ejournalist

Understanding the Impact of the Internet:On New Media Professionalism, Mindsets and Buzzwords

Introduction

In 1998 the Web-based bookstore Amazon.com claimed to offer more than 100 new books on the topic of the World Wide Web. Books which can be considered to be quite outdated at the time of writing this particular essay. The relevance of these and other publications lies therefore predominantly the tools they can offer in understanding the impact new media technologies have on different aspects of society over time. Certainly the Internet has gained in popularity among scholars in the communications field, especially after the special issue of the authoritative Journal of Communication on the topic in 1996, special issues of journals like Convergence and the Journal of Computer-Mediated Communication (online) and the introduction of a new journal on the topic called New Media & Society. In terms of journalism the trade periodicals in most Western countries – Der Journalist in Germany, De Journalist in The Netherlands, the Columbia Journalism Review in the US, the British Journalism Review in Great Britain and the Australian Journalism Review in Australia to name but a few – have addressed the topic over and over again since the first journalistic Websites came online (since 1992 in the US and elsewhere, see Lapham, 1995). The central questions which have been addressed to some extent in these publications can be summarized as:

- 1. What kind of business model works for journalism online (i.e. where can we make profit)?
- 2. Will traditional newsmedia or even traditional news values dissappear because of the Internet?
- 3. Should there be journalism at all online?
- 4. If the answer to question 3 is "Yes", what kind of journalism should it be and what kind of skills are required of journalists working for and with the Internet?

The first two questions come from a more or less worried and even anachronistic point of view (see Deuze, 1998). At this point nobody earns money through online journalism and the general consensus in the industry seems to be that there is "no profit in content" (Gardner,

the assumption that this network of computers can be seen as a testing ground for new kinds, genres and types of journalism, not as the publishing arena for a fully independent, clearly boundarized and self-sustaining news venture on its own. This may lead to a new business model for journalism, but if we assume that all media will converge sooner or later (anywhere between 2 tot 10 years to come), thinking of an 'online-only' business model does not seem to be all that profitable. A future model for a newsmedium should take media convergence (cf. multimedia) and digitalization as a given point of departure. This assumption discards an answer to the second question: no mediumtype will dissappear *because* of another type – at least, this is what media history tells us. But mediatypes are converging, both in terms of technologies as in terms of organization and production patterns – of which the integrated newsroom (for example the Chicage Tribune in the US) and the merger of content and infrastructure companies (for example Time Warner and AOL) are early 'warning signs'.

The third question is an intriguing one. After the first lustrum of online journalism in most countries the initial enthusiasm (in terms of investments and development of infrastructure) for online journalistic ventures has faded. Reports on the sacking of hundreds of online media staff worldwide are paramount (see the infamous 'pink slip parties' in the US). Not a single newssite is making money, or so it seems. The only ones which are reportedly are doing fine are those linked to well-established traditional brands (such as CNN.com and the BBC online newsservice) or those that offer specialized (niche) services such as stock market updates, analyses and sportsscores (Screen Digest, 2000). Studies of how online newssites make use of the typical advantages of the Internet – hypertextuality, multimediality and specifically interactivity – show that most sites do not offer much 'extra' online; its sometimes even hard to find a single editorial e-mail address on these Websites (see Deuze, 1999; Jankowski and Van Selm, 2000). So what do we need journalism online for if it does not seem to offer anything else beyond its 'traditional' content? Here one may reiterate an earlier point: its not online journalism we can expect much from, its the learning experience this experimental testing ground the World Wide Web offers journalists to get to grips with new skills, standards and role definitions in a highly networked, fully digitalized and truely global media environment (Bardoel and Deuze, 1999; Friedrichsen et al, 1999).

These admittedly simplistic answers to the first three questions leave us with the last remaining problem: what kind of journalism can this so-called 'ejournalism' be and what kind

environment? This paper aims to offer some thoughts on how to answer this question in three steps. First a brief sketch of the two key developments in journalism and new media technologies in the last decade or so addresses the state of the art in ejournalism: as it impacts upon all journalists through Computer-Assisted Reporting (CAR) and upon a specific 'group' of media professionals through the establishment of online journalism. Secondly data from a 1999 survey of online journalists in The Netherlands the self-perceptions and the dilemmas of this new group of media professionals are analyzed, with a specific focus on an emerging new 'mindset' of newsmedia professionalism in an online environment. Thirdly we will examine how these insights might inform us in addressing some of the 'buzzwords' regarding the future developments in ejournalism: annotative reporting (Paul, 1995; Bardoel, 1996), opensource journalism (Moon, 1999) and the concept of hyperadaptivity (Guay, 1995; Nelson, 1999).

