A Cross-National and Intermedia Study of U.S. and European Online Newspapers: the Depth and Breadth of International News Coverage

Yana Terukhova

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A Cross-National and Intermedia Study of U.S. and European Online Newspapers: 

the Depth and Breadth of International News Coverage 

Paper Presented in Partial Fulfillment of the Master of Science Degree in 

Communication & Media Technologies 

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To my dearest father, who always wanted me to study abroad and who would be very proud of me
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Abstract

This study examines 192 newspaper issues by the *New York Times*, the *Washington Post*, the *Times*, the *Independent*, and *Frankfurter Allgemeine Zeitung* during one month. The purpose of the study is twofold: to compare depth and breadth of international news coverage (1) by U.S. and European online newspapers and (2) by the printed and online *New York Times*. A cross-national comparison reveals broader coverage in the U.S. newspapers; the European newspapers offer deeper coverage in hypertext dimension. Based on the content analysis, the online *New York Times* covers more international news, while the printed edition allocates a larger part of its newshole for the world news. The findings reveal intermedia agenda-setting between the two *New York Times* publications.

Key words:

Internet, Newspapers, International News, Cross-National Comparison, Content Analysis, Intermedia Agenda-Setting, United States, European Union.
Introduction

“The U.S. media are the most provincial in their approach to the world news, while the U.S.A. is the top news-maker with all media” (Tai, 2000, p. 331). Similar conclusions were drawn by a number of studies (Peter, 2004; Rauch, 2003; Brossard, Shanahan, & McComas, 2004; Dimmick, Chen, & Li, 2004; Weder, 2002) that applied a cross-cultural approach to analyze the patterns of news coverage in the traditional media, predominantly newspapers. The rise of the Internet and online journalism practices over the last decade, however, makes newspapers constrained neither by circulation nor by a newshole. Media scholars question whether reporting patterns and international news flow generated by the new media change and to what extent.

The Internet is thought to be “a great equalizer” (Dimitrova et al., 2003), when the content of the new media\(^1\), such as online newspapers, theoretically can become globally uniform. Contrary to this assumption, Boczkowski (2002) argues that most online newspapers operate within the geographic boundaries defined by their printed counterparts and that “the social structures found in the ‘real’ world are inscribed in online networks” (Halavais, 2000, p. 7).

Today, many newspapers (Nguyen, 2003)\(^2\) create their online presence, at least for the economic and marketing purposes of better reaching their targeted audience or out of fear of electronic competition (Morris & Ogan, 1996; Barnhurst, 2002). Meanwhile, the concept of national news gradually erases; electronic space makes the same piece of news equally available to the audience, regardless of their physical location. But, do newspapers take advantage of the new medium or do they predominately produce
“shovelware” (Boczkowski, 2002, p. 274), offering the content of their printed editions on the Internet?

The present study examines five leading online newspapers in the U.S. and the EU and, analyzing their coverage, measures the amount of media attention paid to international news. Analyzing how deep and broad international news is covered and presented in different countries can shed some light on countries’ ideologies and news sources that play a certain role in structuring the content of world news. Werder (2002) claims that a country’s political landscape and the position news media take, facilitate framing of international events in different ways. Arguing for the importance of analyzing news forms also over the traditional and new media, Barnhurst (2002) says that the news form itself invites the public into a steady relationship with economic and political entities beyond journalism, including civil society and the public sphere.

Online newspapers are preferred by readers for more global information (Li, 1998). At the same time, even printed newspapers do not tend to offer all of their content on the Internet, attracting the paying readers to their printed editions (Barnhurst, 2002). The current study, therefore, explores differences in breadth and depth of international news coverage between the printed and the online media at the example of the New York Times.

With the introduction and development of new media technologies over the last decade, journalism practices were thought to redefine the form of news reporting (Barnhurst, 2002). Online journalism \(^3\) is news presented on Web sites and is considered to be different from the traditional, printed forms of journalism (Deuze, 2001). Do online newspapers, however, take advantage of the Internet features? How different is the
coverage of news offered by online newspapers, compared to their printed versions? Can online newspapers be distinguished as the new medium or are they basically the extension of their printed versions? In most cases, news stories created for the printed edition are placed online literally unchanged (Boczkowski, 2002). Davis and Owen (1998) provide a plausible explanation that technological innovations develop much faster than media manage to employ them.

Despite the fact that online newspapers are still heavily influenced by the traditional media, the new medium is claimed to alter news content and information presentation (Eveland, Marton, & Seo, 2004) and, therefore, the medium is also said to create different effects (Althaus & Tewksbury, 2002). Althaus and Tewksbury’s study (2002) proposes at least two aspects, in which the new medium could have different effects on news perception. First is “the flexibility of Web-based news formats” (p. 182) and second, a hierarchy of story presentation (Althaus & Tewksbury, 2002). The present study identifies to what extent international news coverage in the new medium resembles presentation and framing patterns of the traditional medium.

Approaching the new medium from different perspectives, this study looks into interrelationships and connections among international news coverage patterns, online journalism practices, and media globalization trends. The research undertakes a two dimensional approach: first, comparing cross-nationally international news coverage in five online publications in the U.S. and the EU, and second, examining international news, covered in the printed and online versions of the New York Times. The Internet or online newspaper is defined as a publication on the World Wide Web (Li, 1998).
Rationale

Previous research (Terukhova, 2000) on international news coverage on television in the U.S. and Belarus revealed differences in the presentation patterns of international events: the breadth and depth of news coverage across these two countries varied significantly. Today, when the Internet facilitates the development of new forms of mass media such as online newspapers, international news reporting is said to change (Deuze, 2001). The introduction of the new medium is claimed to introduce new patterns of crafting, disseminating, and responding to media messages (Barnhurst, 2002). Therefore, the news agenda offered by the new medium, distinguished by its global reach, could differ from the traditional medium as well.

Li (1998) points out in her study that little attention is given “to address changes in [the] communication process in the Internet environment” (p. 355). Moreover, even fewer studies examined presentation of international news, reported by the new medium in the U.S. and the EU. The present research attempts to fill in the lack in the media research of online newspapers.

Although, both the Internet and computer-mediated communication (CMC) have become popular areas for communication research, only 26.7% of Internet-related studies from 1996 to 2000 were quantitative in nature, among which, only 7% of the studies applied a content analysis (including a Web site analysis) (Kim & Weaver, 2002, p. 528). The present study contributes to the quantitative studies of the new medium, examining online newspapers from an intermedia perspective.

Extensive studies (Tewskbury, 2000; Boczkowski & Ferris, 2005) compared news coverage between the traditional and new media, usually by contrasting printed and
online newspapers. However, only a few studies (Peter & de Vresse, 2004; Rauch, 2003; Brossard, Shanahan, & McComas, 2004; Dimmick, Chen, & Li, 2004) compared news coverage across different nations or across different media forms. Riffe & Freitag's (1997) content analysis of Journalism & Mass Communication Quarterly publications during 1971-1995 revealed that only 5.1% of studies had a cross-national focus, when U.S. media was compared with the media in other countries (p. 519). Thus, a cross-national study of the new medium could help to understand how cultural and media traditions influence the way news is presented.

This type of cross-national comparison, as Brossard, Shanahan, & McComas (2004) state, helps “to gain a broader understanding of the influential mechanisms and cultural patterns that might influence media coverage of social issues” (p. 360). The role of the Internet, as a disseminator of international news in the information age is hard to deny due to the global nature of the medium. That is why a study that goes beyond physical borders, as online newspaper are thought to do, will help better understand how the new medium structures the picture of the world and if this picture is becoming less reported and diverse.

**Literature Review**

A limited number of cross-cultural studies have investigated online newspapers or other forms of new mass media so far, that is why this literature review summarizes only the most prominent studies that analyze international news flow and coverage patterns in the traditional media. The review also reports on some studies that examine the new medium cross-nationally, but do not necessarily focus on international news, as well as a few studies that compare the new medium to the traditional forms of mass media.
The novelty of the new medium and its distinctiveness, defined by hypertextuality, multimediality, and interactivity (Deuze, 2001), requires new theoretical and methodological approaches, that go beyond the province of mass communication theories (Boczkowski, 1999). The current literature review, therefore, addresses the concerns and challenges of the Internet-related studies. Since the Internet is claimed to erase national borders in media space, previous scholarly concerns regarding the choice of units for cross-cultural studies that have investigated the new media, are discussed.

