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Designhistory of the WWW: Website development from the perspective of genre and style theory

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Published in:

Artifact: Journal of Design Practice

Publication date:

2008

Document Version:

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for pulished version (APA):

Engholm, I. (2008). Designhistory of the WWW: Website development from the perspective of genre and style theory. *Artifact: Journal of Design Practice, Vol. 1*(Issue 4), 217-232.

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Publisher Routledge

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Artifact

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t725414070>

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Online Publication Date: 01 January 2007

To cite this Article Engholm, Ida(2007)'DESIGN HISTORY OF THE WWW.: WEBSITE DEVELOPMENT FROM THE PERSPECTIVE OF GENRE AND STYLE THEORY',Artifact,1:4,217 – 231

To link to this Article: DOI: 10.1080/17493460802127757

URL: <http://dx.doi.org/10.1080/17493460802127757>

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DESIGN HISTORY OF THE WWW.: WEBSITE DEVELOPMENT FROM THE PERSPECTIVE OF GENRE AND STYLE THEORY

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Since the emergence of the World Wide Web in the early 1990s, the internet has become one of the most of important tools for information, entertainment, trade, and social contacts. From a primitive, text-based medium, the web has become a highly advanced and complex mass-multi-medium representing multiple forms of design. Despite the web's importance as a design medium, the development of website design has only been sporadically described. As yet, we have no historical, chronological descriptions of web design history similar to what we find, for example, in the study of art or "analogue" design history. The article demonstrates how website development can be analysed from a genealogical point of view. It does so by pointing out a number of genre and style formations and discussing their ideological and cultural sources. It is argued that the main engine for web development is the demand for renewal and differentiation from producers and users, which leads to various technical, functional, and symbolic distinction strategies for website design.

Keywords: design history, genre, style theory, web design

Previous research

Until now, the literature on website design has been characterized by normative and pragmatic how-to introductions that set up guidelines for web design. The main focus has either been on usability aspects (e.g. Fleming, 1998; Nielsen, 2000; Nielsen & Tahir 2002; Sharp et al., 2007) or on graphic-aesthetic dimensions of web design (e.g. Siegel, 1996; Veen, 1997; Black, 1997; Beaird, 2007; McIntire, 2007). In brief passages, authors of practice-oriented books on "how-to-design-websites" have outlined historical web trends. These outlines, however, have served only as the basis for prescriptive criteria or as specific input for web production (e.g. Cloninger, 2002; Niederst

Robbins, 2007; Rosenfeld & Morville, 2006; Siegel, 1996). The classifications in question are intended less as documentation and more as inspiration in technical and design-oriented how-to guides for producers and as examples of different approaches to web design. With respect to design history, Philip Meggs (1998) has provided examples of prominent web design trends. His analysis, however, is strictly synchronous, focusing on the web medium in relation to trends in graphic design around 1996/1997. So far, few attempts have been made to describe the development of web design in a diachronic perspective or to establish institutional classification systems like those that are applied in the study of

art, design, or media history. Ida Engholm (2003; Engholm et al. 2005) has described web

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ISSN 1749-3463 print/ ISSN 1749-3471

DOI: 10.1080/17493460802127757

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design history from a genre and style perspective in what is, to the best of our knowledge, the first extensive historical documentation of web design development. This article expands the design history perspective and uses the concepts of genre and style to identify style formations, describe selected genres, and to discuss technical, functional, and cultural distinction strategies for web design development. The main focus will be on early web representations. In the following the concepts of genre and style are discussed and it is argued that they can be used to define and conceptualize distinction strategies for website design. Within this conceptual framework, the distinction dynamics for web development are demonstrated through specific examples of web styles and genres. In closing, it is argued that website design as a field of analysis should be incorporated into institutionalized design history with a view to continuing the conceptualization, classification, and documentation of developments within this medium.

Genre and style

As analytical concepts, genre and style traditionally serve as the basis for exploring and classifying the development of art forms and media. In historical studies, genre and style have been applied in various contexts, with genre mainly related to classification in the study of literature, media, and film. Style has mainly been applied in art history and recently also in media and film theory. In recent years, the concepts of genre and style have changed from static categories in normative assessments of artworks to dynamic entities that describe the varying expectations of producers and recipients (e.g. Altman, 1999; Bordwell et al., 1985, 1994).

As a concept, genre is used to categorize representation forms. A genre classifies a group of objects with common or related expressions. Genres are convention-based “frames of reference” shared by and connecting senders and recipients. In that sense, genres

have an *expectation-generating function*. Genres are constituted by expectations, demands, and wishes that affect the way producers design products, and the way that recipients perceive them, based on familiarity and experiences with other, similar products. In web design, accordingly, to justify the use of the term we must be able to point to multiple sites with common or related features that meet the expectations for what has “historically” and culturally been delivered by the proposed genre. The genre’s statement on the one hand and the users’ basis for interpretation on the other establish a consensus on usage conventions and systems of expression. This relationship changes continuously, which causes the genre to develop dynamically.

By contrast, style is used to characterize singular objects and events. This is reflected in everyday language, as in “he has his own, unique style”. Used in this fashion, the word style refers to a particular, possibly singular style. Several objects with similar stylistic features can make up a general style. Like genres, general styles are created through repetition, and thus, like genres, general styles serve to generate expectations. Particular stylistic features become a general style when enough people agree upon the stylistic features common to a set of phenomena. The general style is anchored in a common perception. This, in turn, is related to our backgrounds and frames of reference. Here, the functions of genre and general style overlap to some extent.

Film theoretician Rick Altman (1999) uses the terms “noun genres” and “adjective genres” to describe genre dynamics in film production. These terms may help define the way that genre and style are used in this article. According to Altman, a noun genre is an established genre, while adjective genres *may* develop into noun genres over time. This is what happens, for example, when a “commercial message” (adjective+noun) becomes a “commercial” (noun only), and “musical drama” becomes a “melodrama” (Altman

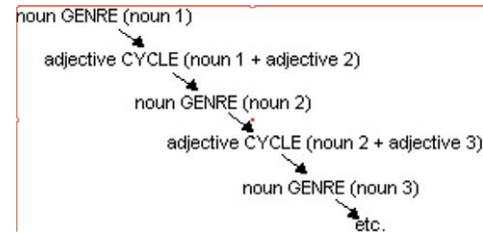


Figure 1. Genre dynamics. Source: Altman (1999, p. 62).

1999: 51). In both cases, adjective genres may eventually develop into independent categories, characterized by a noun. This can be visually represented as depicted in Figure 1.

This process is not exclusive to film genres; according to Altman, it occurs in all domains that aim for product differentiation and distinction. Replacing Altman’s “noun genre” with “genre” and his “adjective genre” with “style” gets us closer to a definition of the use of “genre” and “style” in this article. Genre refers to convention-based expectations of a product. Style individualizes a product within its genre. Thus, we now see that style serves to *meet or challenge expectations*. In this sense, genre is almost synonymous with group, type, and category, while style is almost synonymous with nuance, tone, and accent. Genre is an overarching term, while style is complementary. Genre groups and categorizes, while style modifies. Genre represents a common perception of a relatively specific group of phenomena and proclaims a consistency across individual features, while style is a more elastic concept that anyone may apply to a phenomenon without necessarily claiming any permanence across individual phenomena. One may simply say that in one’s individual assessment of a given set of phenomena, there are certain recurring features.

