# What are the Characteristics of Digital Genres? - Genre Theory from a Multi-modal Perspective

Dr. Inger Askehave

Department of Languages and Intercultural Studies, Aalborg University, Kroghstraede 3, 9220 Aalborg O, Denmark askehave@hum.aau.dk

Dr. Anne Ellerup Nielsen Faculty of Language and Business Communication, Aarhus School of Business Fuglesangs Allé 4, 8210 Aarhus, V, Denmark <u>aen@asb.dk</u>

# Abstract

This paper explores the possibility of extending the functional genre analysis model to account for the genre characteristics of non-linear, multi-modal, webmediated documents. The extension involves a *twodimensional* view on genres which allows us to account for the fact that digital genres not only act as *text* but also as *medium*. Genre theoretical concepts such as 'communicative purpose', 'moves', and 'rhetorical structure' are being adapted to accommodate the multimodal, non-linear characteristics of web texts. The homepage (the first, introductory page on a website *not* to be confused with the 'personal homepage' genre) constitutes the material for the theoretical discussions and the exemplary analyses.

# 1. Introduction

Since its introduction in the 1980s, the concept of genre has been a matter of considerable discussion in research communities throughout the world. In Australia systemic functional linguists such as Martin (1992) and Eggins (1994) have used the concept to complement the hallidayan notion of register, in America the seminal work of Miller (1984), Bazerman (1984), Swales (1990), and Yates and Orlikowski (1992) have contributed to a wider understanding of the concept of 'genre' by defining the concept, introducing models suitable for performing genre analyses, and not least capturing the complexities of genre systems and genre development. And finally, in Hong Kong Bhatia (1993) has paved the way for the practical application of genre theory by suggesting a comprehensive framework for analysing non-literary genres - especially ESP texts. While these genre studies offer important insights into the notion of genre, it is also a well-known fact that most of the above genre theorists (except for Yates and Orlikowski) tend to focus on genres transmitted through speech or print. Recent years, however, have seen a steady increase in genre research which deals with genres transmitted through one of the most significant electronic media of today: the Internet. See for example Yates & Orlikowski (1992) on the production, reproduction, and modification of genres over time – e.g. the memo's transfer to the electronic medium; Yates et al. (1999) on the transfer of genres into the computer conferencing medium; Roussinov et al. (2001) and their study of people's recognition of genres on the web, Crowston & Williams (1997) on the reproduction and adaptation of genres on the web; Ryan et al. (2003) on the evolution of US state government homepages, and finally Furuta & Marshall (1996) on genres used on the Internet to facilitate information. In this paper we shall, however, not follow directly in the foot steps of the above researchers of genres in electronic media, instead we propose a closer examination of the research object - the electronic genres themselves. Our research purpose involves a controversial claim namely that it may be necessary to incorporate the notion of 'medium' into the notion of 'genre', i.e. we cannot account for the characteristics of genres mediated on the Net (for example a corporate profile) if we simply analyse 'print-outs' of the web profiles and treat them as static products and, thereby, neglect the fact that the Internet as a medium has a number of characteristics which significantly influence and contribute to the way the web-mediated genres look and are used. Thus the aim of the paper is twofold. First the paper serves as a theoretical exploration of the extremely popular and widely used Swalesian genre model. It attempts to establish whether the model is suitable for capturing the essence of webmediated genres or whether the digital context of web genres may call for a reconsideration of - or at least provides new insights into - the constituents of the genre model. Second, even though a systematic characterization of web-mediated genres is outside the scope of this paper, we use the homepage as exemplary material in our theoretical discussion and in that way provide a tentative characterisation of the homepage as a genre. The reasons for choosing the homepage are (i) it is a web-generated genre in the sense that it came into existence with the advent of the WWW and has no direct parallel outside the Web (as opposed to other texts on websites such as extracts from annual reports, corporate brochures, etc.) and (ii) it is among the first web-generated texts to have reached genre status which means that the form and content of the homepage is now becoming conventionalised after more than 10 years of 'rhetorical anarchy'.