Journalism and the Internet

A first step has to be made in terms of the developments on the technological front and the ways in which these developments are making inroads into our understanding of journalism. Computerization in all sectors of society has taken place in particularly Western capitalist democracies - with effects on the way the economy and society operates. Practically all media companies have switched to computer network systems, electronic communication traffic and the 'paperless office' are topics of debate in management circles and the convergence of media as well as the fact that the television set, video player and personal computer have found their way into an increasing number of West-European, North-American and Australasian households are signs of the high impact of technology on all aspects of life. The Internet as it can be considered to be affecting journalism in general and the professional ideology of journalism in particular will be discussed here in two ways: how it has made inroads into newsrooms and desktops of journalists working for all media types in terms of Computer-Assisted Rreporting (CAR); and how it has created a new type of journalism: online journalism. Although it must be said that every country or region has its own specific issues regarding new media developments and journalism, the author assumes that some of the more general points made here can be extrapolated to the developments in more or less similar areas in the world such as Nort America, Australia, Western Europe and Japan.

The Internet had a fast start virtually everywhere, although initially there were not many publicly available electronic resources. The first newsmedia on the World Wide Web started in 1992 (notably in the US) and fully emerged in 1994. At the time of writing nearly all newspapers, national magazines and broadcasters in the mentioned countries have their own Websites up and running. In terms of the use and availability of searchable archives, databases or news sources on the Internet by journalists the developments in Western Europe are still in their infancy as compared to for example the US (Verwey, 2000). The last two years have seen a tremendous increase of the use of the Internet by traditional media, with radio and TV programs referring to the addresses of Websites (cf. URLs: Universal Resource Locators) and newspapers putting up archives and infographics online for their readers. This prompted some subscribers to complain: one wonders what you miss when you do not have (or: want) access to the Internet and your paper redirects you to a Website for more information.

The Journalism Departments of universities, further training organizations and the various Schools for Journalism in Europe are investing heavily in training programs in Computer-Assisted Reporting (CAR): using the Internet as a reporting tool (Bierhoff, De Vreese and Deuze, in print). Generally all newsrooms have Internet connections now. Although this development often started as one computer with desktop Internet access per newsroom, all media have been switching to universal desktop access in recent years. Not everybody is happy about these developments; research in the US revealed that many reporters and editors of newspapers felt nervous and concerned about the 'omnipresence' of the Internet in their work (Singer, 1997a and 1997b). The journalists questioned by Singer all reported seeing the Internet as shifting the concept of what is information, who provides it and what can be done with it (1997a: 16). Most media companies in The Netherlands for example employ documentalists specialized in researching online resources, who are not all too enthusiastic about individual journalists finding their own way online - lamenting the lack of skills and the loss of time better spent on reporting involved (De Vree, 1998). Research at the BBC in Great Britain also revealed the unrest new media technologies have created in the newsroom; journalists reported lack of time to adequately use and master the technology, feeling stressed because of the 'immediate' nature of the Internet (Cottle, 1999). Another aspect related to CAR which affects all journalists is how to deal with e-mail, newsgroups and Internet Relay Chat (IRC) in an environment where the verification of information is extremely difficult due

attribute CAR to the impact so-called 'liberating' new media technologies such as the Internet may have on journalism with regard to its credibility, legitimacy and validity.

Online Journalism

The Internet has created its own kind, fourth kind of journalism: online journalism - which differs in its characteristics from traditional types of journalism (Deuze, 1999). Online journalism can be functionally differentiated from other kinds of journalism by using its technological component as a determining factor in terms of (operational) definition. The relevance of defining online journalism as such and its portée for the profession as a whole can be summarised quoting Peter Dahlgren's observation that:

"Journalism is carried out in specific institutional circumstances, within concrete organisational settings and under particular technological conditions. The advent of cyberspace will inevitably impact on the factors which shape how journalism gets done - and may well even colour how we define what journalism is" (Dahlgren, 1996: 60).