Genre and style in web design

In relation to the development of website design, it is claimed that genres are related to the sender’s perceptions of the *function* of a site (is it, for example, an entertainment or an

information site?). Website design is also related to conventions within the *industry* that the site belongs to. Genres mark a site's association with a given industry as opposed to other industries. Styles, however, are independent of function and industry, and both a bank site and a design agency site might choose to borrow stylistic features from Japanese minimalism.

Both genre and style are expressed in a site's overall appearance on the user's computer screen, as constituted by technological, navigational, interactive, and graphic-symbolic components. These aspects are internally connected as well as engaged in a dialogue with current trends on the web and in other media. A site's genre and style are determined by both producer and recipient based on the sum of elements that define the site's appearance and use potentials, its design. Here, the term "design" is defined as the sum of the technological, usage-related, and cultural dimensions that constitute a website. In modern design theory, design is both a noun and a verb, capable of referring both to the end product and to the process (Lawson, 2006, p. 3). In this context, the emphasis is on the product, i.e. historical and existing websites as they appear on screen as an object of analysis in a framework of genealogy and design history.

Based on the concepts of genre and style, we will focus on the early web and early examples of distinction strategies for website design and for the genre and style development of the web.

Style as a means of distinction

Until the early 1990s the internet was text-based and required advanced technical skills to use. The launch of the World Wide Web (WWW) gave the internet a graphic interface. The first version of WWW was developed in 1990 and distributed the following year on the internet. The launch of the first browser, *Mosaic*, in 1993 made it easier for people without a technical background to use the

internet and navigate in the available information. Technically, the potential for designing graphic websites was very limited. The documents were constrained by the html format and the browsers' default settings, which determined the appearance and function of text, graphics, and hypertext. This did not preclude technical-functional and graphic distinction strategies in the development of genres and styles. We find one example of stylistic distinction as a means of expanding a genre convention in the site category of Search Engines. In 1993, this category consisted of automated search robots, so-called *spiders* (Exite, 1993 and Galaxy, 1994) (Figure 2). In terms of their graphic appearance and interaction, these automated search robots featured a front page with an image at the top, default Times New Roman wall-to-wall text and purple links. Towards the end of 1994, however, a new type of search engine was launched: Yahoo! Search. Unlike the spiders, Yahoo! featured a hierarchy of topics (Figure 3). The service based its selection and categorization of links on "relevance criteria" and enabled topic-specific searches. Yahoo! also made full use of the new Netscape facility for incorporating graphically designed logos based on the image formats *GIF* and *JPEG*. The hand-drawn logo and the funky button menu were

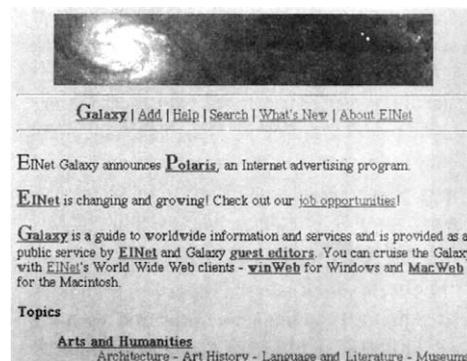


Figure 2. *Galaxy*, Austin, USA. Production: EInet/MCC Research Consortium, University of Texas, 1994. Source: Zender et al. (1995, p. 74).



Figure 3. *Yahoo*, Stanford, USA. Production: David Filo and Jerry Lang, 1994. Source: Zender et al. (1995, p. 73).

provided by the underground font creator Emigre. The logotype font referred to the multi-ethnic cartoon style that was common in "analogue" pop culture and music in the early 1990s. Thus, in terms of both function and screen appearance, Yahoo! stood out from the neutral spider design. Through stylistic differentiation, Yahoo! Search marked a new sub-genre in the main genre of search engines.

Today, Yahoo! and other web directories have become more automated, but the topic categories are still in use, and the services are characterized by a more graphic expression, heavy on information. In contrast, contemporary search robots and the "search engines of search engines" (e.g. Kopernikus, Ask Jeeves, and Google) are characterized by a simple design featuring only a logo and a search box. In this, they continue the focus on function and content that were introduced with the early spiders. Conventions were established in 1993/1994 when function and individual style became means of distinction in genre development.

Other means of distinction could be observed in early genres for privately operated sites: user manual sites that focused on graphic design and early forms of e-commerce. In 1993/1994 one of the first examples of graphic

design trends appeared: the *illusion of tactility*. This trend was evident in different forms of bulging and 3D effects; it became popular as browsers developed to support the integration of graphic features and a choice of other backgrounds than grey or white. One example of a tactility illusion effect was *Lens Flare*, which at the time was a new feature in the software program Photoshop that made letters and graphic elements look like polished brass. The effect was used in the user manual site *Website Design Guidelines* (Figure 4) from 1994, where Lens Flare bullets indicated the main list of topics, and ordinary links were replaced with brass buttons. In the privately operated site *Welcome to My Head in the Clouds* (Figure 5) (1994), the cat-loving site-owner used shiny bullets and clip art to divide the layout into sections. In *Karen's Tie-Dye Shop* (Figure 6) (1995), an early example of a mail order site, the Star Wars-like 3D heading was clad in gleaming gold. The background image, which is featured on all sub-pages, was



The goal of these guidelines is to describe a style of design that defines a visual identity for WMU's Web site. Web publishing has many similarities to that of the traditional print medium. However, it offers opportunities and challenges distinctly different. The potential reach of your Web pages is tens of millions of people. Hence the same high-quality standards for content and appearance of printed communication are applicable.

- [Introduction](#)
- [Organizing Your Pages](#)
- [General Design Considerations](#)
- [Use of Graphics and Other Media](#)
- [Home Page Design](#)
- [Balancing Site Structure](#)
- [Templates and Resources](#)
- [Copyright](#)
- [Use of the University Seal and Signature](#)



Comments to: janet.oliver@wmich.edu
 Instructional Technology Services, 2213 Sangren, WMU, Kalamazoo, MI 49008, Phone: (616) 387-5046

Figure 4. *Website Design Guidelines*, Western Michigan University. Production: Janet Oliver, c.1995. Source: Own archive.

Photoshop bump-mapped with “bluster contoured” logos and thus contributed to sporadic illusions of tactility.

These graphic effects are evidence that attempts at differentiation played an important role in early web design. The actual means for designing websites, however, remained limited. The html code and browser functions imposed serious restrictions on designers. Accordingly, the first style of web design could be called the *HTML Style* (Engholm, 2003, p. 75). In principle, no other style was possible but, as discussed earlier, stylistic differentiation did begin to affect the dynamics of genre and style and the development of the web.