# 2. The Concept of Genre in Functional Genre Theory

Ever since the 'new', functional genre movement began to gather momentum in the early 1980s, there has been a widely-shared view that genres are best conceptualised as goal-directed or purposive. This emphasis on functionality is clearly reflected in the definitions of genre provided through the years – perhaps most eloquently expressed in the words of the systemic functional linguist, J.R. Martin: "Genres are how things get done, when language is used to accomplish them" (1985: 250). Yates et al. (1999: 84) define genres as "socially recognized types of communicative actions [...] that are habitually enacted by members of a community to realize particular social purposes. A genre may be identified by its socially recognized purpose and shared characteristics of form.".

One of the most extensive definitional discussions of the concept of genre, however, remains that of Swales (1990):

> "A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style." (Swales 1990: 58)

The above definition does not only emphasise the purposive nature of genres, it also makes an interesting claim concerning the way genres 'look'. The communicative purpose constitutes the *rationale* for the genre which means that the purpose of a genre (what we try to accomplish in a social context) triggers a particular text structure and – more often than not - a host of conventionalised verbal and visual rhetorical strategies. To conceptualise this interdependency, Swales (1990) suggests the following three-level genre model whose three constituents capture the essence of what we call 'genres':

# Communicative purpose Realised by Move structure Realised by Rhetorical strategies

The concept of 'communicative purpose' is used in Swalesian genre theory to account for the social purpose of a given text genre and it is also the primary criterion for classifying a certain communicative event as a 'genre' (though critical voices have been raised concerning the difficulty of using communicative purpose as a privileged criterion (Askehave & Swales 2001)). 'Move structure' refers to the conventionalised internal structure by which a particular text genre unfolds (i.e. a text consists of a number of functional units, or 'moves', which, when added together, realise the communicative purpose of the genre). Finally, the 'moves' are realised by a wide range of rhetorical strategies (verbal as well as visual) which realise the particular communicative intention of each move in the text.

# 3. The Homepage as a Web-Mediated Genre

In the Swalesian genre model, the notion of 'medium' is clearly separated from the notion of 'genre'. However, when trying to apply the genre model to account for the genre characteristics of web-mediated texts one realises that this separation is difficult to uphold. In this paper we discuss how to analyse a homepage, defined as the toplevel document of a website. Our use of the term 'homepage' is not to be confused with another common genre on the Web namely personal and corporate homepages which cover entire websites with pages of corporate or personal information. Our term 'homepage' corresponds to the French expression page d'acceuil (reception page). For similar distinctions see also Crowston & Williams (1997). The home page as a 'page d'acceuil' performs two overall functions: first it introduces the user to the general content of the site by presenting 'informative' tables of contents and providing 'enticing' text bits. Secondly, it functions as the official gateway of the website as it enables the reader to access and navigate the site by providing navigational tools or links that branch off into the website as a whole. This duality inherent in homepages may best be described by conceptualising the homepage as a front door with a door sign. The door sign indicates the name of the residents (i.e. the 'content' of the house) while the door itself is the gateway (the medium) which enables guests to enter the house and visit the residents inside. In this paper we suggest that the WWW as a *medium* conveys unique properties to the homepage as a *genre* and this co-existence of genre and medium, which seems to be ignored in traditional genre theory, is fundamental to web communication and must not be overlooked with trying to determine the genre characteristics of the homepage.