The literature suggests that the essential characteristics of online journalism are interactivity, customisation of content, hypertextuality and convergence or rather: multimediality (see for example Newhagen and Rafaeli, 1996; Singer, 1998; Deuze, 1999). The convergence of communication modalities leads to an integration and possible specialisation of information services, where the existing unity of production, content and distribution within each separate medium will cease to exist (Bardoel, 1998). The online journalist has to make decisions on which media formats best tell a certain story (multimediality), has to allow room for options for the public to respond, interact or even customize certain stories (interactivity) and must consider ways to connect the story to other stories, archives, resources and so on through hyperlinks (hypertextuality). This is the 'ideal-typical' form of online journalism, as professed by an increasing number of professionals and academics worldwide (in the US see Reddick and King, 2001; in Germany see Friedrichsen et al, 1999: 139-143; in The Netherlands see Stielstra, 1999). Studies among or about populations of online journalists are rare. Examples thereof are the work of Singer on the management of online newsrooms (Singer, 1999). Also in Germany and Finland attempts were made to typify the journalist who has chosen the World Wide Web - the graphic interface of the Internet - as his or her preferred working environment in

al, 1998; Luege, 1999; Heinonen, 1999). Although such studies conclude that the reporter online certainly differs in some characteristics - for example technological knowledge and public service orientation - a comprehensive look at a population of 'Net-native' reporters has not been published yet.

The consensus among the online media professionals internationally, such as it is voiced at gatherings like the NetMedia Conference in Great Britain or the Editor & Publisher Interactive Conference in the US, is that online journalism is definitely "a breed apart" (Meek, 2000). On the other hand, online journalism is still seen by many members of the profession of journalism as something 'outside' of journalism, which claim is often legitimized by the fact that most newssites do not produce original content (that is, news content which is exclusively produced for the online environment). Examples thereof are the unwillingness of the Pulitzer Prize foundation in the US to allow online newsstories to be submitted for recognition or the problems online journalists recently had in obtaining press accreditation at the European Soccer Championships (June 2000) in Belgium and The Netherlands.

This claim against online journalism by traditional journalism has been described by critics of the new media as a fear of technological determinism or even 'de-professionalization' in journalism (Porteman, 1999: 15). Authors refer to the fact that anyone can be a journalist online, hence further blurring the distinction between reliable, objective information offered by a professional and 'going tabloid' such as for example the infamous Matt Drudge, whose Website *The Drudge Report* in 1998 originally broke the news of President Clinton's affair with Monica Lewinsky (Pavlik, 1999; Fallows, 1999). Specifically the lack of 'institutional credibility' of online journalism and in particular 'Net-native' journalism which does not have a corresponding traditional 'mother-medium' is cited as endangering the core values of professional journalism, even though audience surveys show that people in general have no problem seeing online newssources as credible (Singer, 1997b: 80; Gahran, 1998; debate on the "Net credibility myth" on the Online News-mailing list of November 2000). Online journalism is further criticized for its lack of professional standards or ethics (Deuze and Yeshua, 2000), its unclear distinction between commercial and editorial content (Van Dusseldorp, 1998), its catering to increasingly smaller publics often referred to as the 'Balkanization' of news (Schudson, 1995) and its reliance on 'tertiary' sources: after news agencies, print or broadcast editors come the online editors who select and edit the news of an

journalism as a distinct professional realm was acknowledged by the national union of journalists, the *NVJ*, in March 2000 with the start of a new branch catering only for 'Internet journalists', which development was widely applauded by online journalists at the time (compare to the lauch of the Online News Association in the US in 1999).

The Internet as a reporting tool and as the arena for a new kind of journalism particularly challenges professionals ideals of credibility, reliability and objectivity, since the information and sources obtained through the worldwide network of computers is considered to be too 'immediate' and hard to verify to use by journalists. Yet the pressure to do so is rising throughout the field of journalism. The traditional values of factuality and validity corresponding with the ideal of quickly delivering the news are also challenged by the '24/7'element of online news. Several authors additionally have questioned the way in which journalists cope with ethical dilemmas on the Internet; whether using CAR and deciding which information to use (for example e-mails, chats or private Homepages) or working as an online journalist and linking to external sites or copying parts of original sources into the newssite itself (Mann, 1997; Cooper, 1998). This leaves the concerns voiced about the lack of clear standards for distinguishing commercial from editorial content online. Recently new media technologies such as news delivery via mobile phones (cf. WAP: Wireless Application Protocol or its presumed successor 'Bluetooth') further fueled this debate. Since the future seems to hold convergence of different media modalities into a (more or less mobile) wireless and networked environment, this poses similar questions to the future of journalists in general as well as online journalism in particular; the online media professionals of today are the first generation of reporters to deal with these fundamental issues in journalism professionalism.