Many early technical web entrepreneurs considered these attempts at differentiation a threat against the democratic nature of the internet. This view reflected profession-specific ideologies popular in certain technical and scientific environments related to the early internet, where standardization and a one-size-fits-all approach were to provide all users

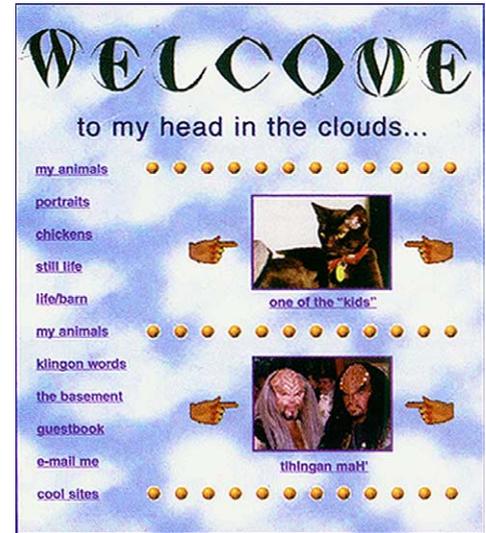


Figure 5. *Welcome to my head in the clouds*, 1993/94. Source: Gluskin (2002, p. 80).

with equal access to information, regardless of computer equipment, transmission speed, or browsers. Web entrepreneurs James Gillies and Robert Cailliau (2000), members of the WWW development team around Tim Berners-Lee, described the scepticism in the early internet environments in 1993 when the February version of Mosaic introduced the tag ``, a feature that Gillies and Cailliau feared would make websites look like “glossy magazines” (p. 252). The ideal of pure function and universal design became challenged by commercial interests as well as producers and users sought renewal and distinction. One of the first to use this new Mosaic-tag, according to Gillies and Cailliau, was an employee at Honolulu Community College, who in 1993 launched an online version of a dinosaur exhibition at the university (Figure 7). The site – which is still online – includes a logo, images of the exhibits, short audio sequences, and even a choppy film clip. Startled, Gillies and Gailliau saw that the site attracted a great deal of attention and was included in NCSA’s “What’s New” list for 1993 as “one of the hot places to go!” (p. 253).



Figure 6. Karen's Tie-Dye Shop. California. Production: Karen Ferguson, 1994/95. Source: Zender et al. (1995, p. 376).

Towards the mid-1990s, the context of the internet changed from the one characterizing the earliest days. The new material reality of the internet was that it now had to work for a large and varied group of users. On the one hand, this reduced the rate of change in technical features and usage. On the other hand, web design came to focus increasingly on distinction values, with renewal as a key goal. This was expressed in various technical and symbolic representation strategies applied by website designers and producers. To commercial companies and organizations, websites began to take on particular functions concerned with maintaining or expanding market

shares and manoeuvring within specific production and organization cultures.

In many ways, the shift in focus from technical aspects and function to renewal through graphic and stylistic differentiation can be seen as a re-enactment of a historical trend in twentieth-century design history, as growing postwar affluence led to an increased interest in the cultural and symbolic dimensions of design. Many of the products that continue to play a key role in the world market today had been invented and put into production by then, from cars and bicycles to household appliances and electrical devices. The product was expected to work and to use the latest version of its basic technology. As this was more or less taken for granted, manufacturers began to focus increasingly on differentiation through aesthetic and symbolic design features. Similarly, already in the 1990s, website design began to go beyond the technical requirements and focused increasingly on being culturally meaningful for the user. Website design was treated as signs or communication, embedded in a symbolic context like a physical design object, inseparable from its construction and production. Websites are based on programmable, variable, numerical representations of data, able to carry out functions unparalleled by other tools or machines but, like physical design objects, web design became increasingly embedded in commercial and sociocultural contexts of production and consumption.

Professionalization through design

Increasing commercialization of website development went from being the domain of technicians and private enthusiasts to involve professional developers and designers. In the mid-1990s new website developers began to enter the stage. They typically had a background as graphic designers in print-based agencies or as interface designers from the software industry, and around 1996–1998 the first design and art colleges began to train

actual web designers, which further consolidated the status of web design as a distinct discipline and profession.¹

According to media theoretician Miriam Rivett (2000) these professional developers introduced a “design discourse” that was business oriented due to its roots in existing persuasive discourses, e.g. advertising, through which the promotional aims of business are circulated. “The discourse of designers . . . (is) inflected by existing corporate commercial discourses and designers engaged in the negotiation of commercial concerns as part of their production practices” (Rivett, 2000, p. 43ff). The imposition of design discourses on the web was evident in the professionalization of websites, which were developed on the basis of established principles for layout, legibility, and usability. This professionalization was further promoted by the many “how-to” books released during the second half of the 1990s. The books combined website analyses with prescriptive development principles. The introduction of guidelines for web design gradually established value systems that made it possible to distinguish “good” sites from “bad” (Rivett, 2000, p. 45).

The first graphically oriented publications showed that designers’ interest in the internet stemmed from the increasing technical potential for managing visual appearance and layout (Engholm, 2003, p. 62ff). In what may be the very first graphic how-to book on internet design (Zender et al., 1995), Mike Zender pointed to the table function and frames, which were launched with Netscape 1.1 in 1995. These new features made the internet interesting, because we could now “*make our page design a bit more distinctive*” (1885, p. 277). Zender’s book and other graphically oriented publications viewed design as the key aspect and engine of future web developments. Many of the writers of these books were agency owners, who acted as consultants and web developers for the growing number of companies and organizations wishing to go

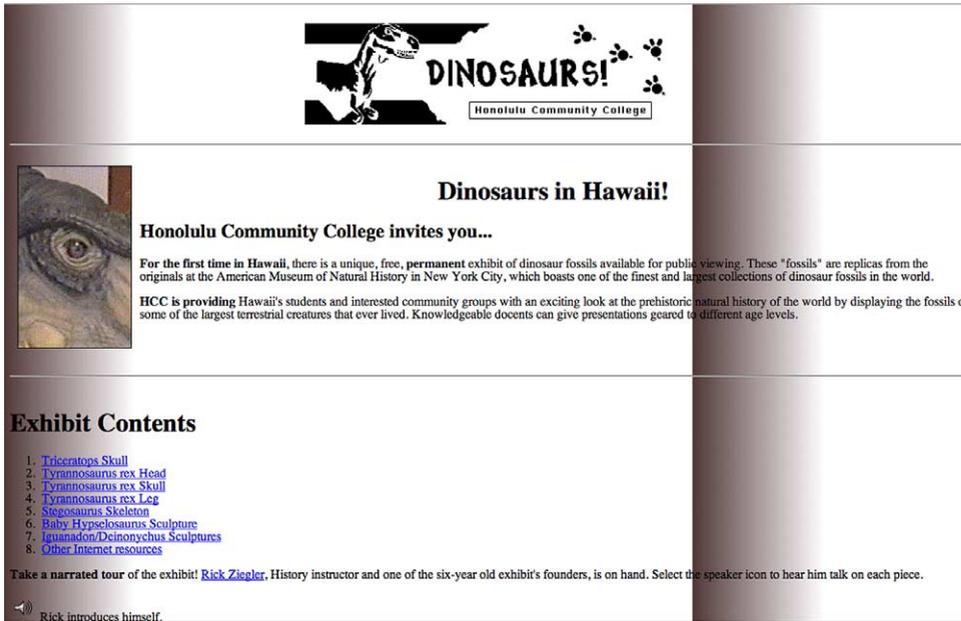


Figure 7. *Dinosaurs, Honolulu Community College, Hawaii. Production: Kevin Hughes. URL: <http://honolulu.hawaii.edu/dinos/dinos.1.html>*

online. In one sense, the growing professionalization was a matter of keeping up with the many new technical features and the constant launch of new additions, but it was also a matter of creating the basis for technical, functional, and cultural distinction through design for companies.

In the second half of the 1990s, web developers were divided in their view on where the key focus should be: on technical-functional aspects or on graphics. According to Rivett, the different conceptions of design reflected competing discourses, represented through two “beacons”: Jacob Nielsen and David Siegel. Both were widely quoted, and through their books and websites they became key players in the discussion about the web. Jacob Nielsen emphasizes usability, while David Siegel focuses on graphics (Rivett, 2000, p. 45). Nielsen, who has a background as a leading engineer at Sun Microsystems and is a usability expert, wants to provide the basis for quick and easy

access to information. To Nielsen, “content is king” (Nielsen, 2000, p. 206), and consequently he applauds “similarity of layouts” (2000, p. 189). Siegel, who is an active web designer with a background in graphic design and digital typography as well as a member of the W3C Committee, believes that web design should no longer be “technologically driven” but instead should be founded on “typographic and visual layout principles” (Siegel, 1996, p. 13). Web design should not just be functional; it should also offer entertainment and a good user experience.