Since the present study analyzes how international news is presented in the new medium, a number of studies that look at global news flows are touched upon. And finally, the patterns of international news presentation in the traditional and new media are reviewed in the light of agenda-setting and framing theories.

News coverage has been approached relatively scarcely from a cross-national perspective and among these studies newspapers are a most popular medium to investigate. The findings of such cross-national studies over the traditional media quite unanimously emphasize differences in international news coverage between U.S. and European media traditions, saying that the U.S. media are much more shortsighted and locally focused (Tai, 2000).

Smaele (1999) contrasts two media models, Western and Eastern, which have been historically characterized by various regulation policies and media traditions. The study (Smaele, 1999) concludes that, while a private commercial approach and limited government interference rules the U.S. media system; the European media system seeks to balance the private and public interests through a higher degree of regulation. Terukhova’s study (2000) of U.S. and Belarusian mass media draws the same conclusion.
The current study uses a similar approach, comparing U.S. and European online newspapers both evolving out of a Western media tradition, but directed by different news values (Brossard, Shanahan, & McComas, 2004). The present study analyzes to what extent these findings are still true in the case of the new medium.

Content analysis is a popular methodological approach in studies (Peter & de Vresse, 2004; Rauch, 2003; Brossard, Shanahan, & McComas, 2004; Singh & Baack, 2004) that examine news media across various countries, use content analysis as a method of research investigation. However, these are basically descriptive accounts of news coverage. Most of such studies lack definite answers explaining why such cross-cultural differences in news coverage exist. Peter & de Vresse (2004), however, attempt a theoretical generalization by examining television news coverage, reported in different European countries. Although, the study (Peter & de Vresse, 2004) claims to be explanatory rather than descriptive, its findings only conclude that the European scope is too narrow for such an analysis and further investigation into larger media markets is suggested.

Another study (Brossard, Shanahan, & McComas, 2004) also suggested future research involving more nations to the sample. Brossard, Shanahan, & McComas (2004) compared global environmental issues in the New York Times and Le Monde from a cross-cultural perspective and found that the coverage by U.S. mass media “tends to focus on domestic politics” (p. 375). The study (Brossard, Shanahan, & McComas, 2004) conducted a content analysis and measured media attention to global warming issues in the U.S. and France, reporting no significant differences. One of the findings suggests
that “journalistic practices embedded in a specific cultural context, may affect the nature of media coverage” (Brossard, Shanahan, & McComas, 2004, p. 373).

The above mentioned studies of the traditional media intend to find cross-cultural differences in news coverage by measuring either media attention (Brossard, Shanahan, & McComas, 2004) or story’s prominence (Peter & Lauf, 2002). These two studies both investigate news coverage using word count per story or story count per issue, as the units of analysis. To measure the depth and breadth of international news coverage, the current study develops a methodological approach based on these two studies.

The new medium is investigated from a cross-cultural perspective in the content analysis of the U.S. senator Web sites and Korean legislator Web site (Hwang, 2003). Similar to other cross-cultural studies of the traditional media, news stories, and separate pages are used as units of analysis to reveal cultural differences. Though the study (Hwang, 2003) does not focus on international news, the research gives a good idea on how to approach information presented in the new medium. For example, new features of the Internet such as hyperlinks, types of menus, and home pages are defined and observed.

Studies of international news flow (Tai, 2000; Kim & Barnett, 1996; Wu, 2000; Nossek, 2004; Wanta & Hu, 1993) have compared international news coverage in different countries, with the intent of explaining possible changes in news coverage in the new media. Tai (2000) brings up the discussion of differences in media systems that predetermine the agenda and the amount of media attention to international news. Digitalization and the rise of the new media are said to cause “unprecedented democratization of international communication” (Chalaby, 2005, p. 31). Such trends
facilitate remapping of media spaces and "international reach is no longer the preserve of Western-based conglomerates" (Chalaby, 2005, p. 30). The system of news values is a strong factor that determines the coverage of international news. International news flow analysis is distinguished from international news coverage analysis in a study by Kim & Barnett (1996), who emphasize economic factors, as a significant news determinant in both aspects of research. Although the present study focuses on international news coverage, a closer look at news flows gives better clues why the amount of media attention could differ across different countries.

Research on the new media

The number of publications on the Internet-related studies grew during 1996-2000, but only from 2.3% to 7.6% (Kim & Weaver, 2002, p. 252), therefore, a brief literature review, regarding the specifics of approaching the new media, is noteworthy. Previous studies of the Internet concentrate mostly on legal and political issues, uses of the Internet, technical, social, and economic aspects of the new medium (Kim & Weaver, 2002). Not only has communication research of the Internet as a mass medium been relatively under-researched, but the validity of examining the new media from the standpoint of mass media theories has come into question (Boczkowski, 1999).

Debates about theoretical approaches to the new medium can be well explained by the fact that online newspapers are not well established as the new medium yet. Investigating online newspapers (Morris & Ogan, 1996; Boczkowski, 2002; Dimitrova et al., 2003; Li, 1998), comparing them with their printed counterparts (Barnhurst, 2002; Althaus & Tewksberry, 2002), and studying online journalism practices (Deuze, 2002), researchers all report some resemblance between the paper and online newspapers in
different aspects. Dimitrova et al. (2003) have analyzed the usage of hyperlinks by U.S. online newspapers and reported finding scarce application of this feature, while Deuze (2002) argues for the widespread of new journalism practices that, by definition, involve an extensive use of hypertextuality, multimedia, and interactive features. Differences in news formats and presentation patterns by the traditional and online newspapers are approached by other studies, claiming that news reporting in the new medium has not been fundamentally changed yet (Barnhurst, 2002; Althaus & Tewksberry, 2002; Li, 1998).

Researchers (Morris & Ogan, 1996; Russel, 2001; Ursell, 2001) sought to find the place of the Internet within the context of the traditional mass media. Approaching online newspapers from the position of computer-mediated communication, Boczkowski (1999) claims that the new media can not be thoroughly explained by traditional mass media theories. The study (Boczkowski, 1999) also proposes a cross-disciplinary approach examining the new media, an approach that needs to be reconstructed within previously used cross-disciplinary framework. Kim & Weaver’s (2002) meta-analysis of the Internet says that only 17.1% of Internet related studies are theory driven. Exploring the nature of the new medium, the study (Hwang, 2003) also attempts to examine which theories can be applied to the Internet. The study (Hwang, 2003) asks “if the unique characteristics of the Internet override or dilute the cultural borders, with theoretical bases of Hall, Hofstede, and McLuhan” (p. 1). Thus, the novelty of the new media explains theoretical constrains in the research on the Internet as a mass medium.

The Internet also distinguishes itself by its global nature. To conduct a cross-national study this aspect of the medium deserves attention. Halavais (2000) hypothesizes
that, although, the Internet is seen as "an inherently international medium" (p. 7), its organization still conforms to traditionally national borders. Looking at the evolution of the new medium, most studies (Barnhurst, 2002; Dimitrova et al., 2003; Halavais, 2000; Morris & Ogan, 1996; Boczkowski, 2002) conclude that economic factors predetermine online newspapers' reluctance to go beyond geographical borders, established by their printed counterparts. In general, the Web demonstrates how national cultures exert control and influence over the new media (Halavais, 2000), partly due to the fact that "new technologies may foster social differentiation in contemporary society" (Lievrouw, 2001, p. 8). The study of international news coverage in online newspapers in the U.S. and the EU can shed some light on these aspects of the new medium.

Beside theoretical constrains of Internet related research, methodological approaches to the new media deserve attention as well. All of the above mentioned studies apply content analytical methods, extensively used to study cultural differences in the traditional press and broadcast media. However, "the use of content analysis to study information content on the Internet is still at an infancy stage, and only a few studies have used this technique" (Singh & Baack, 2004, para. 5) Weaver and Lin (2000) examine methodological issues in content analytic research of the World Wide Web and claim that ubiquity, global reach, interactivity, decentralized, hyperlinked structure, and multimedia format of the new media call for methodological considerations and improvements in conducting this type of research of the new media.