Surveying Online Journalists

For purposes of determining the suggested changes and challenges in the routines and perceptions of journalists in the context of a general journalism survey project a population of online journalists in The Netherlands was defined, contacted and surveyed during August-September 1999. The population was operationalized as those journalists working for Internet publications (cf. newssites) which contain 'news content', in the broadest sense of the term, meaning not only 'hard' news in terms of Gaye Tuchman's famous hard/soft distinction but all sorts of general or special interest information and infotainment material that can be

relation practitioners, marketing managers and so on. For approximately 21% of the total number (n=67) of newssites, online presence hardly coincided with production of journalistic content, be it hard or soft news, custom news, interviews, general or special interest features and other kinds of information which requires editorial supervision to obtain a form presentable to the public and distinguishable from advertising/promotional content. The exclusive use of their Web sites for sales or PR is the main reason why several public and commercial journalistic companies do not employ journalists for their Web sites. This tendency is reflected in the figures from a recent general survey among all kinds of journalists (n=955) in The Netherlands: 85% of journalists in the national survey indicated that their employers have a Website (or will soon have one online); whilst more than two-thirds of them were not involved in any way with this online presence (Deuze, 2000). In addition to this, several media publish their URLs and were therefore initially included in the list of media with presence on the Internet, while in fact their Web pages were still under construction at the time - and in most cases, these media only work with a (small) technical staff (cf. one or two Webmasters). Apparently, the employees of these two categories of Web sites are not represented in the study, since they do not qualify as journalists.

A Mindset of Online Journalism

Can one talk of a distinctive mindset of online journalists in The Netherlands based on the survey findings? Yes. The technical attributes of online journalists are perceived as essential for the occupation. In terms of its organization online journalism in The Netherlands is increasingly professionalized and structured separately from its parent medium – if any (12 out of 67 sites were so-called 'Net-native' news outlets). The logic behind the kind of journalism as it is practised online is clearly focused on an interactive relationship with a (widest possible) audience, with less importance attributed to traditional media functions like agenda-setting or advocacy journalism. The process within which online content – be it original or shovelware – is produced can be considered a separate and even almost completely autonomous one, with little or no exchange and collaboration between the online editors and other sectors of the media. Online journalists are surfing the Net, (re-) writing their stories and handling their email correspondence almost exclusively, which makes their daily work largely 'medium-driven' so to speak. The production patterns within online journalism clearly reflect a powerful role for the technological context of the job, coupled with a perceived need to use

communicating to them as would be reflected in role perceptions like being a spokesperson or advocate for certain (groups of) people in society. The respondents in particular agreed (78%) to the statement that online journalism provides an added value to other journalisms, whilst 75% felt that it should also be seen as the 'added' responsibility of wired journalists to justify their existence online (75% agreed).

The online media profession reflects a new mindset and a hopeful trend towards including more young people and women into journalism as reflected in its social-demographics. The question now is, whether these men and women are in fact capable in terms of financial and infrastructural support of fulfilling the promise and the perceived roles of online journalists. From the answers received from participating journalists it seems that especially this support from employers, businesses and publishers regarding manpower, infrastructure and time to successfully implement a working online journalism model is lacking, thus reinforcing the idea that generally news companies still think of the Internet as a way of selling their main print or broadcast product. These findings also underscore the growing apprehension in the industry regarding further investments into online ventures. Online journalism in itself does not seem to be the answer to the question from the industry how to cope with the changes and challenges a wired environment offers to the profession (and its business models), even though its journalists are developing a mindset that suggests a cloear step away from traditional thinking.