These differing ideologies affected the distinction values among website developers, with commercial and user-oriented aspects influencing the technical, functional, and visual design of websites. In terms of genre, the usability approach became particularly popular among developers and users of websites with technical content and industries that focused on providing news and information. The graphic ap-

proach became influential in aesthetically oriented areas: design-conscious companies, cultural institutions, music, and youth portals, etc. The usability and graphics perspectives represent two separate ideologies, which became reflected in very different forms of website design. At the risk of oversimplifying, they may be divided into two stylistic categories: *usability functionalism* and *digital modernism*.

Usability functionalism

The usability perspective, which in the how-to literature was championed by, among others, Nielsen, Fleming (1998) and Lynch & Horton (1999), grew naturally from the early entrepreneurs’ democratic goals of a free internet, where everybody has equal access to information. These ideals were based on conventions from the interface industry about usability as superior to aesthetics and culture. The design of a site should be determined only by considerations about technical and functional features and the objective of providing easy access to information. The graphic-aesthetic aspects did not add much to function and could impede downloads and the direct access to content (see, e.g., Nielsen, 2000, p. 5).

Like the “analogue” functionalist trend, which emerged in the early 1900s based on a desire to meet the demands for standardization raised by industrialization and mass production by aiming for a form determined by core function, exponents of usability strive for a plain, technically and functionally oriented expression. And just as functionalism sought to oust and replace the historicist and heavily ornamented styles of its era, proponents of usability had the express goal of abolishing web design diversity by promoting simplicity and uniformity. In this sense, the ideology and style of the usability movement may be referred to as *Usability Functionalism*. It was characterized by a neutral expression where navigation and content were the essential



Figure 8. Learn.com, England. Production: Learn.com Inc.: Patrick Toomey, 1998/1999. Source: Own archive.

aspects; graphic elements were subservient to this goal and had no value in themselves.

Examples of usability functionalism from 1998/1999 included *learn.com* (Figure 8). The layout here was based on columns and an L-shaped search panel. There were no images, only navigational elements in the form of tabs, a free-text search function, hyperlinked words, and headings arranged in a subject hierarchy. The yellow bar, which may be a reference to the yellow bar in Jacob Nielsen's famous usability mentor site, *useit.com*, aimed to direct the user's attention to the search functions. The other colour used on the site was purple, a popular web colour in the late 1990s.



Figure 9. FotoForum. Production: Fernando Mateus, 1998/1999. Source: Beer (2000, p. 56).



Figure 10. GL Communications Inc., Hong Kong. Production: World Wide Web Global LTD/Cybernetic.com.hk. Alan Cheung, 1999. Source: Beer (2000, p. 94).

Fotoforum.net (Figure 9) also used purple as its corporate colour and yellow to mark its search panel. Here too, the only focus were on the hyperlinked headings. Like *learn.com*, *GL Communications* (Figure 10) uses an L-shaped search panel with fixed search functions and changing links. In the centre of the layout, images and text sections provided access to topical, varying offers.

The sites shown here reflected conventions that were beginning to form in 1998/1999 concerning the placement of site components, in this case a logo positioned to the right, an L-shaped navigation unit in various designs with permanent and semi-permanent links, and centrally positioned news-oriented content. This convergence toward more established norms for navigation was reflected in contemporary prescriptive literature. Jacob Nielsen & Marie Tahir (2001) advocate ideal guidelines for the organization of website content and navigation. In *Homepage Usability: 50 Websites Deconstructed*, 50 European and American corporate sites are analysed from a usability point of view. The objective is to establish guidelines for good design. The emerging convention here was a logo in the upper left corner, fixed and visible navigation panels with access to basic information top



Figure 11. Barnes & Noble, USA, 2000/2001. Source: Nielsen & Tahir (2002).

right or left, and more dynamic, news-oriented content in the middle. This remains the predominant structure of websites today, largely based on the ideals concerning website design that are reflected in usability-oriented sites from the late 1990s.

After the dot.com crisis in 2000 and the general uncertainty that followed 9/11 and the resulting economic slump, usability ideals gained ground in most of the established and commercial part of the web. The web agencies



Figure 12. Mother Nature, USA, 2001. Source: Own archive.



Figure 13. CD Now, USA, 2000/2001. Source: Nielsen & Tahir (2002).

that survived the crisis focused more on usability ideals, which led to increasing standardisation and a greater focus on user-friendliness rather than graphic finesse, animations, and visual effects. Consequently, website design within genres of e-commerce genre and corporate investment after 2000 seemed to have stabilized around small and sometimes extremely modest modifications (Figures 11–13).

Digital modernism

In contrast to the usability angle, the graphic design perspective reflects a cultural practice that sought to promote graphic-aesthetic norms for website design by differentiating itself from the “riff-raff” of non-professional web developers and the “engineering design” promoted by the usability proponents. The graphic design perspective (apart from Siegel, see Black, 1998; Mullet & Sano, 1995; Zender et al., 1995) was driven by established graphic designers who had worked with print media, and some of whom (e.g. Siegel) had also taken part in developing designs for the transitional phenomenon of the CD-ROM. These designers mainly based their ideals on conventions from the print media as to what was considered good and appropriate design in

relation to certain industries and target groups; these ideals were embedded in persuasive discourse from advertising and business promotion, as Rivett points out.

In his book *Websites that Work* (1997), the graphic designer Roger Black wrote that designers who worked with website design should not discard passed-down experience but adhere to the conventions that had long promoted legibility and readability in books and other print media, naturally with due consideration for the interactive and dynamic character of the web (Black, 1998). The passed-down conventions mainly involved the layout and typography ideals that developed and consolidated modernist typography in the twentieth century. These ideals included Russian constructivism, Dutch de Stijl, Bauhaus, Neue Typographie and Swiss graphic design. The Swiss style had been particularly influential in modern commercial graphic design, with its modular structure and geometric grids for handling the montage of text, images and graphic elements, asymmetry, and consistent typography.

An early example of web design with a modernist slant is Mike Zender’s agency site *Zender + Associates* from 1995 (Figure 14).

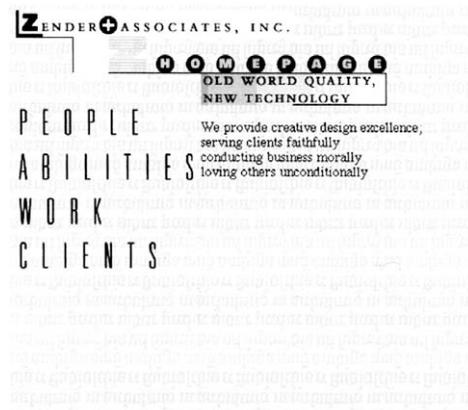


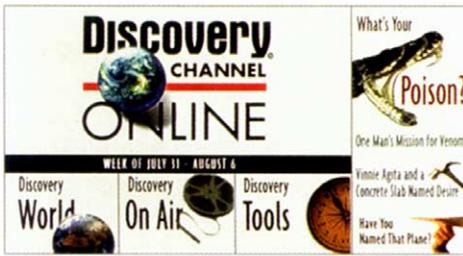
Figure 14. Zender + Associates, Inc. Ohio, USA. Production: Rick Albertson, Jeff Fine, Mike Zender, 1995. Source: Zender et al. (1995, p. 118).