The development of online newspapers, the adoption of new media technologies, and the global reach of the medium make researchers raise the question about cross-cultural comparisons of news coverage in the same medium or by different media. Using
content analysis as a research method for a cross-cultural study raises the issue of determining units of analysis. Livingstone (2003) and Peter and de Vresse, (2004) question the validity of viewing the new media from cross-cultural perspectives, since the global nature of the new media often overlaps national borders. In calling for research of the new medium from an international perspective, Livingstone (2003) emphasizes the application of "models of comparative cross-national research" (p. 491) and questions whether to treat a nation as an object of study, context of study, unit of analysis, or a part of a larger system.

The same issue is raised by Wu (2000), who investigates determinants of international news coverage among 38 countries. The sampling suggests the overwhelmingly global scope of analysis, with all main regions of the world, including 214 countries subsequently presented in the media. While Livingstone (2003) argues that analysis be confined to similar cultures she does not make clear what is meant by similarity. Wu's (2000) avoids ambiguity using the following country characteristics: "traits of the country, interactions or relatedness between countries, and logistics of news gatherings" (p. 116). The study cautions that units of analysis be carefully chosen.

The choice of units for analysis has been well discussed in communication research of mass media that historically have been governed by different traditions in approaching and structuring international news. Tai (2003) distinguishes among the Western approach, the Third World development, and the Communist system. In one study (Brossard, Shanahan, & McComas, 2004) cultural traditions in news coverage were taken into account by analyzing the New York Times and Le Monde; however, the sample was too small to generalize to international media. Thus, major concerns that need to be
addressed in cross-cultural studies that investigate the new media are the scope and the choice of units of analysis.

The current study examines the new medium, comparing international news story reporting of online newspapers cross-nationally. All five online newspapers in this study were launched during 1995-1996, which allows drawing valid conclusions. Accepting different worldview and identity concepts, cross-national studies help to understand cultural journalistic practices on media attention. Cultural impact on news presentation is analyzed by a number of studies (Brossard, Shanahan, & McComas, 2004; Werder, 2002). Peter (2003) draws attention to country characteristics as contingent condition of new media research.

Beside different media traditions, economic issues also determine the flow of news information on a global level (Wu, 2000). At the same time the evolution of new media technologies promotes the emergence of new forms of journalism. However, Ursell (2001) argues that political and corporate executives, not technology, may compromise journalistic standards. Thus, the nature of the new medium, cultural differences, economic policies, and technological aspects of media could equally predetermine the way news is reported.

Agenda-setting theories

It has been argued that if information is processed differently, the effects will differ as well (Wanta, 1997; Althaus & Tewksbury, 2002). According to this premise, media effects will be different due to variations in characteristics different media possess. For example, comparing news presentation patterns by television and newspapers, Wanta (1997) summarizes previous studies and concludes that television usually covers more
news issues but with shallower coverage and that newspapers provide much more of in-depth reporting. Since the patterns of news packaging and presentation vary among different media, the present study raises the question about the differences in international news presentation by the printed *New York Times* and its online edition.

Since proposing a hypothesis on agenda-setting as a study of media effects by McCombs and Shaw (1972), Dearing and Rogers (1996, as cited in Schefele, 2000) identified more than 350 articles reporting on agenda-setting, that test various elements of this theory. Traditionally, communication scholars have analyzed agenda-setting at two levels: the media agenda and the public agenda. Such studies usually relate to what media cover with what the public perceives as important. The present study focuses on the medium’s agenda, exploring only how different newspapers present international news, without looking at the differences in the public agenda.

Generally, media effects are approached from the perspective of agenda-setting theory, while the presentation of news is viewed as an aspect of media framing (Roessler, 2001). The idea of news frames is treated in media research rather controversially. News framing has long been approached both as a part or extension of agenda-setting (McCombs, Shaw, & Weaver, 1997), but also as a concept, separate from agenda-setting (Schefele, 2000). If agenda-setting research emphasizes the choice of news stories covered by media, studies of media framing bring about nuances in story presentation that affect story’s interpretation by the audience. Thus, major trends in contemporary agenda-setting and framing theories are summarized briefly.

Some recent studies have extended the traditional province of agenda-setting research investigating intermedia agenda-setting, attribute-agenda setting and framing
(McCombs, Shaw, & Weaver, 1997), cross-national agenda-setting (Werder, 2002; Peter, 2003), and agenda-setting in the traditional, and the new media (Althaus & Tewksbury, 2002). Thus, current studies on agenda-setting and framing explore these phenomena in terms of various contingencies that alter media effects.

Wanta & Hu (1993) examine story frames as contingent conditions in agenda-setting theory, analyzing international news coverage from the perspective of various news frames. The rationale for exploring international news coverage from the perspective of framing is twofold. First, news frames, in particular, have received little research attention (Wanta & Hu, 1993) and second, the importance of international news coverage grows due to globalization trends, the widespread of the new media, therefore, deserves thorough attention.

The study by Althaus and Tewksbury (2002) proposes a hypothesis that “filtering the same news content through two different media might produce different patterns of agenda-setting effects” (p. 181). Althaus and Tewksbury (2002) report on a series of experimental designs to see if processing the same information from the printed New York Times and its online edition could lead to different media effects. One finding of the study (Althaus & Tewksbury, 2002) showed that “the readers of the paper version of the New York Times came away with systematically different perception of the most important problems facing the country” (p. 196). The experimental design (Althaus & Tewksbury, 2002) is limited by the fact that framing, particularly news presentation (Roessler, 2001) as its aspect of comparing the same news stories between different media, is not considered. The researchers (Althaus & Tewksbury, 2002) only mention that at least two differences in the presentation of news in printed and online media
should be viewed as relevant to agenda-setting, but the study does not talk about measuring these differences in news presentation.

Writing about news framing in terms of presentation patterns, Roessler (2001) studies media frames at four major dimensions: presentation, subtopics within a particular issue, cognitive, and affective attributes. Examining news coverage with the development of the Internet, Roessler (2001) pays attention to framing of particular events in terms of argumentation patterns and also identifies if there are any subtopics related to major issues presented.

So far, discussing the role of media differences in terms of agenda-setting effects, most studies usually build a case either for stronger print effects, or stronger broadcast effects (McCombs, Shaw, & Weaver, 1997). Such differences could be explained in terms of the mental efforts necessary to process information from different media. The present study analyzes such possible differences between those media that are claimed to be both as very similar (Barnhurst, 2002) and very distinguishable (Deuze, 2002; Boczkowski, 1999). The present study looks at the differences between the printed and online medium and specifically approaches their coverage of international news in terms of presentation and framing patterns. It seeks to determine whether the printed New York Times sets agenda for its online version.

Definition of framing

Wanta and Hu (1993) define framing as “persistent patterns of presentation through which journalists organize their stories” (p. 251). Roessler (2001) says that “frames represent the central organizing ideas which supply a context and suggest what the issue is about through the use of selection, emphasis, exclusion, and elaboration” (p.
50). In the present study the working definition of international news framing assumes patterns of international news presentation, regarding the organization of overall newspaper content through international news placement, and depth and breadth of coverage. Thus, the present study approaches framing of international news coverage on a macrolevel, without going into nuances within stories themselves.

Thus, the literature review of cross-national comparisons of international news coverage by the new medium has to be extended for two reasons. First, few investigations have taken such an approach like that due to a limited number of empirical studies in the field. Second, the new media are too new to have generated many studies yet. That is why the present study looks at analogous studies but within the traditional media. The novelty of online newspapers and the Internet as a mass medium in general calls for more careful consideration of the medium itself. The changes, which distinctive features of the Internet bring about, are not yet well studied in the existing literature. Therefore, more attention needs to be given to methodological aspects of Internet-driven research.

**Hypotheses**

The present study accentuates two dimensions in researching international news coverage: (1) the study undertakes a cross-national analysis of international news covered by the U.S. and European online newspapers (the first set of hypotheses), and (2) the study approaches international news coverage in the printed *New York Times* and its Internet edition from the perspective of news presentation and, therefore, the case of intermedia agenda-setting (the second set of hypotheses).

Halavais (2000) argues that, although, “geographic borders may be removed from cyberspace, the social structures found in the ‘real’ world are inscribed in online
networks” (p. 7). As a result, operating in the same media environment and having the same access to the audience, newspaper coverage of international news will differ among various newspapers. Contradictory to this previous assumption, recent media convergence trends and general beliefs that wide access to new technologies will most likely lead to uniformity in reporting, compels proposing first two non-directional hypotheses (Nossek, 2004).