# 4. The World Wide Web as a Medium

It is well-known within media studies that "the medium is the message", as pointed out by Macluhan (1962) in the sixties. This means that, although many web genres have printed counterparts (e.g. an annual report may be published in print and on the Net), the medium adds unique properties to the web genre in terms of production, function, and reception which cannot be ignored in the genre characterisation. One of the most significant characteristics of the web medium is its use of hypertext. Hypertexts relate web texts to each other; thus enabling a non-linear transmission of information. Compared to traditional text, the hypertext system tend to place certain constraints on the reading pattern, which result in a new kind of reading referred to as hyper-reading (Sosnoski 1999: 135). The most obvious difference between 'traditional reading' and hyper-reading boils down to that of linearity; with hypertext reading being regarded as non-linear (where the reader filters, skims and scans the text), and traditional text reading being regarded as linear. Nevertheless, many researchers have started questioning whether hyper-reading can be considered a new reading technique born with and peculiar to the WWW. In fact, some literary hypertext researchers consider hyper-reading a particular reading mode, which can be found both in printed as well as in web-mediated text. Finnemann (1999) claims for example that the reading process of web texts is in fact very similar to that of traditional texts; in printed texts we also filter, skim and fragment the information (thus performing a nonlinear reading) and in web texts our reading process may also be characterised as linear because the user cannot connect to five nodes at a time but must make each connection in turn. Thus instead of operating with the linear/non-linear dichotomy, Finnemann suggests that we regard hypertext as a text system which has the capacity of activating at least two modal shifts in the reading process (1) the 'reading-as-such' being one mode (the reading mode) and (2) the navigating mode (or linking mode) being the other. The 'reading mode' leaves the user in a traditional reader position with

sequential reading as the guiding principle (similar to traditional reading, no matter whether the actual reading is strictly linear or not). The 'navigating mode' allows the reader to navigate the site and actively construct his/her own reading path through one or several sites. So when consuming web texts, the web user employs two different cognitive capacities and demonstrates two different types of behaviour when s/he shifts from the reading to the navigating mode and vice versa.

The concept of 'modal shifts' in hypertext reading offers an interesting perspective on web genres and seems to be an extremely useful tool for a refinement of the traditional genre analysis model. We suggest that the analysis of web genres should be centred round the two modes. Thus when we consider the use of the web-mediated text in the reading mode, the traditional genre analysis model seems to be an appropriate tool for a genre description (because in this mode, text consumption is in fact not very different from traditional texts). What we need then is an extension of the genre model to account for the fact that a web text also functions in the navigating mode where the text, due to its media constraints, becomes an interactive medium, used actively to navigate the website.

## 5. The Traditional Genre Model – Revisited

Our solution is to reconsider the Swalesian genre model; keep the basic premises of the model (the three-level analysis of communication purpose, move structure, and rhetorical strategies), but add the hypertextual mode (i.e. Finnemann's concept of navigating mode) to all levels of analysis, thus producing a two-dimensional genre model. Schematically it looks like this:

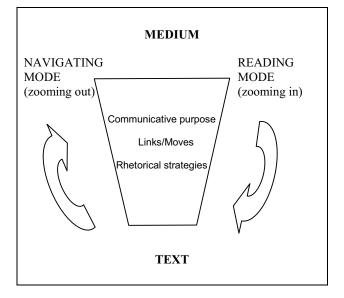


Fig 1: The two-dimensional genre model

The model above is supposed to signify that web documents are two-dimensional:

- Users of web documents carry out modal shifts shifts between acting as a reader and acting as a navigator.
- Shifts are circular there is a constant change between reading and navigating.
- When in the reading mode, the *reader* zooms in on the text and uses the web document as if it was a 'printed' text (basically *reads* the text).
- When in the navigating mode, the *navigator* zooms out of the text and uses the web document as a medium (exploiting its navigation possibilities).
- an account of the *generic properties* of genres on the web involves a three-level analysis of *both modes*:
  - in the reading mode, the *text* must be characterised in terms of its communicative purpose, moves, and rhetorical strategies.
  - in the navigating mode, the *medium* must be characterised in terms of its communicative purpose, links, and rhetorical strategies.

# 6. The Interplay between Medium and Genre

The model of analysis proposed above not only suggests a close interplay between medium and genre but claims that media properties influence both the purpose and form of web-mediated genres and should therefore be included in the genre identification. This is a controversial view and other researchers warn against this position. For example Yates et al (1999: 100) claim that "it is the genres enacted within a medium that establish the communicative purpose of the interaction not the medium". Nevertheless, Yates & Orlikowski (1992: 310) recognize an interplay between medium and genre when they claim that "Although our notion of genre is clearly differentiated from that of medium, we recognized their interaction by positing that medium may play a role in both the recurrent situation and the form of a genre.". In Yates et al. (1999: 84) they become even more explicit, suggesting that the medium (which they then define as an aspect of form) can indeed be used to identify genres. The reason for this uncertainty and confusion when it comes to the role of the medium in characterising and identifying genres seem to have appeared concomitant with the shift in genre research from traditional printed genres

to genres published in electronic media such as the WWW.