This site drew on classic print traditions for structure, layout, and typography. The asymmetrical composition had roots in Neue Typographie and its use of sans serif fonts and large areas of blank space. On this site, the “print-free” space featured a processed, tinted background of print characters, resembling, perhaps, a scan of the Gutenberg Bible in a clear historical link to the print medium. The information architecture was simple: the front page presented the logotype, logo, etc., and plain links provided access to the sub-pages, which offered pure text-based information about what the company had to offer. The site is an example of the widespread tendency in early web design to base site structure on the book with a cover/front page in graphic layout and pure wall-to-wall text on the content pages.

Another example of modernist influences on web design is Roger Black’s Interactive agency site (Figure 15). The agency was established in connection with his graphic design firm in the mid-1990s. The site was held in classic constructivist-modernist colours: white, red, and black, which Black promotes as ideal, beautiful web colours in his book (Black, 1997, p. 36). The interactive elements were integrated but not immediately visible as navigation elements. In a sense, the site resembled a brochure, but Black accommodated the broader format of the computer screen, so that the user did not have to scroll as was the



Figure 15. Interactive Bureau. New York, 1996. Production: Interactive Bureau. Designer: Roger Black. Source: Black (1997, p. 232).



26-40



26-41

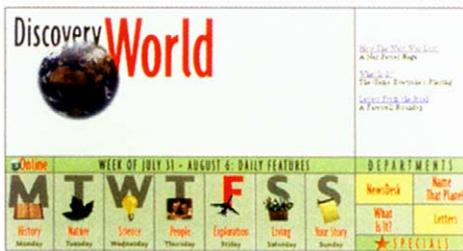


Figure 16. Discovery Channel Online. New York, 1995. Production: Interactive Bureau. Designer: Jessica Helfand, Melissa Tardiff. Source: Meggs (1998, p. 472).

case in early 1990s sites with their print-based format. As a result of the growing professionalization, web developers began to work within a small, “safe area” in the mid-1990s, defined by the area of the browser that the designer has access to in a screen resolution of 640x480.

The TV-station Discovery’s first site from 1995 (Figure 16), designed by graphic designer Jessica Helfand for Black’s agency, was a similar example of professionalized graphic simplicity, angular and with a consistent colour scheme and typography. Philip B. Meggs (1998) points to the Discovery site as a distinct example of a

consistent style in terms of colours, structure, and typography. Headings, sub-headings, and a sidebar for information are placed within geometrically defined zones, and the consistent colour scheme of white, black, red, and various shades of green is used on all sub-pages. According to Meggs, this site exemplifies a new “paradigm of design” on the web in the mid-1990s (Meggs, 1998, p. 472), a shift in paradigm initiated by graphically oriented users, with assessment criteria based on conventions from the print media concerning established (modernist) norms of “good design”.

As a sign of the modernist influence, websites often resembled print publications. The interactive elements were established by now and copy graphic print features and decorative effects rather than appearing as what they were: tools for navigation. As evident in Roger Black’s sites, however, the interactive elements began to draw attention. Black’s (1997) book introduced button design as a new design area worthy of attention. Buttons were not only user-friendly, he wrote. It is more natural to navigate on the basis of images or symbols rather than hypertext. Besides, they are more aesthetic and act as a means of achieving individual character (Black, 1997, p. 82).

Despite the growing focus on interactive elements, much modernist website design con-



Figure 17. Onyro.com. England, 2000. Production: Kioken UK. Design: Anthony Kyriazis. Source: Own archive.

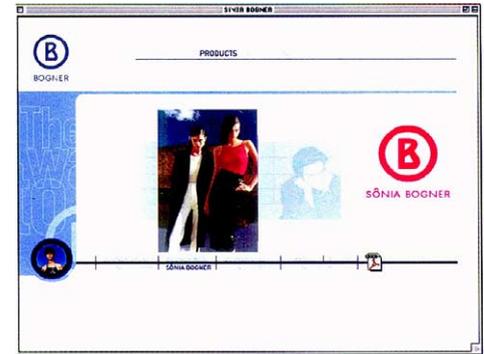


Figure 18. Sonia Bogner. Germany, 2000. Production: Perplex. Source: Beer (2000, p. 118).

tinued to resemble print media well into the 1990s. Examples of the print-oriented approach is the Greek web agency *Onyro.com* (Figure 17) from 1999, where the front page was a single image that might as well have been the cover of a magazine. The sub-pages resembled the traditional grid-based positioning of images and text columns in fashion magazines. Similarly, fashion designer Sonja Bogner’s site resembled a fashion brochure, and the interactive elements had been disguised as logo, graphic text, and images (Figure 18). The Spanish web designer Antonio Fernández and the German fashion site Annette Goertz drew on classic Swiss graphic

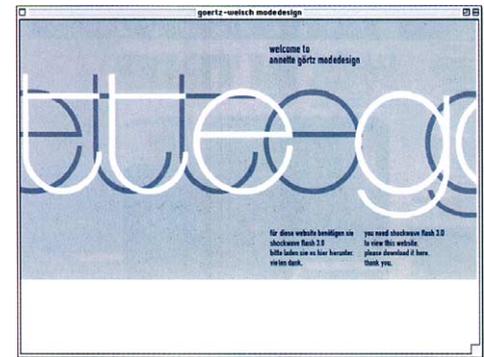


Figure 19. Goertz-welsh Fashion. Sweden, 1999. Production: VS42. Design: Joerg Waschat. Source: Beer (2000, p. 106).



Figure 20. Zender + Associates, USA, 2008. URL: <http://www.zender.com> (May 2008).

design ideals with large monochrome surfaces, an asymmetrical structure for text and images, sans serif fonts, and oversize text as a graphic element (Figure 19). The Flash animation of the Goertz front page notwithstanding, the layout, typography, and information architecture stuck closely to the presentation form of the print media.

Modernist principles of simplicity, clarity, grid-based structuring, and consistency in typography and graphic detailing continued to characterize established design-conscious sites that did not stray far from the consensus in established networks of graphic designers and design firms.

One contemporary example is Mike Zender's agency site (2007) (Figure 20), where a Swiss-style grid controls the montage of images and graphics in an asymmetrical and

airy layout with a discreet background colour and decorative web graphic features in the form of delineating dots and shading (possibly an indirect reference to the founder of Swiss-style typography, Jan Tschichold's phonetic lower-case alphabet from the early 1900s, which included conventions for spaces, commas, and periods). In terms of its interaction elements, the site sticks to contemporary conventions for positioning the navigation panel, here as a "mirror L", which provides access to text content and images within and to the right of the L-shape. Flash gives the site a "motion feel", which contributes to a sensuous and dynamic interaction, but in terms of graphic design and layout, classic pre-press conventions are maintained.

By the late 1990s it became an increasingly complex affair to develop website designs. The technology became more complicated, and sites contained more functions. This required more specialized knowledge from producers – and continuous updates from users in terms of plug-ins and add-ons. Website design converged several disciplines: programming (design by numbers: from html and CSS over Flash to databases, CMS, etc.), information architecture (content structure), interaction (navigation) and screen appearance (including graphics, fonts, layout, animations, video, background music, etc.). Website design became a team discipline involving several players with different specialties. In website design the previously distinct disciplines of programming, interaction/information architecture, and graphic design began to merge into a new entity, which helped establish the status of the web as a complex design medium.