**Hypothesis 1.1:**

*The breadth of international news coverage differs significantly between U.S. online newspapers and European online newspapers.***

**Hypothesis 1.2:**

*The depth of international news coverage differs significantly between U.S. online newspapers and European online newspapers.***

Based on the previous studies (Tai, 2000; Brossard, Shanahan, & McComas, 2004) U.S. media have been labeled as locally focused. The current study examines if U.S. online newspapers also continue reporting more locally. To determine this, the amount of media attention to international news by U.S. and European online newspapers is measured. Based on the previous assumptions, proposed in hypothesis 1.1 and 1.2, the present study suggests the following hypothesis:

**Hypothesis 1.3:**

*U.S. online newspapers give less media attention to international news compared to European online newspapers.*
The second set of hypotheses tested in the present study, investigates media attention to international news and analyzes presentation patterns in international news coverage by the online *New York Times* and its printed version.

The features of the new medium facilitate access to potentially wider and much more international audience with much larger circulation, compared to printed publications, which are tightly limited by physical space and even more by the amount of advertising. Rather contradictory to this assumption, Barnhurst (2002) summarizes the findings of a few studies, concluding that most online editions include less than half of the stories from their print editions. While, the Internet supposedly eliminates newshole constrains and the new media distinguish itself by the possibility of a global reach, hypothesis 2.1 is proposed to compare the breadth of international news coverage by both *New York Times* versions.

**Hypothesis 2.1:**

*The online New York Times provides significantly broader coverage of international news compared to the printed New York Times.*

According to the results of the first scrolling-screen eye-tracking investigation Internet users read “shallow but wide” (p. 276), while at the same time pursuing selected topics in depth (Boczkowski, 2002). Based on these findings the present study proposes the following hypothesis to be tested.

**Hypothesis 2.2:**

*The online New York Times provides shallower coverage of international news compared to the printed New York Times.*
The *New York Times* distinguishes itself as a role model for other newspapers, at least in the U.S. (Nossek, 2004). No studies have been identified to show if intermedia agenda-setting is the case between the printed and electronic media, such as newspapers and television. Different patterns in news presentation by various media does make hardly possible for newspapers to set agenda for television (Wanta, 1997). As online newspapers have not established themselves as the new medium yet (Barnhurst, 2002), the above mentioned hypotheses have been suggested to understand to what extent the online *New York Times* differs from its printed counterpart.

Considering the emergence of online journalism practices many studies (Barnhurst, 2002; Dimitrova et al., 2003) find a lot more similarities between printed and online newspapers. Bolter and Grusin (1996) put it as a soft remediation; when the new medium only emerges, it naturally imitates the pattern of the traditional medium. The present study analyzes if such remediation is the case with the *New York Times*, comparing international news presentation and framing and this way, the study finds out if the printed *New York Times* sets the agenda for its online edition. Thus, this hypothesis tests the case of intermedia agenda-setting.

News generally originates in existing sources rather than being produced specifically for the new media. Other researchers point out at the idea of “shovelware”, when information is taken in its originally generated form and placed virtually unchanged onto the Web site (Boczkowski, 2002; Dimitrova et al., 2003).

**Hypothesis 2.3:**

*The international news section of the online New York Times is framed according to the international news section of the printed New York Times.*
The decision to focus on online newspapers, rather than on other forms of the new media, is explained by the fact that “in an era of advanced communication technologies, newspapers still provide a basis and model for professional journalistic norms across all media” (Nossek, 2004, p. 353).

Method

Population

The present study content analyzed online publications of five U.S. newspapers. To examine presentation patterns used in international news coverage, the printed New York Times was compared with its online edition.

The population for the study included two American online newspapers, the New York Times, its printed edition, and the Washington Post, two British online newspapers the Independent, and the Times, and one German online newspaper, Frankfurter Allgemeine Zeitung. These major newspapers of record are among the largest in circulation and readership in their countries and are also their countries’ “most respected and professional newspapers” (Brossard, Shanahan, & McComas, 2004, p. 366; Werder, 2002, p. 224; Nossek, 2004, p. 353). All the newspapers can be considered approximately similar in terms of readership, political stance (Brossard, Shanahan, & McComas, 2004, p. 366), and time presence on the Internet. These newspapers are also thought to be role models for newspapers worldwide (Nossek, 2004) and claimed to be “veteran and prominent publications in their field” (p. 353). Moreover, the New York Times and the Washington Post are listed by Columbia Journalism Review as among the “best American newspapers” (Dimitrova et al., 2003, p. 404). Significant for the present study is that all the newspapers offer relatively extensive international news coverage.
The study content analyzed international news stories in all the issues of the five online publications and the printed *New York Times* within a time period of 32 days, beginning June 16, 2005 and closing July 17, 2005, including weekends and July 4th.

**Sampling procedure**

All the issues of all the newspapers were retrieved from the newspapers’ Web sites each day at a particular time within a three hour time frame from 9 a.m. until noon in order to have coded Web pages carefully controlled (Weaver & Lin, 2000). Frequent updates of online publications, even within an hour, usually result in a change of population content that undermines reliability and validity of the WWW-based content and may skew results of a study. Wimmer and Dominick (2006) warn about “the fluid nature of the Internet” (p. 172). Therefore, precise timing is crucial for such a study.

The present study conducted a multistage sampling. First, a census sample was analyzed, namely all the newspapers’ issues within the timeframe of the study. At the second stage, the cluster sampling was drawn from the 192 issues (including online and printed publications) examining international news coverage in the section under one of the titles: *World / International / Aus der Welt*. The home pages and international news sections of each newspaper online editions were saved each day in electronic format, archived, and later printed out for analysis. There was no need to date the stories and pages as each page already contained exact dates and times the pages had been retrieved. In order to analyze and compare presentation patterns used to report international news by the printed and online *New York Times*, 10 stories were randomly selected every third day.
Definition of categories and units of analysis

Two basic units of analysis were chosen for the current study. Sampling units in the study were defined as Web based newspaper editions, the equivalent of one day’s publication, as proposed by Li (1998). The variables examined included two major news sections: a national and an international news section.

Further, the study approached individual pages as recording units, as suggested by Weaver & Lin (2000). Such units can be equated to a single news story, which is defined as “a semantic entity with at least one topic delimited from another story by a change of topic” (Peter, 2003, p. 689). A news article can also be referred to as the complete content of a news item (Li, 1998). The goal of the present study was to focus on the patterns of international news presentation from a macro perspective: the study examined overall attention of the new medium to international events. Very often different stories would introduce various aspects of the same newsworthy event (even in a number of consecutive issues). The coverage of London bombings that happened during the sampling period is a good example. Such type of coverage was not pursued and each story was counted separately, even if it referred to some previous events covered by the newspaper.

The following independent variables were operationalized in the research: media attention, the depth of international news coverage, the breadth of international news coverage, and the framing/presentation of international news. The amount of media attention can be roughly defined based on how many news stories the newspaper covers (the breadth of coverage) and how deep each story goes in word count and number of related links (the depth of coverage). International news coverage is understood as all the
news stories in a news section in each online newspaper edition under one of the subheadings *World / International / Aus der Welt* and in the international section of the printed *New York Times*.

*Coding procedure*

The breadth of international news coverage was operationalized on a Web site level, based on the assumption that “a Web page is roughly equivalent to an entire newspaper article, while a newspaper’s Web site can be compared to a newspaper edition” (Weaver & Lin, 2000, p. 282). A Web site level analysis helped to calculate the percent of international news stories in the overall newshole per each edition. For the purpose of the present study the newshole of an online newspaper was defined as a part of a newspaper, printed or online, that contains national and international news sections only. First, the total number of news stories in the newshole (international news stories were included) were calculated by counting the number of headlines under each subheading in the section *News* or *National news* covered only at the main page of each newspaper. Sections such as *Opinion, Service, Newspaper, Editorials / Op-eds* or any similar that did not contain national news stories were not considered.

Second, the total number of international news stories was calculated by counting the number of news links (headlines under one of the newspaper subheadings: *World / International / Aus der Welt*). This helped to define the percent of the total number of international news stories in the newshole covered by each newspaper, this way determining the breadth of international news coverage by each newspaper. Thus, both national and international news stories were coded for the following categories: edition
date, national news story section, national news story count per issue, international news story section, and international news story count per issue.