# 7. Analysis of the Homepage – Using the Two-Dimensional Genre Model

In the sections which follow we shall put our twodimensional genre model into practice. For practical reasons we have decided to make a rather linear presentation, which, unfortunately, does no do justice to our view of web-mediated genres as dynamic documents with constant modal shifts.

However, before putting our model to the test, we would like to address the methodological and empirical framework of our analysis. First, our analysis does not involve quantitative studies of a large corpus of web text nor does it include user surveys or reception analyses. The implications are that our analyses do not provide us with a valid and representative identification of the genre characteristics of homepages. On the other hand our purpose is not to establish a taxonomy of digital genres and/or genre specific features of digital texts. Nor do we intend to carry out a field study of the social practice of digital genres in a particular setting. Rather our goal is to propose an analytical framework for genre analysis which does not reduce media specific elements to something which is beyond the genre itself. Our analysis is purely interpretative relying on our own observations as default readers of websites. We mainly restrict our empirical analysis to a single prototypical corporate homepage (i.e. the introductory page of a corporate website) from the corporate website of a large European industrial company, Danisco. The Danisco homepage (www.danisco.com) is the 'front page' of a large commercial site used by the company to communicate with stakeholders (e.g. investors, agents, retailers, local politicians, the press, consumers etc.). We thereby exclude other types of homepages such as individual homepages, family homepages, splash screens, portals, etc. from our examination. This also means that the analysis is an exemplary analysis only - motivated by our wish to put our extended genre model to the test.

# 8. Applying the Extended Genre Model -Analysis of Functional Units (Moves and Links) on the Homepage

Limits of space do not allow us to make an analysis of the homepage at all levels (communicative purpose, move/links and rhetorical strategies), we shall, therefore, restrict our analysis to that of 'moves/links' in the reading and the navigating modes; because at this level the interplay of medium and genre is most obvious.

#### 8.1 Analysis of moves in the reading mode

The analysis of moves in the reading mode is straightforward and similar to that of traditional texts. The moves are clearly distinct with boundaries between them marked off by (i) changes in the type of information present in the different sections of the homepage (content) - often supported by (ii) changes in frames, empty space, shifts in colours, shifts in font size/type, etc.

A brief look a various corporate homepages suggests that the following moves are prototypical on the homepage in the *reading mode*:

#### Attracting attention

This move is meant to attract the attention of the reader when entering the homepage.

#### Greeting

This move accentuates the door metaphor of the homepage; the purpose is to create a feeling of welcoming someone at your doorstep.

#### **Identifying sender**

This move serves to identify the web-owner. The identification is quite important from the point of view of both web user and web-owner; it enables the web user to orientate him/herself and keep track of his/her whereabouts on the Net, and it plays an important role as part of the web-owner's image creating strategy. This move is often realised by a logo.

## **Indicating content structure**

This move, often referred to as *the main menu*, is one of the most fundamental characteristics of the home-page. It provides the web user with a clear overview of the content of the website.

#### **Detailing (selected) content**

This move provides more detailed information about the topics listed in the main menu in the form of small news summaries. Apart from detailing information, the move also realises the news presenting and image creating function of the homepage as news of various kinds seem to be the preferred content of this move (be it international/national news or news of the self-promotional kind (financial results, product news, latest events in the company or community, etc.).

#### **Establishing credentials**

This move is meant to establish a trustworthy image of the web-owner.

## **Establishing contact**

This move enables the reader to contact the sender.

# Establishing a (discourse) community

This move enables loyal or frequent web users to establish communities within the website (often realised by a login facility).

#### Promoting an external organisation

This move promotes another company, product, etc. It usually takes the form of a banner advertisement.