Trash

The graphic design approach emphasized the importance of graphic-aesthetic distinctions. In the early days, art and avant-garde communities experimented with the new medium, and distinction values were neither about commercial success nor usability but about expanding

the expressive register of the medium technically, functionally, and culturally.

One of the first web artists was Auralia Harvey; in 1995 she established an artistic and experimental enterprise with the site *entropy8.com* (Figure 21), which also acted as a showcase for her parallel work as a web designer. Entropy8 combined graphically processed photographs with illusions of 3D depth. Visitors to this site were presented with striking, expressive collages with texture and layer effects that combined illusions of tactility with a digital finish and artistic references to symbolism and surrealism. The interaction design invited an exploratory behaviour. With modems and transmission speeds what they were in the mid-1990s, it must have required patience to download and experience the web pages. Overall, the site was an exotic web territory that did not strive for transparency or functionalism but instead aimed to explore the artistic potential of the medium.

Harvey's experiments were followed by expressive approaches to website design that became popular around 1997/1998 in a number of genres: music sites, experimental web agencies, designer portfolio sites, etc. Here, the distinction strategy consisted in a proclaimed rejection of the ideals that characterize digital modernism and usability functionalism as discussed above.

In contrast to the modernist requirement of the graphic designer of supporting content, these experimental sites turned the designer into a "co-auteur" and often allowed graphics to drown out the content. The conventions of the classic grid, the adjusted text columns, and the modernist ideals of "universal design" and consistency were deliberately flouted. Navigation was non-transparent and cryptic. The goal was not usability or accessible content.

These experiments took on many guises, but as a whole they have been referred to as trash or lo fi grunge; the latter term was used by web designer Curt Cloninger (2002), p. 52ff) about the eclectic montage style that was prominent



Figure 21. Entropy8. New York, 1994. Design: Aur-elia Harvey. Source: Clonger (2002, p. 15); den Boer (1997, p. 46).

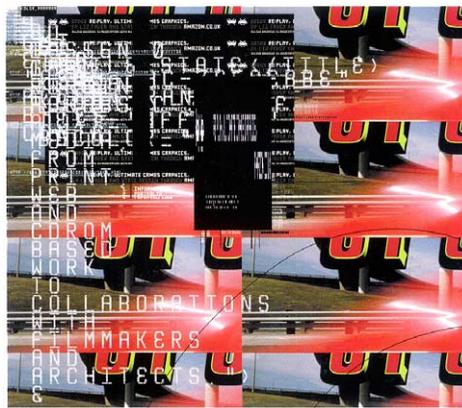


Figure 22. Potatoland, ca. 1998. Source: King, Laur-ence (1999, p. 120).

in experimental underground sites in the late 1990s. The term “trash” was used by web designers about an approach to web development where images, graphics, and “web trash” were sampled from any conceivable context and processed, scratched, sent through fax machines etc. in order to be merged together in an entirely new context.² The two terms cover some of the same expressions; in the following I shall use the term trash.

One example of the style is *potatoland.org* (1998) (Figure 22), which was developed by web designer Mark Napier as work-in-progress gallery and open-source studio site, where users could find inspiration and raw materials – references, multi-user and chat database systems, browsers, information on new programs – as well as Napier’s own



Figure 23. Errol Richardsson portfolio, 1999. Design: Errol Richardsson. Source: Own archive.

experiments, based on code design and graphic web elements.

Another example of Trash is Errol Richardsson’s combined portfolio and web agency site, which sampled elements and combined them to create new artistic works with references to 1920s dada collages (Figure 23). Richardsson made a virtue of low transmission speeds by mainly using images in extremely low resolution and exaggerated and exposed the technical constraints. Thus, only one end of the site had graphics at all – a jab at the technical constraints of “web-safe areas”.

The web firms *nitrada.de* (Figure 24) and *shorn.com* (Figure 25) featured similarly eclectic samplings of existing material and expressive graphic processing. In the *nitrada* site, the distorted low-resolution appearance of the images and graphic components was underscored by scratchy, screeching noise music; thus, the visual and auditory layers combined to evoke a trashy expression. Navigation was deliberately non-functional. The purpose was not to provide easy access to information but rather to point out the conditions of the medium and its limitations in a form of critical media-reflective iconoclasm. While many of the usability-oriented mainstream sites endeavoured to give the user a sense of direct, unmediated access to navigation and data

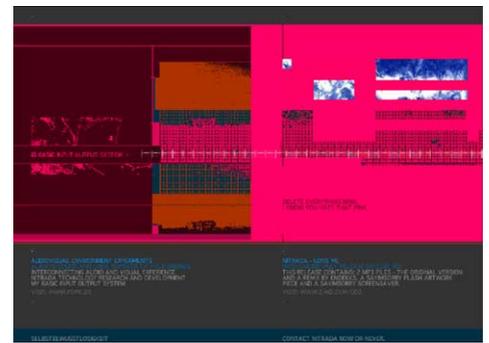


Figure 24. Nitrada. Germany, 1999. Design: Chris-tophe Stoll. Source: Own archive.

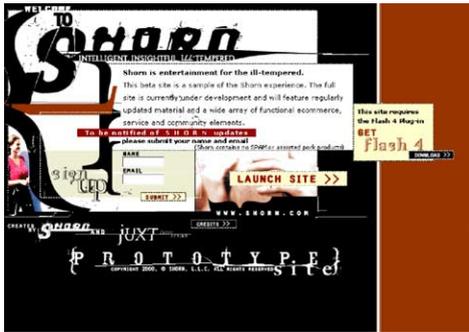


Figure 25. Shorn, 1998. Production: Shorn LLC. Designer: Juxt. Source: Own Archive.

through “WYSIWYG” interfaces, trash-designers operated in a grey zone between transparency and non-transparent mediation as a form of “sooting”.

In the late 1990s, a growing number of music and branding firms began to use a trash element. Like the bubble-up strategies in the physical world, underground web style was used as a representation strategy in the struggle for renewal and distinction. MTV’s 1998 site (Figure 26) is an example of moderate Trash, where raw and graphically distorted layered elements, images, and hyperlinked grungy headings provided access to the music station’s site.

A more recent example of Trash inspiration is the Sony Walkman site from 2002 (Figure 27). Technically, the construction was complex. The site was Flash-based and included the full multimedia register of images, video, speech, music, and dynamic texts. It used an expressive, scratchy style that combined images, music, and sound from a wide range of contexts. As in a music video the graphic design changed from page to page, within one page, and from component to component. Navigation was game-like and invited exploration; its goal was to offer an experience rather than specific information searching. It is not clear which areas had navigation function, where one might go, or how to get around.



Figure 26. MTV, ca. 1996. Source: Own Archive.