The depth of international news coverage showed how much information was given to international events by each newspaper analyzed (Brossard, Shanahan, & McComas, 2004). At this level, only sections that contained international news stories were considered as a part of the cluster sample.

The depth of international news coverage was operationalized in two ways: first, syntactic units were examined by calculating word count of randomly selected international news stories, one per issue. Each international news story from the cluster sample was printed out and the number of words was counted by copying and pasting a story text into a Word document, where the word count feature was employed to determine the number of words per story. Even if this method could have resulted in miscalculation of the number of words per story, applying this technique throughout the whole study, made such bias, if any, very consistent.

It is worthy to note that a printed newspaper story can be analyzed by measuring the number of column inches or numbers of lines, but words are the only so far appropriate units of analysis in a Web based study. The reason is that the Internet is a much more flexible, customized, and individually adjusted medium (Potter, 1999 as cited in Weaver & Lin, 2000; Dimitrova et al., 2003; Wimmer & Dominick, 2006). A Web page can be often adjusted in font size and text format to meet the reader’s needs. Thus, international news stories were coded for the following categories: the date of a story, the newspaper title, international news story section, word count per international news story.
The depth of international news coverage was also approached by examining the presence of related to a story hyperlinks, which were evaluated first as referential units (such as presence or absence of hyperlinks) and second, as physical units such as hyperlink count (Reinard, 2001). Hyperlinks were defined as a combination of words or phrases that directs readers to additional information related to the story by activation (Li, 1998). Hyperlinks counted in the present study were coded by the following four types: in-text links, links to multimedia (audio, video), photo links (enlarged or/and series of photos), and links to related news stories (Dimitrova et al., 2003, p. 405). Only story related hyperlinks were analyzed and counted. To count the number of hyperlinks reliably, the following categories were created: hyperlink presence, hyperlink placement, hyperlink type, and hyperlink count per story.

Hyperlinks are used by publishers to provide additional information on a particular news story, therefore, the presence and number of hyperlinks suggested the depth of international news coverage. The more hyperlinks a story contained, the deeper the coverage a newspaper was assumed to be. Also, hyperlinks were coded by their placement, whether links were internal (connecting to related information within the same newspaper) or external (leading to outside sources). Although hypertextuality distinguishes the new medium from the traditional media, few online newspapers actually make use of this feature. That is why hyperlinks were also analyzed as referential units (Deuze, 2003). First, international news stories were coded by the presence of hyperlinks, in case of hyperlink absence a zero was entered in all hyperlink categories. Next, the number of hyperlinks, placement (internal or external links), and hyperlink type were identified in stories, where hyperlinks had been found.
To understand if there is the case of intermedia agenda-setting in the printed and online media, framing techniques of international news were analyzed in both versions of the New York Times. The composition of international news section was compared and word count per international news story was conducted for both editions.

**Intracoder reliability**

All coding was done independently, with home pages and separate news stories first printed, appropriately compiled, dated and then analyzed. Since the units of analysis were clearly defined as clearly identifiable, no other coders were involved in the study.

Intracoder reliability was tested by recoding a random subsample of 9.5 % the data set (18 of 192 editions). The recoding was conducted 10 days after the first coding. As a result, intracoder reliability was measured to be 0.95. To measure intracoder reliability most content analysis studies propose 10% for test-retest coding (Riffe, Lacy, & Fico, 1998).

**Internal and external validity**

To improve the validity of the study a number of elements used in the methodological procedure have been borrowed from similar studies that conduct either cross-national content analysis of the traditional media (Brossard, Shanahan, & McComas, 2004; Peter, 2002) or research of online newspapers, compared to the traditional media forms (Barnhurst, 2002; Althaus & Tewksberry, 2002) or analysis of the new medium from various aspects (Dimitrova et al., 2003; Boczkowski, 1999, 2002).

**Results**

A total of 192 newspaper editions, both online and printed, were analyzed in this study. The analysis of the data reveal that, although all the five online newspapers have
the potential to reach the same audience, there are substantial differences in the amount of international news coverage between American and European newspapers. To investigate the new medium in the U.S. and the EU all the five online newspapers were examined separately and later the results were summarized and compared between the two newspaper groups. The first group refers to U.S. and the second group refers to European online newspaper group.

Table 1 summarizes the total and mean numbers of both national and international news coverage reported in the five online newspapers during one month. The American online newspapers covered significantly more national news (26.75 stories per issue, on average), than did the European newspapers (19.03 stories per issue, on average).

Moreover, the American newspapers also reported significantly more international news stories than the European newspapers (with mean distribution of 16.88 and 7.08 respectively).

**Hypothesis 1.1** predicted:

*The breadth of international news coverage differs significantly between U.S. online newspapers and European online newspapers.*

The results of a one sample t-test show that there is statistically significant difference between the two newspaper groups, both for national (\( t = 36.12, \text{df} = 31, p < 0.000 \); \( t = 26.53, \text{df} = 31, p < 0.000 \)) and international news coverage (\( t = 28.17, \text{df} = 31, p < 0.000 \); \( t = 24.95, \text{df} = 31, p < 0.000 \)), which allows supporting hypothesis 1.1.

A newspaper's breadth of international news coverage was measured as the percent of international news stories in the newshole per issue that an online newspaper covered.
### Table 1

**Total and Mean Numbers of National and International News Stories in the Five Online Newspapers for June 16-July 17, 2005**

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>National news stories (total)</th>
<th>National news stories per issue (mean)</th>
<th>International news stories (total)</th>
<th>International news stories per issue (mean)</th>
<th>International stories in newshole</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Times</td>
<td>1091</td>
<td>34.09</td>
<td>665</td>
<td>20.78</td>
<td>37.87%</td>
</tr>
<tr>
<td>Washington Post</td>
<td>621</td>
<td>19.40</td>
<td>368</td>
<td>12.97</td>
<td>37.21%</td>
</tr>
<tr>
<td>American online newspapers (total)</td>
<td>1712</td>
<td>26.75*</td>
<td>1033</td>
<td>16.88**</td>
<td>37.54%</td>
</tr>
<tr>
<td>Independent</td>
<td>502</td>
<td>15.69</td>
<td>302</td>
<td>9.44</td>
<td>37.56%</td>
</tr>
<tr>
<td>Times Frankfurter Allgemeine Zeitung</td>
<td>981</td>
<td>30.66</td>
<td>261</td>
<td>8.16</td>
<td>21.01%</td>
</tr>
<tr>
<td>European online newspapers (total)</td>
<td>1829</td>
<td>19.03*</td>
<td>679</td>
<td>7.08**</td>
<td>27.89%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>3541</strong></td>
<td><strong>1712</strong></td>
<td><strong>1712</strong></td>
<td><strong>32.72%</strong></td>
<td></td>
</tr>
</tbody>
</table>

* t-test, two-tailed, p < 0.000
** t-test, two-tailed, p < 0.000
Comparing the percent of international to national news stories between the two newspaper groups reveals that the U.S. online newspapers covered significantly more international news stories (37.54%), than did the European online newspapers (27.89%). The present study, however, neither analyzes types of stories that made up international news coverage, nor are the criteria for newsworthiness used by any of the five online newspapers studied. The data analysis that computed the average number of international news stories by each issue has also uncovered that the New York Times (with the average of 20.78 stories per issue) in the American group and Frankfurter Allgemeine Zeitung (7.08 stories per issue) in the European group skewed overall results to some extent.

The depth of international news coverage was measured by computing, first, the average number of words and, second, the average number of hyperlinks for each international story in each online newspaper. Table 2 lists the total and mean word count in international news stories for each of the five online newspapers. Both the American and the European online newspaper groups within themselves were rather similar in the amount of attention to international news.