Buzzwords

Having established both Computer-Assisted Reporting as wel as online journalism as contemporary realities 'on the job', as well as finding that these structural developments create confusion and apprehension among the industry and its professionals, we may look forward into assessing the potential of a number of 'buzzwords' attributed in the literature regarding the possible futures of journalism on the Internet or rather: ejournalism. The problem with buzzwords – as the erstwhile online game 'Buzzword Bingo'

(http://www.buzzwordbingo.com/">http://www.buzzwordbingo.com/) strongly underscores – is that these come and go; what is the trend today may be hopelessly obsolete tomorrow in the new media context. A few of these buzzwords stand out though, and have been suggested by authors (both in trade and scholarly publications) throughout the last decade:

1. annotative reporting

As early as 1995, new media commentators realized that journalists were not the only ones providing information anymore – in particular on the World Wide Web (Lapham, 1995). That is an understatement to say the least: even if one considers the latest figures of the total numbers of newssites (12.398 according to E&P's Online Media Directory at the time of writing, see http://emedia1.mediainfo.com/emedia/statistics.htm) only accurate to one-tenth, it is still a modest number as compared to the millions of sites 'out there'. Poynter's Nora Paul coined the term 'annotative journalism' in February 1995 as a way to address this realization. Paul envisaged a model of journalism based on hyperlinks, on a vision of the audience as active users instead of passive consumers of information, requiring "a whole new category of worker in the interactive products newsroom" (Paul, 1995: 3). Several media critics adopted the term or slightly modified it so it could cater to the notion of a shifting power balance in the post-industrial economy, in a Western 'glocalized' society, between journalism and it publics. These perceived shifts do not, as often suggested by technological optimists, only decrease the need for mediation by media professionals (in another buzzword coined as 'disintermediation'). Paradoxically as the boundaries between journalism and non-journalism crumble beyond definition, its the same profession of journalism that can be seen as being able to point a way through the 'clutter of voices' through participatory storytelling (Trench, 1997). Citizens will become more direct and active information seekers on subjects they are already familiar with needing instrumental journalism - while they will continue to favour assistance in fields they are less familiar with - opting for orientational journalism (Bardoel, 1996). Annotative reporting can be seen as a hybrid between these two options: both critical – expecting specialized expertise on the side of the audience - as well as orientational – guiding individuals to and through information on any given topic and issue.

To annotate means to add explanation to information – extra 'commentary information' in terms of the Online Dictionary of Computing (see http://foldoc.doc.ic.ac.uk/foldoc/index.html). One of the dominant trends visible in recent international journalism survey research in particularly Western democracies is an increase of the importance attributed by journalists to explanatory role perceptions (Weaver, 1998) adding comment and analysis to information as shown in what Barnhurst coined as the 'New Long Journalism Theory' (Barnhurst, 1999). To put it more explicitly: it used to be 'getting

issues' (in The Netherlands the latter is even more popular among all journalists, see Deuze, 2000). Some media critics lament this development; who needs yet another comment and opinion? One may argue that the lessons being learned from the Internet and the World Wide Web can bring about a discipline of 'pure' annotative reporting, meaning a model of journalism which is aimed at gathering information, describing the bits and pieces and pointing out to the involved public (whether an individual through personalized content or a certain community of people with a shared interest) where to access this information. Good examples of such early forms of annotative genres are sites like Slashdot, which allows users to create an environment in which people can both access as well as post information – or comments and discussion about information. But in the traditional media similar genres are evolving; one could think of the 'today in the papers'-section in breakfast TV newsshows or the periodical review of what the foremost opinion magazines cover in the newspaper. In this respect annotative journalism should be defined as a form of service-oriented meta-journalism; journalism about journalism.

2. open source journalism

Early October 1999 the US-based magazine Jane's Intelligence Review decided not to publish an article before allowing the mentioned Slashdot-community to evaluate it; the article was critized by Slashdot's visitors, whereafter the editor withdrew the original piece and replaced it with on based on the critics' comments (see Leonard, 1999). This was a pure form of open source journalism: the use of so-called 'open' sources on the Internet to check facts. The term "open-source journalism" stems from the procedure to make software source codes openly available so that experts and regular users will find and correct glitches and modify the original code to their own benefit (O'Reilly, 1998). Open source journalism applies this principle to news stories — making them available for scrutiny and corrections before final publication (Moon, 1999). As Moon summerizes:

"Advocates of open-source journalism proclaim it as the new journalism, perfecting all that is wrong with traditional journalism. Others strongly oppose use of open sources, claiming the tactic will hinder the practice of traditional journalism and allow experts to wrest editorial control from journalists and the outlets for which they write."