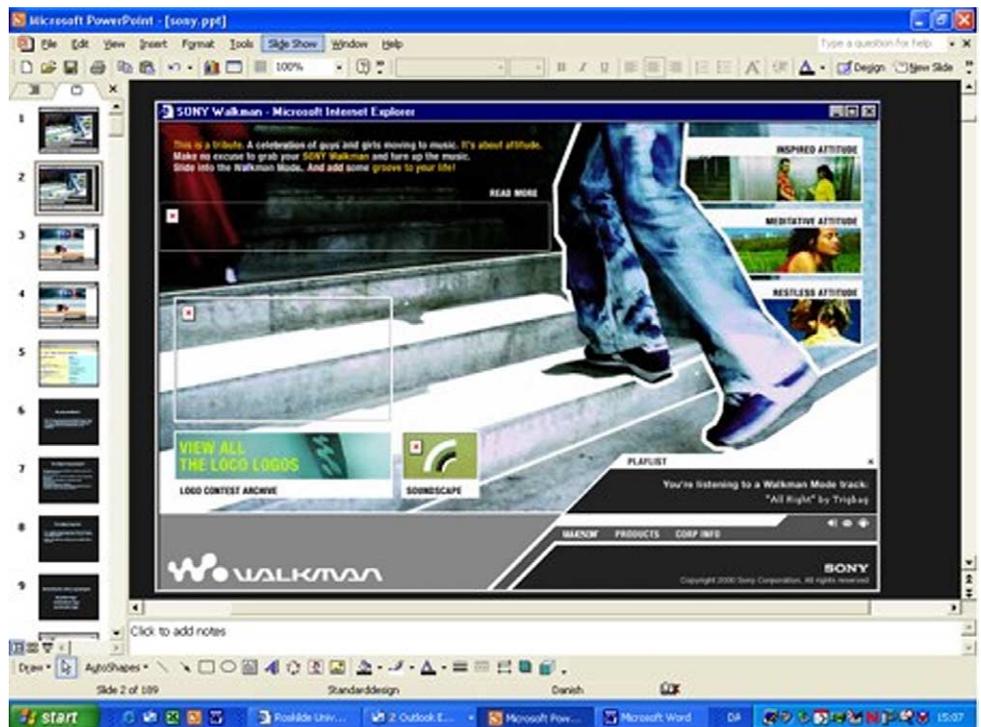


Figure 27. Sony Walkman, 2003. Source: Own Archive.

Many of the web designers who used the Trash style had a background in graphic design, but rather than the established networks of web agencies and firms, they were oriented towards postmodernism and deconstructivism. There are a number of similarities between Trash-sites and graphic designers such as David Carson and publications such as *Beach Culture* and *Emigre*. Like graphic postmodernism, they rejected functionalism, here expressed in a rejection of the ideal of the “service function” of web design and web navigation. Users may have to work hard to decipher the content and navigate the site. The demand for legibility, clarity, and easy access to information is flaunted in favour of distortions. In the Trash style, the graphic expression is experimentally and artistically motivated; it is not subservient to content or navigation purposes.

While the modernist principles were widespread among established graphic designers, trash was popular with the new web designers graduating from design colleges, which began to offer classes in web design from around 1996/1997. This made the web designer profession more established as a discipline with graduates who had not simply learned the trade as a sideline to interface development or graphic print design. Many young web designers were inspired by postmodernism and deconstructivism. The basis was still the print medium, but many web designers had a background in and were inspired by games and computer graphics.

Pixel Style

In the late 1990s, computer games and computer graphics inspired stylistic expressions based on exaggerating and exposing the pixels that made up screen images. They were inspired by the expression of old computer games, arcade games, and game consoles. Navigation was often playful and non-transparent, resembling a game. These expressions I have referred to as *Pixel Style*. It is mostly seen

in the genres gaming sites, music portals, fanzines, designer inspiration sites, etc., and around 1999/2000 they began to replace trash in some of these contexts.

Examples of the Pixel Style include the chat and meeting place hotels *habbohotel.com* (Figure 28) and *icontown.de* (Figure 29), which is still online, and where visitors may become citizens in a virtual town which they help to expand by constructing houses, gardens, and factories. Both are examples of an isometric pixel style that makes a virtue of using as few pixels as possible to create recognisable figures or achieve maximum effect. Another example is a designer portfolio site by Craig Robinson (Figure 30) that features little pixelized caricatures of various celebrities. Like the early, primitive computer games he tries to achieve maximum expression with a minimum of pixels.

Here too, the style spreads from experimental contexts to the more commercial arena. DaimlerChrysler’s traffic safety site *Mokitown*

(Figure 31) portrayed a colourful world resembling Robinson’s miniature animations but with more detail and colour saturation, like an arcade game. Similarly, *eboy.com* drew on expressions from game consoles, mixing European and Japanese cartoon aesthetics.

Pixel style may be seen as a conceptual rebellion against the styles and expressions that sprang from the print media, and found its inspiration in alternative sources like computer games, free from the norms and guidelines that characterized mainstream graphic communication and web design.

A variant of the pixel style is *kawaii*,³ which takes its inspiration from Japanese cartoons, commercial graphic design and wrapping paper. It aims for a cute and sentimental style; in web design this is combined with American *My Little Pony*-style and *Hello Kitty*-style.

The pixel style was popular on the web in the late 1990s in children’s sites and gaming sites, but it also appeared in designer inspiration and web agency sites. A combination of



Figure 28. *Habbo Hotel*. URL: <http://www.habbohotel.com>



Figure 29. *Icon Town*, 1997/98. Design: Bernd Holzhausen. URL: <http://www.icontown.de>

kawaii and pixel style is seen in *futurefarmers* (Figure 32), which brings New Age music and cutesy cartoon style together in a pixelized

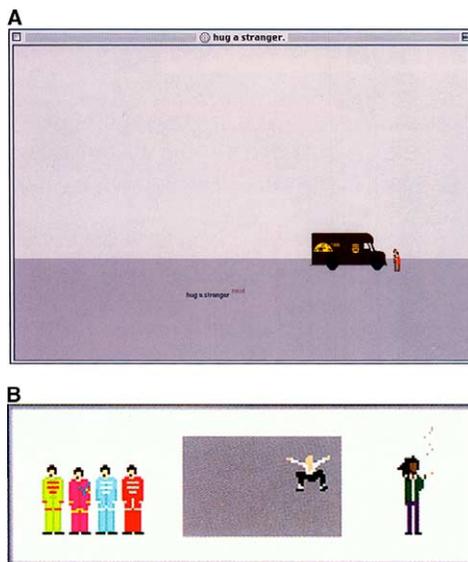


Figure 30. *FlipFlopFlyin* (*Mini-Pops – The Beatles, Moby, Bob Marley*). London, 2002. Design: Craig Robinson. Source: *Cloning* (2002, p. 126).



Figure 31. *Mobilekids*. USA, 2003. Production: DaimlerChrysler.

universe that forms a combined gaming, portfolio, art, and web agency site.

Today, new genres and styles develop and converge continuously and rapidly, with varying life spans. Symptomatic of the rate of development, with a single exception none of the sites described in this article still exists on the web.⁴ That highlights the need for historical documentation in this domain.

Concluding remarks

Web design is a field in rapid development, which has developed, in just a few years, from a primitive text-based tool into a sophisticated design medium.

This article has demonstrated that website development can be analysed from a genealogical and design-historical point of view. By pointing out some genre and style formations, the article has analysed various design trends and some of the complex technical, usage, and ideological-cultural contexts that they emerged from.