A two sample t-test reveals a statistically significant difference ($t = 9.92$, $df = 31$, $p < 0.000$; $t = 11.89$, $df = 31$, $p < 0.000$) within the American online newspaper group. However, for the European online newspaper group an analysis of variance shows no significant difference ($F = 0.32$, $df = 93$, $p < 0.72$) in the average word count among the three European online newspapers. Table 2 also shows that the American online newspapers provided significantly deeper ($t = 1.71$, $df = 31$, $p < 0.05$) international news coverage than the European online newspapers (856.9 and 792.7 words per issue on average by the two groups respectively).
## Table 2

**Total and Mean Number of Words in International News Stories Covered by the Five Online Newspapers for June 16-July 17, 2005**

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Words in all international news stories (total)</th>
<th>Words per international news story (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New York Times</strong></td>
<td>29470</td>
<td>920.9*</td>
</tr>
<tr>
<td><strong>Washington Post</strong></td>
<td>25370</td>
<td>792.8*</td>
</tr>
<tr>
<td><strong>American online newspapers (total)</strong></td>
<td>54840</td>
<td>856.9***</td>
</tr>
<tr>
<td><strong>Independent</strong></td>
<td>23746</td>
<td>742.0**</td>
</tr>
<tr>
<td><strong>Times</strong></td>
<td>21908</td>
<td>684.6**</td>
</tr>
<tr>
<td><strong>Frankfurter Allgemeine Zeitung</strong></td>
<td>24311</td>
<td>759.7**</td>
</tr>
<tr>
<td><strong>European online newspapers (total)</strong></td>
<td>69965</td>
<td>728.5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>124805</td>
<td>792.7***</td>
</tr>
</tbody>
</table>

* t-test, two-tailed, p < 0.000  
** Analysis of variance (df = 2, 92): F = 0.32, p < 0.72, post hoc Tukey test with significance level at least 0.72  
***t-test, two-tailed, p < 0.05
These findings support hypothesis 1.2, which predicted that:

**Hypothesis 1.2:**

The depth of international news coverage differs significantly between U.S. online newspapers and European online newspapers.

The present study also analyzed a second dimension of the depth of international news coverage: the number of story related hyperlinks (which add in depth information about news stories) was counted for each newspaper.

Table 3 summarizes the results of the hyperlink analysis. A one sample t-test registers statistically significant difference ($t = 4.12, df = 31, p < 0.000$) within the American online newspaper group and shows that the *New York Times* used more hyperlinks than did the *Washington Post*. For the European newspaper group the analysis of variance test reveals significant differences ($F = 8.66, df = 93, p < 0.000$) among the three European newspapers, considering the number of story related hyperlinks.

The *Times* and the *Independent* incorporated approximately similar number of hyperlinks (3.41 and 3.88 hyperlinks per story on average), while *Frankfurter Allgemeine Zeitung* did not take advantage of the Internet feature and introduced, on average, 1 hyperlink in each story.

Hypothesis 1.2, that predicted significant difference in newspaper’s depth of international news coverage between the American and the European online newspapers, is supported. According to a paired two sample t-test, there is statistically significant difference ($t = 1.91, df = 31, p < 0.03$) between U.S. and European newspapers regarding the number of hyperlinks introduced to the international news stories.
Table 3

Hyperlink Count per Story and Mean Number per Issue in the Five Online Newspapers for June 16-July 17, 2005

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>International news stories (total)</th>
<th>International news stories that contain hyperlinks</th>
<th>Number of hyperlinks (total)</th>
<th>Hyperlinks per international news story (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Times</td>
<td>665</td>
<td>40.63%</td>
<td>65</td>
<td>2.03*</td>
</tr>
<tr>
<td>Washington Post</td>
<td>368</td>
<td>37.5%</td>
<td>45</td>
<td>1.41*</td>
</tr>
<tr>
<td>American online newspapers (total)</td>
<td>1033</td>
<td>39.07%</td>
<td>110</td>
<td>1.72***</td>
</tr>
<tr>
<td>Times</td>
<td>302</td>
<td>50%</td>
<td>109</td>
<td>3.41**</td>
</tr>
<tr>
<td>Independent Frankfurter Allgemeine Zeitung</td>
<td>261</td>
<td>75%</td>
<td>124</td>
<td>3.88**</td>
</tr>
<tr>
<td>European online newspapers (total)</td>
<td>679</td>
<td>74.33%</td>
<td>265</td>
<td>2.76***</td>
</tr>
<tr>
<td>Total:</td>
<td>1712</td>
<td></td>
<td>375</td>
<td></td>
</tr>
</tbody>
</table>

*t-test, two tailed, p < 0.000, p < 0.001
**Analysis of variance (df = 2, 92): F = 8.68, p < 0.000, post hoc Tukey test
***t-test, one tail, p < 0.03
Contrary to the previous test of hypothesis 1.2 (measured by word count), this time the European online newspapers covered international news stories deeper than the American newspapers. The results of the data analysis allow concluding that the European online newspapers provided deeper coverage of international news stories in terms of the amount of related to a story insight information. The results of the previous two hypotheses also furnish enough data to test hypothesis 1.3.

**Hypothesis 1.3 predicted:**

*U.S. online newspapers give less media attention to international news compared to European online newspapers.*

Defining media attention as a newspaper’s breadth and depth of international news coverage, the following results are drawn based on the two previous hypothesis tests. In terms of newspaper’s breadth of coverage the American online newspapers covered more international news stories than did the European newspapers (37.54 percent and 27.89 percent of the newshole respectively for the two groups). The word count shows that the American online newspapers also provided significantly more depth to international news (856.9 words per story compared to 728.5 words per story in the European newspapers).

But the hyperlink analysis does not support hypothesis 1.3, as the European online newspapers provided more additional information than did the American online newspapers, with the average of 1.72 and 2.76 hyperlinks per international news story by the first and the second group respectively. The tests of these three hypotheses indicate that, though, online newspapers have no newshole constrains, they could be still largely governed by the policies typical to the traditional media. Quite unexpectedly, the present
study has found the differences in adopting new technologies by the new medium in the
U.S. and the EU: the U.S. online newspapers expanded the breadth of international news
coverage, while the European online newspapers took advantage of the Internet and
provided more story details by using hypertext and multimedia features.

Applying an intermedia approach, the present study uncovers that the online \textit{New
York Times}, to some extent, resembles its printed edition regarding the pattern of
international news reporting. Table 4 presents the total and mean numbers of national and
international news story coverage by the printed and the online \textit{New York Times}.

A one sample t-test shows significant difference ($t = 2.06$, $df = 31$, $p < 0.047$) in
international news coverage between the two \textit{New York Times} editions, and rather
contradictorily, supports hypothesis 2.1, which predicted:

\textit{Hypothesis 2.1:}

\textit{The online \textit{New York Times} provides significantly broader coverage of
international news compared to the printed \textit{New York Times}.}

Comparing the means of international news stories does show that significantly
more (20.78 stories per issue) international stories were reported in the online edition,
than did the printed \textit{New York Times}, and it is what hypothesis 2.1 initially predicted. But
the present study operationalized a newspaper’s breadth as a percent of international
news stories in the newspaper’ newshole. Based on this definition of coverage breadth,
the printed edition allocated half of its newshole (51%) to report the world events, then
the online \textit{New York Times} only 37.87%. 
Table 4

Mean Numbers of International News Stories in the Printed and Online New York Times

for June 16-July 17, 2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Online edition</td>
<td>1091</td>
<td>34.09</td>
<td>665</td>
<td>20.78*</td>
<td>37.87%</td>
</tr>
<tr>
<td>Printed edition</td>
<td>401</td>
<td>12.53</td>
<td>415</td>
<td>12.97*</td>
<td>51%</td>
</tr>
<tr>
<td>Total:</td>
<td>1492</td>
<td>23.31</td>
<td>1080</td>
<td>16.86</td>
<td></td>
</tr>
</tbody>
</table>

* t-test, two tailed, p < 0.047
Such findings could be explained by editorial decisions to promote international focus for the printed edition and not to loose its traditional readers, by reporting enough national news online, being oriented on international audience.

Based on the research on behavior patterns of online readers, who prefer news in small bits and about multiple issues (Livingston, 2003), hypothesis 2.2 predicted:

**Hypothesis 2.2:**

*The online New York Times provides shallower coverage of international news compared to the printed New York Times.*

The present study compared 10 randomly selected international news stories published by both newspaper versions and revealed that all the story copies were identical in text content and, therefore, equal in word count. Barnhurst (2002) draws the same conclusion in his study that compares online and printed newspapers. This finding shows that both New York Times editions offer exactly the same depth of information on international news. The other dimension of coverage depth, measured by hyperlink count, can not be applied because the printed newspaper can offer neither hypertext nor multimedia nor interactive features. Provided both newspaper versions offered the same depth of information, the online New York Times added hyperlinks that offer in depth and relevant details, therefore, the study can not support hypothesis 2.2, as the online New York Times evidently offered deeper coverage of international news.

