, it may be possible to study genre formation in real-time in digital environments. Further studies are warranted of other potential genres and their formation speed.

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