As the name suggests the move structure of a text indicates a preferred way of organising the text in order to realise a particular communicative purpose (Bhatia 1993: 30). However, the homepage is a genre which exploits the entire spectrum of rhetorical creativity - also in terms of text structuring. There is a vague tendency towards a preferred text organisation which is similar to that of newspaper front pages: the most important information first and the least important last. However, web documents (including the homepage) are texts in which sequence and linearity seem to be suspended. The web text is not intended to be read in its entirety but rather scanned by the reader before s/he finally decides which elements to read. Thus the author of the homepage may have decided on a particular path for the reader to follow when entering the homepage but in the scanning process the reader selects the element which will be read first, second, third etc. thus making his/her own personalised move structure.

#### 8.2 Analysis of links in the navigating mode

The next step in our genre analysis is to analyse the realisation of the communicative purpose in the *navigating* mode, namely to provide access to the website. In the reading mode, and within traditional genre analysis, communicative purposes are realised by moves. However, in the navigating mode we cannot use this unit as a structural/functional criterion. Instead we suggest that the communicative purpose is realised by *hyperlinks* witch tie together the text chunks into a web structure. And since hyperlinks are an inherent property of the web medium as such - and not related to specific text genres - we suggest an investigation into the functional value of links on the web in general.

A link may be defined as a clickable object (for example appearing as an icon or as underlined/highlighted text as in "<u>read more</u>") which allows the navigator to go from one place to another on a webpage or a website. Present day research into the functional value of links seems to focus on how one (mostly the text producer) links documents on the website in terms of two variables: (1) "what should come first and what should come last" i.e. using *structural links* to organise the information on the website hierarchically, or (2) "what would the reader like to know more about", i.e. organising the documents in an

associative manner, adding *associative links*. However, our notion of the functional value of links is concerned with the *relationship* established *between* the two chunks of information being connected; i.e. what *is webpage* B (the textual point of destination) doing in relation to *webpage A* (the textual point of entry)? We shall adopt a 'linear' approach in our analysis of links and take *our point of departure* in the link itself, i.e. the clickable objects on the homepage, referred to here as 'webpage A'.

Links on webpage A are used to provide access to the entire website. However, there are different ways of doing this. Either the links provide access to very general topic categories at the upper levels of the website (which we refer to here as 'generic' links) or they provide access to more specific information at a lower level on the website serving as small previews or appetizers of what the website also contains (referred to here as 'specific' links).

**8.2.1 Generic links.** Generic provide access to the main topics on a website. Due to their general, topical status, generic links are frequently inserted in the top section of a web document (e.g. in the navigation bar or a hyperlinked table of contents) where they provide shortcuts to the main subject areas of the website as in the example below from www.danisco.com.

home	products	<u>about</u>	sustainability	people
		us		

This placement leaves the generic link with a particular high information value as ideal and salient information which is in line with the above-mentioned pragmatic relevance value of links in general. Many of the generic links are static - in the sense that they act as navigation bars on the entire site; and not only on the homepage. Generic links are always of a descriptive nature as the function of a generic link is to bring the navigator on to an information chunk which identifies a general topic. In other words the link brings the user from a point of entry of the topic (A) to the topic itself (B). The link is a kind of 'empty' content category - waiting to be 'filled out'; which also means that the generic link is thematically 'decontextualised' in the sense that it points to nothing but its own topic at a 'deeper' level on the website (hierarchically speaking) and contains no explanation of its relevance besides the one given to it by its status as link. Linguistically, generic links are often realised by a noun phrase (as e.g. the term 'investor' in the navigation bar above) and if the link is accompanied by a text, the text is usually a meta-discoursal text providing navigational information, not information about the topic, as in the example below:

You can also download the report as a PDF file.