According to the data analysis of the same 10 randomly selected international news stories, the study concludes that both New York Times editions used similar patterns to frame international news stories. The present study reveals that, occasionally,
hyperlinks were added to the same copy of international news story published in the printed edition and then placed online. Thus, hypothesis 2.3 is supported.

**Hypothesis 2.3:**

*The international news section of the online New York Times is framed according to the international news section of the printed New York Times.*

This finding also demonstrates that the printed *New York Times* sets agenda for the online edition to some extent. Beside the stories that were repeated in both editions, the online *New York Times* reported on other international news as well.

The fluid nature of the new media does not allow comparing the agenda of international news section in the printed and the online edition. Though, most stories covered by the printed *New York Times* appeared online, their placement and presentation order were not the same. The possibility to update online newspaper content instantly, introduced differences to the agenda of the international news section in the online edition. The top stories in the printed edition were removed to the bottom of the online page within the same publication day, while the printed edition published the night before became permanent for that day. Moreover, Althaus & Tewksberry (2000, as cited in Eveland, Marton, & Seo, 2004) point out that the first story under the “international” heading online is, frequently, the most recently posted story, rather than the most important, as it is in the printed newspaper. Clearly, the organization of stories in online newspapers is substantially different from their printed counterparts.

**Discussion**

The present study analyzed and compared depth and breadth of international news coverage reported by American and European online newspapers. In particular, the study
tried to find out if the new medium facilitated more uniformity in international news coverage in the U.S. and the EU. Beside the cross-national analysis, an intermedia approach was applied to examine presentation patterns in international news coverage by the printed and online *New York Times*. This way the study observed the coexistence of the traditional and new medium, investigating the case of intermedia agenda-setting.

The initial assumption of the present research was based on previous cross-cultural studies (Tai, 2000; Brossard, Shanahan, & McComas, 2004; Halavais, 2000) that analyzed differences between American and European traditional news media. Previous studies found U.S. media to be much more locally focused in their news coverage. The current analysis, however, uncovers two rather unexpected findings: first, the U.S. online newspapers, compared to the European ones, gave more breadth to international news and, second, the percent of international news stories in the newshole covered by the printed *New York Times* was significantly higher compared to its online edition. These results lead to a number of plausible explanations.

Differences in the amount of media attention to international news between the U.S. and the European online newspapers support the conclusion drawn by Dimitrova et al. (2003). Despite the fact that the Internet is claimed to be "a great equalizer" (p. 412), when every online newspaper has a potential of reaching the same pool of readership, not being limited in depth and breadth of news coverage, their study (Dimitrova et al., 2003) argues against that. Though the Internet may seem to be so for the new media, the patterns of international news coverage seem to be similar to those used by traditional newspapers.
The present study’s findings reveal that the three European online newspapers covered fewer international news stories but provided more opportunities for their readers to follow storylines beyond the story text, therefore, potentially giving deeper coverage to the world events. Apparently, the editors of the European online newspapers took more advantage of the new medium. However, the study did not intend to analyze in-the-newsroom decisions to decide the use of hyperlinks.

One plausible explanation why the U.S. online newspapers gave broader coverage of international news, compared to the European newspapers, are the consequences of September 11 events and the war in Iraq. Media researchers (Rosenberry, 2005; Pulaski Behling, 2005; Clausen, 2001) point out that international news flow, at least by U.S. media, has changed since then. Also the power of economic determinism in international news flow has been widely emphasized, which is distinctly pronounced in the new medium as well (Wu, 2000; Davis & Owen, 1998). Davis & Owen (1998) suggest that news values, preached by the new media, are heavily influenced by the assumptions that entertainment news draws a larger audience. Analyzing further which topics make up international news section and which news values predominate for both newspaper groups, would clearly explain what predetermines the amount of media attention to international news by each online newspaper.

The findings about international news coverage by the two versions of the New York Times showed the online edition to be an extension of its printed edition rather than a brand new medium. However, the online edition not only took advantage of boundless space and covered, on average, more international news stories, but the electronic version also proved to facilitate broader depth of international news. This finding contradicts
another study (Barnhurst, 2002), saying that online newspapers refrain from offering all their content on the Internet. The frame of the present study does not allow concluding whether the *New York Times* stands out and does not represent the rest of the U.S. press, or online newspapers have progressed so much during the last 3 years. The present study, (similar to Pavlik, 1997, as cited in Dimitrova et al., 2003), revealed that the online *New York Times* duplicated the same story text, later supplementing stories with interactivity and hypertextuality features, therefore, the online edition gave more in depth coverage. The online *New York Times* still generally reflected editorial policies and news values employed by the printed edition: all the stories reported in the printed edition were found on the Internet. Thus, the printed edition still sets agenda for the online publication to some extent.

Analyzing differences in the news presentation and framing, flexibility of online news formats and differences in information presentation deserved consideration. Althaus and Tewksbury (2002) point at the structure of online newspapers, where news is organized into topical categories, rather than linearly by printed newspapers to encourage readers to process information differently. The present content analysis found that the online *New York Times* provided a broader range of both national and international news. Based on the findings, summarized in another study (Barnhurst, 2002), local newspapers provide a much more limited number of issues online of that covered in their printed editions. Also, quite unexpected to the findings of the current study is the conclusion made by Althaus and Tewksbury (2002), who found out that the readers of the printed *New York Times* had reported a broader range of national news compared to the readers of the online version. Evidently, these findings bring about the discussion about the role
of media environment, that can influence news perception, and about the *New York Times* itself, that hardly can be generalized to all U.S. media. The present study only registered the fact that the printed edition gave international news more space in the newshole, compared to its online edition. Therefore a further study should take both agenda-setting approach and news presentation patterns analysis comparing the traditional and the new medium to determine how the new medium and online journalism change news reporting and presentation.

Rather similar patterns in international news presentation by both editions can be predetermined by economic reasons as well (Wu, 2000; Davis & Owen, 1998; Barnhurst, 2002). At least an attempt to keep their readers can explain why the content of the online *New York Times* resembled its printed version so closely. Similar to the findings of the present study, Dimitrova et al. (2003) suggest that online newspapers add mostly internal hyperlinks to their stories, fearing that readers will not come back when they leave a newspaper’s Web site.

The findings of the present study can be generalized only to the sample size and the time frame of the study. The units of analysis were clearly defined and easily coded. Only one coder was involved and, therefore, no test of intercoder reliability was conducted, which imposes some limitation on the study. Although, neither internal nor external validity was tested in the present study, other studies (Brossard, Shanahan, & McComas, 2004; Peter, 2002; Barnhurst, 2002; Althaus & Tewksberry, 2002; Dimitrova et al., 2003; Boczkowski, 1999, 2002) served as the guidelines to elaborate on the methodology section.
Since the depth of coverage was measured by word count in international news stories, there is a limitation due to the differences in linguistic means to express the same ideas in English and German. Since both languages belong to the same German linguistic group, however, any differences of this type are assumed to be minor and insignificant. Despite the fact that the results could have been slightly skewed, as a language can have an effect on international news flow (Kim & Barnett, 1996; Wu, 2000), including both British and German online newspapers, apparently, enriched the present study and gave a more diverse picture of European media. British media, most frequently studied, alone do not represent all the European media. This limitation, nevertheless, can be approached in the next studies by counting and comparing, for example, the number of words and sentences per story.

The present study also did not avoid an evident limitation of all content analysis studies, which is methodology itself. As Roessler (2001) mentioned, explanatory power of content analysis is limited. The content analysis has provided a thoroughly detailed snapshot depicting the amount of media attention to international news by U.S. and European new medium within a limited time period. The study has also presented an elaborate picture of news frames and presentation patterns by the traditional and the online New York Times; however, only plausible explanations can be drawn based on this research.

Follow up studies should include approaching a number of questions generated by the present research. Further research could investigate a greater number of online newspapers, including, for instance, more European countries. Also, a longer time frame will allow tracking and measuring changes in international news coverage over time.
Longer observations will give an opportunity to see if international news presentation and agenda in the new media have a potential to become more uniform both in the U.S. and European media. Researching if there is correlation between the depth and breadth of international news coverage is a possible venue for further studies as well. Exploring these directions of further research we can answer the question if new media create new meanings and how various components of media and technology could affect dissemination and flow of world news from country to country (Silverstone, 1999).