The fundamental idea behind open source journalism can be seen as an advanced form of

news. The Internet as it wires millions of individuals as potential information experts provides an ideal platform for improving journalism by incorporating the expertise of people 'outside of the Rolodex'. It admittedly also blurs the boundaries of what one may see as journalism – but one can argue that this would be a *top-down* definition of journalism. Considering rising levels of education worldwide (especially in Western democracies) and increasing functional differentiation and developments towards further specialized 'niche' markets the inclusion of public (cf. 'open') experts seems to be not such a long shot as to providing a future for journalism in general. The potentials (and pitfalls) of open source journalism should therefore be explored, not discarded. An early example of support for this potential: 69% of Dutch online journalists agreed to that a strong interactive relationship with the audience is an essential building block for any newssite.

3. hyperadaptive news

The key to understanding many developments in particularly new media technologies is convergence; the merger of existing technological appliances with computerized networks, predominantly enabled by the digitalization of all information formats. This facilitates open communication between all devices used in some way or another to gather, select, edit and distribute information. But the convergence-paradigm can be attributed to many developments in contemporary society, of which thinking about Web design and the future of the Internet as it integrates with all our household appliances such as the VCR, the TV and the mobile phone is but one aspect (ie. convergence of public and private spheres, culture, infrastructure and entertainment industries, modernist and postmodernist thinking etc.). As early as 1995, Tim Guay wrote about the convergence of the existing Web publishing paradigms – multimedia, hypertextuality, interactivity – into what he predicted to become the future standard, or rather: divergent paradigm: hyperadaptivity (Guay, 1995). One of the acclaimed 'fathers' of hypertext, Ted Nelson, later on defined this concept as 'Xanalogical media' – even explicitly claiming that this new paradigm was developed to prevent something like the World Wide Web to persist (Nelson, 1999). What these authors claim essentially means that what we consider to be the three separate characteristics of the Web will eventually diverge into a single paradigm of publishing. Each of these three elements has its own problems in its current status, which I will try to exemplify by looking at the online news situation.

- Hypertextuality. The problem with hypertext is, as Nelson, writes, that it creates "a delivery system for separate closed units a system which allows only only embedded links pointing outward." Guay drives home the notion of hypertext of working best when its nonlinear, borderless and clearly (in terms of navigational lay-out) integrates information into the Web as a whole. If one examines how today's newssites apply these concepts, the conclusion has to be pessimistic: few sites actually embed hyperlinks and if they do, it does not integrate their information with the Web, linking moreoften to pages elsewhere within the branded frame (Jankowski and Van Selm, 2000). Layered or non-linear content exists (see for example sites like MSNBC, BBC online or CNN) when a media company has access to different types of content within its own organization. But linking and integrating layers of external content managing and opening up content is problematic, not in the least because of ownership and copyright infringements. But one has to expect this particular problem to be solved in the near future, especially considering the convergence of public (cf. media professional) and private content.
- Multimediality. Guay writes about the inherent pitfalls of applying multimedia content to Websites: "if multimedia is used with no thought as to the reasons why it is being used, or it has poor lay-out or content it can result in a pointless aesthetic fiasco that needlessly hogs bandwith" (1995: 5). Accepting for a moment that bandwith and copyrights are still two structural factors that impede progress in developing innovative multimedia content, its mindboggling to see how media companies are stuggling to integrate their traditional newsroom with the Web editorial team, let alone reaching out and integrate content (or even 'virtual' newsrooms) with other content providers. In general, the industry is responding truely conservative to change. At this point I can only reiterate Guay's early words, again accepting the premise of near-future full media convergence with corresponding bandwidth-development. This makes thinking of a clear multimedia philosophy essential; training journalists to become media-independent regarding in their newsstories. In this respect one may reconsider the inverted pyramid toward the following shape:



This shape, an *octagon*, can be seen as a collection of pyramids (top starting from the center), each representing a different but interconnected in non-linear style (cf. without a predetermined point of entry) part of the newsstory. The shared top of these eight pyramids – each embedded with different kinds of content such as audio, video, infographics, still images, text, interactive tools, archives and so on - could be seen as the 'traditional' newslead. In a further step towards a multimedia news philosophy one may consider this shape as an *octavo*, meaning a folded three-layered (cf. spoken, written and image language together forming a single text) page which can be unfolded into the mentioned eight pyramids of content. Perhaps this model is a wild guess, but it may help in developing a notion of where to 'enter' the multimedia newsstory as a journalist, of finding the best way or ways (not everything should be told in different layers or formats) to tell or explain the story.