8.2.2 Specific Links. The homepage is more than a table of contents; it is also meant to evoke curiosity in the navigator, making him/her want to enter the site. For this particular purpose the web producer provides his/her homepage with *specific* links which function as appetizers or previews of what is to come. Specific links are thematically contextualised. They are usually introduced by 'leads' which explain the relevance of the link; and where the link in generic links was an 'empty' category, specific links (not least because of their leads or 'paratexts') not only introduce the topic itself, but provide us with information about the topic and show the relevance of the link. The specific link takes the navigator to B where s/he may find a text chunk with a more elaborate description, a causal explanation, an argument or a brief story, etc. in support of the topic in A. Specific links are often inserted further down the homepage primarily containing real information and the links are of a changeable nature; text connected by specific links change by the hour, day or week which helps accentuate the dynamic nature of web texts as opposed to printed text. Here is an example of a specific link from the danisco.com homepage:

#### **Press release**

## Danisco Venture invests in Dutch biotech company

Dutch biotechnology company CatchMabs BV announces the closing of its second round of financing including Danisco Venture. read more

The specific link, as we define it here, consists of the lead *and* the clickable object. The lead presents the topic – sets the scene, so to speak, and gives the navigator an idea of what type of information to find behind the link whereas the link is the actual 'gateway'. In the example above the link and the lead constitute the first macrosequence in a narrative sequence – i.e. the orientation stage. It sets the scene, but to complete the story, the navigator has to click on 'read more' and be transferred to webpage B where the entire news report - the press release - can be found.

**8.2.3 The Distribution of Generic and Specific Links on the Homepage.** Both generic and specific links are placed on the homepage to provide access to the rest of the site – though in rather different ways. Generic links give an overview of the main topics covered on the website, which is quite important on the homepage because the navigator tends to use the homepage as a gateway to the 'real stuff'. It is, therefore, hardly surprising that generic links are more frequent on the homepage compared to specific links. Specific links, on the other hand, function as

appetizers, they are previews of what the website contains; their primary function is not to provide an overview of the website content but rather to 'lure' the navigator into accessing the site. The presence of specific links on the homepage is limited. The reason may be that the homepage is the front door of the website. Generic links constitute a navigational map and enable the web user to work his/her way through the website in a systematic way. Nevertheless, specific links perform an important role on the homepage as well. They are placed here to make the homepage more interesting and relevant to the more 'hesitant' navigator, whose way into the website is not guided by a particular route, but is based on intuition, a sudden impulse; i.e. the navigator who may not be looking for any particular information but is more prone to act on specific links with enticing leads.

As it appears from the examples above it is possible, and fruitful, to add a functional dimension to links. Our research shows that adding links to the homepage is not simply a question of enabling the navigator to 'move on' but rather a question of connecting items on the web page in a meaningful and sensible way, setting up a semantic relation between webpage A and webpage B. The notion of functional links may thus prove useful for the text producer when designing his/her homepage as it provides him/her with an idea of which information warrants a generic and a specific link. And, if choosing a specific link, what kind of semantic relation works best. I.e. should s/he introduce a topic such as 'sustainability' by using a generic link which suggests to the navigator that "on this site you can find information on sustainability or should s/he anticipate a discussion of the topic already on webpage A and use a specific link which already presents the information from a particular angle?

#### 9. Conclusion

The aim of this paper was to 'up-grade' the genre model and suggest ways in which the traditional model could be extended to account for web-mediated texts. Since the web medium forms an integral part of web genres we proposed a solution which incorporates medium-related features into the genre model. Therefore, the notion of modal shifts - where the web user alternates between reading the text and navigating the medium - was introduced. The notion of modal shifts led to the development of a two-dimensional genre model whose constituents are more or less similar to the traditional genre model but which accounts for the characteristics of web documents in the two modes. The most significant addition to the traditional genre model was the introduction of links as functional constituents in web documents. Our findings suggest that adding links to the homepage is not simply a question of enabling the navigator to 'move on' but rather a question of connecting items on the web page in a meaningful and sensible way, setting up a semantic relation between webpage A and webpage B. A systematic genre characterization of web-mediated genres was outside the scope of this paper. A thorough investigation into the characteristics of web genres should obviously not be restricted to one homepage but calls for in-dept analyses of the interplay between the web medium and other genres and sub-genres used by various discourse communities on the Net.