Conclusions

The choice of the newspapers does not allow making generalizations over the rest of the new media that operate both in the U.S. and the EU. Also, the five online newspapers investigated here, clearly, stand out from the rest of the media in terms of readership, traditions, online presence, and circulation. However, the tests conducted in this study showed ultimately no significant differences within both newspaper groups that assumes valid comparisons between the two groups. The study has also put under scrutiny the question how interactive, hypertextual, and multimedia environment changes international news coverage with a cross-national approach, which enriches our understanding of international news coverage in the age of the new media.

The findings of the study generally support the conclusion by Nossek (2004), who says that regarding the technological changes to global communication, the Internet coverage is structured according to the national ties of whoever built and edited the Web site. This means that news values and editorial decisions that guide the choice of international stories to report should be examined as well. Apparently, the coverage of international news, measured by the amount of media attention, can be influenced not
only by the media environment, where online newspapers have a higher potential to provide more uniform coverage, but equally by media traditions and culture.

The presence and the development of new technologies, evidently, is one of the factors to affect the way international news is reported by media with different traditions. At present, it can not be denied that the traditional newspapers serve role models and set agenda for their online editions. The present study also concluded that technological potential of the new medium exceeds its practical application (Davis & Owen, 1998; Barnhurst, 2002) and online newspapers can be viewed as an attempt by U.S. and European newspapers to establish online presence, rather than distinguish themselves as the new medium. The new medium remediates traditional newspapers in a soft manner, as online newspapers, and at least thus far, seem to be only the extension of the traditional newspapers. So far, the Internet is utilized more in the function of a channel to transmit newsworthy information to the audience rather than a new medium.
Appendix A

Coding Instrument Protocol

This protocol is designed to facilitate better coding of the data collected to measure the depth and breadth of international news coverage in one paper and five online newspapers. The present study examines the amount of media attention to international news stories by comparing national news coverage versus international news coverage. The study also analyzes how international news coverage is presented and framed by the printed versus online edition of the *New York Times*. The protocol provides main definitions, used in the coding procedure, and is supposed to facilitate more accurate analysis of the content.

*Edition date* – the day and the month of the online or paper release or publication.

*News story* – a piece of information reporting a newsworthy event covered by one the newspapers and placed into *National news* or similar sections. Only news stories that have been written by the newspaper’s staff are coded. Any news from outside sources such as *AP, Reuters,* or similar are not considered.

*National news story section* - some space on a newspaper’s Web site or in the printed *New York Times*, containing news stories about the country of newspaper’s origin. Such space is titled as *National news* or similar, indicating the country of newspaper’s origin.

*National news story count* - the number of headlines per corresponding section. The news story date should be watched carefully because news sections often contain relevant news stories, published on the previous days.
International news story – a piece of information that covers a newsworthy event that happened outside the country of newspaper’s origin, covered by in a corresponding section.

International news story section - some space on the newspaper’s Website or in the printed New York Times containing news stories about events originating from a region, different from the country of newspaper’s origin. Such space is titled International news / World or another corresponding title.

International news story count is conducted by counting the number of headlines in the corresponding section (international news or equivalent), whether in the printed or in on of online editions. The news story date should be watched carefully because news sections often contain relevant news stories, published on the previous days.

International news story word count is conducted by randomly selecting one of the international news stories per each online edition first. Later, the story text should be copied into an MS Word document and finally the number of words is automatically determined by word processing software.

Hyperlinks are related information pieces that are incorporated into the text of a story itself or attached to a story. In-text hyperlinks are underlined words or phrases that lead to additional information about the story placed on different pages within a newspaper Webpage (internal hyperlink) or outside Web sites (external hyperlinks). Only hyperlinks within one mouse click are considered and coded.

Hyperlink type defines the nature of the hyperlink which could be one of the following: in-text, multimedia (contains video or/and audio files, related to a story),
photo / picture / graph (could have enlarged version or be linked to a series of related photos / pictures / graphs or their combination), links to related stories/news.

**Hyperlink placement** is defined by the virtual place on the Internet, to where this link leads. A hyperlink could be lead to some additional information about the story placed on a different page within a newspaper webpage (internal hyperlink) or to outside websites (external hyperlinks). Only hyperlinks within one mouse click are considered and coded.

**Hyperlink count per international news story** is coded by determining the number of hyperlinks, incorporated directly into the story plus the number of links that is related to a story and placed on the same Web page.
Appendix B

Content Code Book

Newspaper Coding Sheet

General Newspaper Characteristics:

V1 Edition Date:

1 Month-June=07, July=08.
2 Day
3 Year

V2 Newspaper Name:

1 New York Times (online version)
2 New York Times (printed version)
3 Washington Post
4 Times
5 Independent
6 Frankfurter Allgemeine Zeitung

General Characteristics of a National News Story:

V3 National News Story Section:

1 National news
2 News
3 Other corresponding section
4 Difficult to identify

V4 National News Story Count
**International News Coding Sheet**

General Characteristics of an International News Story:

V5 International News Story Section:

1. *International*
2. *World*
3. *Aus der Welt*
4. *Other section*
5. *Difficult to identify*

V6 International News Story Count

V7 International News Story Word Count

V8 Hyperlink Presence:

1. *Present (1)*
2. *Absent (0)*

V9 Hyperlink Type:

1. *In-text*
2. *Multimedia (video or/and audio)*
3. *Photo / picture / graph (enlarged or/and a series or/and combination of them)*
4. *Related stories/news*
5. *Difficult to identify*

V10 Hyperlink Placement:

1. *Internal*
2. *External*

V11 Hyperlink Count per International News Story
References


http://www.ascusc.org/jcmc/vol1/issue4/cover.html


Roessler, P. (2001). Between online heaven and cyberhell: the framing of “the Internet” by traditional media coverage in Germany. *New Media & Society, 3*(1), 49-66.


Biographical Sketch

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She enrolled into the Communication & Media Technologies Graduate Program at Rochester Institute of Technology in September 2004 as part of Ed. Muskie Graduate Fellowship Program.

She earned her Bachelor of Arts in English and German Interpreting, with minor concentration in International Economic Relations at Institute of Modern Knowledge, Vitebsk, Belarus in 2002.

She moderated a panel at the conference for undergraduate research in communication at RIT in April, 2005. She presented her research paper *Remediation of News: The Transition from Traditional to Online Newspapers* at the research conference of Eastern Communication Association in Pittsburgh (April, 2005). In June, 2005 she presented her research paper *Biases and Consequences of New Communication Technologies: The Case of Global Media Convergence* at the 6th convention of Media Ecology Association at Fordham University, New York.

*Other research papers:*

- *The analysis of communicative elements in English advertisements* (1998)
- *The comparative analysis of international news coverage for Belarusian and American audience* (2001)
- *The analysis of communicative elements in news discourse* (2002), Diploma paper

*Scholarships:*

- *Freedom Support Act, Senator Ed. Muskie Graduate Program* (finalist), 2004
- *DAAD - Deutsche Akademische Austausch Dienst Program* (finalist), 2004
- *FSA Ed. Muskie Program* (semifinalist), 2003
- *FSA Undergraduate Program* (semifinalist), 2000
Notes

1 New media is “a generic term for the many different forms of electronic communication that are made possible through the use of computer technology. The term is in relation to old media forms, such as print newspapers and magazines that are static representations of text and graphics. New media include web sites...” (The source for WI-FI Business and Technology. Retrieved January 10, 2005 from http://wifiplanet.webopedia.com/TERM/N/new_media.html).

New media are the press and TV online that may include the elements of multimedia (audio and video).

2 The number of American newspapers with an online version rose from 1,149 in 1999 to 1,207 in 2000. In Europe, the same trend was recorded: In Germany, 232 newspapers were present online in 2000, up from 179 in 1999” (Nguyen, 2003, par. 1).

3 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 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) (Deuze, 2001).

4 Riffe & Freitag’s (1997) study indicates that within the period of 1971-1995 content analysis studies published in Journalism & Mass Communication Quarterly comprises only 5.1%, while focusing on content of media messages, 71.0 % of the published studies dealt with news/editorials.


6 The complete listing of the Columbia Journalism Review as well as methodology details can be found at http://www.cjr.org/year/99/best.asp.

7 “News link is defined as a hyperlinked headline or a combination of words and phrases which directs readers to the content of information represented by the headline through activation” (Li, 1998, p. 358).