The key point of the article is that the development of the web is driven mainly by demands from producers and users for renewal and differentiation, reflected in various technical, functional, and symbolic distinction strategies for website design. The article identifies these distinction strategies by applying the concepts of genre and style, where genre is defined as a stabilizing, convention-based “framework” for website design that connects senders and recipients in a joint agreement concerning development and use, and where

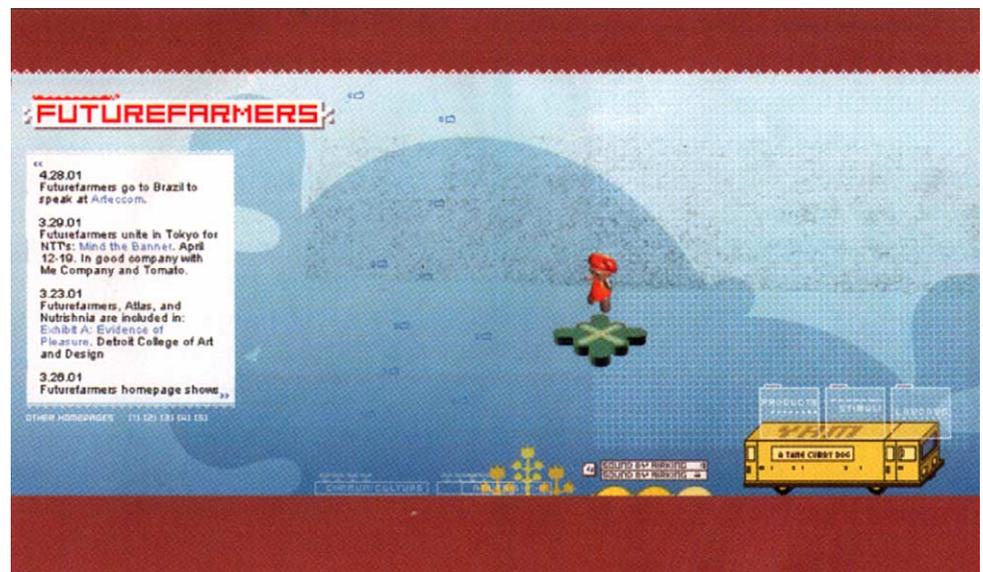


Figure 32. *FutureFarmers*. Design: Amy Franceschini. URL: <http://www.futurefarmers.com>

style is defined as a modifying aspect – the tone and accent – that varies or disrupts genre conventions. The article claims that distinctions are achieved by consolidating, varying, or violating conventions, and that this constitutes the driving force in the history of web design. This development is exemplified through a number of styles: html-style, usability functionalism, digital modernism, trash, and pixel style, and some of the commercial and avant-garde genres that they relate and contribute to.

So far, web design history has been the object only of sporadic interest and documentation. Until now, there have been no attempts at developing a classification or nomenclature for web genres and styles from a design-historical point of view. However, the growing interest in the various design forms of the medium and the emergent attempts at analysing them may be considered early steps in that direction.

In developmental practice, naming web design forms may help consolidate the characteristics of genres and styles through “discursive acknowledgement”. This acknowledgement begins with the naming and discussion of distinct genres and styles. This conceptualization will raise them to a generalizing level, which may have both a regulating and a dynamic function, for example by helping producers of bank or advertising sites relate to existing genres and styles and future users.

Analysing genres and styles in the framework of design history may also lead to the consolidation and “canonization” of certain genres and styles. This is seen in critical publications on art and media history, which have helped establish consensus on a certain genre or style; for example there is a general consensus among art historians concerning the definition of “impressionism” or “expressionism” and the artists associated with them.

The design-historical documentation of genres and styles in this article is a step towards establishing web design as an object area in the institutional field of design history. In the long

term, it may be possible to establish institutional sorting systems for website design similar to the ones we know from art, media history, or graphic communication. The classification proposed here is one attempt at mapping the design history of some of the genres and styles that exist today and might exist tomorrow.

Notes

- 1 For example, Art Center of Design, Pasadena began to offer web design as a subject in 1997. In Denmark, web design was included in the degree programme Space Invaders and at the Graphic Arts Institute of Denmark in 1996/1997. Some places were off to a later start, for example the London School of Graphic Design, which only began to offer classes in web design in 2000 (own research through telephone surveys).
- 2 See also interview with web designers Michael Schmidt and Marius Hartmann.
- 3 In Japan the concept kawaii means cute.
- 4 The exception is Kevin Hughe’s Honolulu Community College site, <http://honolulu.hawaii.edu/dinos/dinos.1.html> (Figure 7).

References

- Altman, Rick (1999). *Film/Genre*. London: British Film Institute.
- Beaird, J. (2007). *The principles of beautiful web design*. Collingwood, Australia: Sitepoint.
- Beer, Günter (2000). *Wen design index*. Amsterdam, Singapore: Pepin Press.
- Bordwell, D., Staiger, J. & Thompson, K. (1985). *The classical Hollywood cinema: Film style & mode of production to 1960*. London: Routledge.
- Bordwell, David, & Thompson, Kirstin (1994). *Film art: An introduction*. New York: McGraw-Hill.
- Black, Roger, with Sean Elde. (1997). *Websites that work*. Berkeley, CA: Adobe Press.
- Cloninger, Curt (2002). *Fresh styles for web designers*. Indianapolis, Indiana: New Riders.
- Engholm, Ida (2003). *WWW’s designhistorie – Website udviklingen i et genre- og stilteoretisk perspektiv*. PhD dissertation, IT University of Copenhagen.
- Engholm, Ida, & Salamon, Karen Lisa (2005). *Webgenres and -styles as socio-cultural indicators – an experimental, interdisciplinary dialo-*

- gue*. In: Proceedings in the Making, Copenhagen 29 April–1 May 2005.
- Fleming, Jennifer (1998). *Web navigation: Designing user experience*. Bejiing, Cambridge, Cologne: O’Reilly.
- Gillies, James, & Cailliau, Robert (2000). *How the web was born*. Oxford/New York: Oxford University Press.
- Gluskin, Lisa (2002). The web in the seventh generation. *How, February*, 78–84.
- Johnson, Jeff (2000). *GUI bloopers: Don’ts and do’s for software developers and web designers*. San Francisco, New York: Morgan Kaufmann Publishers.
- Lawson, Bryan (2006). *How designers think: The design process demystified*. Oxford: Elsevier.
- Lynch, Patrick J., & Horton, Sarah (1999). *Web style guide: Basic design principles for Creating Websites*. New Haven/London: Yale University Press.
- McIntire, P. (2007). *Visual design for the modern web*, Indianapolis, IN: New Riders.
- Meggs, Philip B. (1998). *A history of graphic design*. New York, Singapore, Toronto: Wiley.
- Mullet, Kevin, & Sano, Darell (1995). *Designing visual interfaces*. Sun Press.
- Niederst Robbins, J. (2007). *Learning web design a beginner’s guide to X(HTML), style sheets, and web graphics* (3rd ed.). Beijing: O’Reilly.
- Nielsen, Jacob (1995–). *Useit.com*
- Nielsen, Jacob (2000). *Designing web usability*. Indianapolis, IN: New Riders.
- Nielsen, Jacob, & Tahir, Marie (2001). *Homepage usability: 50 Websites deconstructed*. Indianapolis, IN: New Riders
- Miriam Rivett (2000). Approaches to analysing the web text. *Convergence 2000*, 6(3).
- Rosenfeld, L., & Morville, P. (2006). *Information architecture for the World Wide Web* (3rd ed.). Cambridge, MA: O’Reilly.
- Sharp, H., Rogers, Y., & Preece, J. (2007). *Interaction design: Beyond human computer interaction* (2nd ed.). Hoboken, NJ: Wiley.
- Siegel, David (1996). *Creating killer websites: The art of third-generation site design*. USA: Hayden Books.
- Veen, Jeffrey (1997). *Hot wired style: Principles for building smart websites*. San Francisco: Wired Books.
- Veen, Jeffrey (2001). *The art & science of web design*. Indianapolis, IN: New Riders.
- Zeldman, Jeffrey (2001). *Taking your talent to the web: A guide for the transitioning designer*. Indianapolis, IN: New Riders.
- Zender, Mike, Fine, Jeff & Albertson, Rich (1995). *Designer’s guide to the internet*. Hayden Books.