Interactivity. In whatever form it may take – navigational through 'Next Page' and 'Back to Top' buttons, functional through mailto:-links, Bulletin Board Systems (BBS) and moderated discussion lists or adaptive regarding Chatrooms and customization through 'smart Webdesign' – interactive options are still a rarity on today's newssites (see for example content analyses in Schulz, 1999; Kenney, Gorelik and Mwangi, 2000). Guay argues that the most sophisticated level of interactivity is adaptive, meaning that it allows the Website to adapt itself (ideal-typically in realtime) to the behavior of the visiting surfer. Several applications have since been devised to work towards this ideal, which moves beyond the 'point and click'-idea of surfing to a sort of 'point and linger'-notion. If you routinely scroll down a site to see the links to archived content, the site records your behavior and next time around immediately displays that content for you. Seen in this way, a site 'feels' what kind of content the individual surfer wants or needs and adapt itself accordingly. If translated into 'smart' TV sets and VCRs, the potential for journalism is tremendous. Instead of having to worry about how to lay-out all kinds and types of content – archives, news, audio, video, photos, infographics about multiple topics and issues on a single page – everyhting can be content is published adaptive and integrated into a given digitalized infrastructure, which can communicate or rather: fuse with any kind of appliance (TV, mobile phone, PC and so on).

Elsewhere we have argued that windowing of content (as in the "report once, write twice"-rule) can be seen as a defining characteristic of online journalism (Bardoel and Deuze, 1999). The next step of journalism in a converged and networked digital environment then must be seen as creating content in an environment which interacts with its surroundings without limitations of media formats (or: windows). Guay (1995) refers to this kind of design as *hyperadaptivity*: the convergence of in particular hypertext, multimedia and interactivity. For journalism this means that it has to break away from two defining principles of the profession: distributing information under a single brand to get and keep a more or less faceless audience and in doing so to remain within the constraints of a single format (audio, video, text). This may not happen in online journalism, but I would like to argue that this is the realm of the media profession where we can try and experience it first-hand.

Discussion

The mindset of online journalists, their increasingly wired working environment and the further convergence of media modalities and publishing paradigms may lead to a kind of ejournalism which is not confined to the limitations of the Internet. Indeed it can be argued that the lessons learned on the Web can help us to formulate new definitions of what journalism is or should be and how it may look like. Computer-Assisted Reporting and online journalism are the two most 'visible' offshoots of these developments, which disciplines are equally valid across the media spectrum in informing us about the impact of new media technologies on the profession of journalism. It does not only impacts upon the way reporters work, but also the way they think, their professional norms and their presuppositions about notions of format, form, audience and news values. A next step to integrate these first-hand experiences into journalism in general may well be to explore new paradigms in journalism: annotative reporting, open-source journalism and hyperadaptive news. Further research should look into these possibilities, exploring and formulating new divergent theoretical frameworks within which scholars can address changes and challenges ahead instead of trying to capture ejournalim in the restrictive categories of the past (Dahlgren, 1992; Singer, 1998).

A final note has to be made regarding the lay-out of newssites, in other words: the graphic context within which the content is embedded. Just as one has can see the different Web

should note the convergence of design and content. Examining today's newssites of established 'traditional' media in particular, it is striking to see [1] that most newssites look fairly similar (roughly: logo top-middle, menu-bar left, scrollable newsbriefs middle, banners and so on page-right) and [2] they look not very different from the front pages of print newspapers. A Web designer colleague mentioned recently that to her opinion online newssites are all desperately trying to look 'serious', indeed seeming to assume that surfers generally do not trust or 'read' news online. Our findings do suggest that journalists working for these Websites have different ideas about their audiences and their role and added value in society. Other studies suggest people do not seem to have any credibility problems with online news, nor do they mind to read (sometimes); its just that they read and 'believe' differently. Starting point for considering any 'new' ejournalism should therefore be its challenge to our core assumptions about the mass media, society and its journalisms.

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¹ In The Netherlands online journalist Francisco van Jole keeps track of this downward spiral in the online news industry with a weekly newsletter called "2525", available at http://www.2525.com.