Finally, in the paper we suggest that web genres cannot be characterised as genres in isolation from their medium. However, we also realise that in spite of the fact that we all seem to know the meaning of 'genre' and 'medium', a clear distinction between and definition of the two terms – not least the borders between the two - still remains to be seen. We suggest a closer investigation into these concepts which may help clarify the difference between medium and genre – or which (as we do here) acknowledges that in some cases we may talk about 'media genres' – where the two seem to be inseparable because the media is not only a distribution channel but also a carrier of meaning, determining aspect of social practice.

## 10. References

[1] Askehave, I. & Swales, J. M. (2001). "Genre Identification and Communicative Purpose: A problem and a possible solution". *Applied Linguistics* 22/2: pp. 195-212.

[2] Bazerman, C. (1984/94). "Systems of Genres and the Enactment of Social Intentions". In Freedman & Medway (eds). *Genre and the new rhetoric*. London: Taylor & Francis.

[3] Bhatia, V.K. (1993). Analysing Genre: language use in professional settings. London: Longman.

[4] Bolter, J. (2001). *Writing Space: Computers, Hypertext and the Remediation of Print*. New Jersey: Lawrence Erlbaum Associates Publishers.

[5] Crowston, K. & Williams, M. (1997). "Reproduced and Emergent Genres of Communication on the World Wide Web", *Proceedings of the 33<sup>th</sup> Annual Hawaii International Conference on System Sciences.* 

[6] Eggins, S. 1994. An Introduction to Systemic Functional Linguistics. London: Pinter.

[7] Finnemann, N. O. (1999). "Hypertext and the Representational Capacities of the Binary Alphabet". www.hum.au.dk/ckulturf/pages/publications/nof/hypertext.htm

[8] Furuta, R. & Marshall, C.C. (1996). *Genre as Reflection of Technology in the World-Wide-Web* (Technical Report): Hypermedia Research Lab, Texas, A & M. http://tamu.edu/ furuta/papers/genres.ps.

[9] Kress, G. & Van Leeuwen, T. (1998). "Front pages, (the critical) analysis of newspaper layout", in Bell, A. & Garrett, P. (eds). *Approaches to Media Discourse*. London: Black-well.

[10] Landow, G. (1997). *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*. London: The John Hopkins University Press.

[11] Martin, J.R. (1985). "Process and Text: two aspects of semiosis". In Benson, J. & Greaves, W (eds): *Systemic Perspectives on Discourse. Vol. I: Selected Theoretical Papers from the 9<sup>th</sup> International Systemic Workshop.* Norwood, NJ: Ablex.

[12] Miller, Carylon R. (1984/94) "Genre as Social Action". In Freedman & Medway (eds). *Genre and the new Rhetoric*. London: Taylor & Francis.

[13] Ryan, T., Field, R. H. G. & Olfman, L. (2003). "The Evolution of US State Government Home Pages from 1997 to 2002". In *International Journal of Human-Computer Studies, no 59, pp 403-430.* 

[14] Roussinov, D., Crowston, K., Nilan, M., Kwasnik, B., Cai, J. & Liu X. (2001). "Genre Based Navigation on the Web", *Proceedings of the 34<sup>th</sup> Hawaii International Conference on System Sciences.* 

[15] Sosnoski, J. (1999). "Configuring as a Mode of Rhetorical Analysis". In Jones, S. (ed). *Doing Internet Research*. London: Sage.

[16] Swales, J. M. (1990). *Genre Analysis – English in academic and research settings*. Cambridge: Cambridge University Press.

[17] Yates, J. & Orlikowski, W. J. (1992). "Genres of Organizational Communication: A Structurational Approach to Studying Communication and Media". In Academy of Management Review, Vol. 17, No. 2, pp. 299-326.

[18] Yates, J., Orlikowski, W. J. & Okamura, K. (1999). "Explicit and Implicit Structuring of Genres in Electronic Communication: Reinforcement and Change of Social Interaction". In *Organisation Science, Vol.10. No. 1, pp. 83-117.*