Humor in the Age of Digital Reproduction:
Continuity and Change in Internet-Based Comic Texts

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This paper focuses on one of the most prominent manifestations of humorous communication in the present era – Internet-based humor. It explores both the content and the various forms of comic-texts in 'humor hubs' – large, dynamic, Websites containing verbal and visual humor. A content analysis of 400 humorous texts from eight salient Websites shows that the Internet functions both as a 'carrier' of old humor types such as jokes and cartoons and as a 'generator' of new humor types. The new types are defined and analysed in the light of three characteristics of the Internet: Interactivity, multimedia and global reach. Whereas interactivity is expressed in the humorous texts in a very limited way, the features of multimedia and global reach are more visible. The results point to a prominence of the visual humorous forms over the verbal forms, as well as to a global dominance over the local. This supremacy of the global is evident in the analysis of the humorous topics: Globally oriented topics such as sex, gender and animals are much more popular than locally oriented topics such as ethnicity and politics. This does not mean, however, that the humorous texts reflect a universal set of values. Not only are the vast majority of the texts in English, but they also reflect the values and priorities of Western, capitalist and youth-oriented cultures.

The basic assumption underlying this study is that humor can serve as a unique key for the understanding of social and cultural processes. Humor has accompanied human society from its very beginnings, changing form, content and style in response to social, cultural and technological trends. In the present era, the Internet has become a major actor in the production and distribution of humor. Countless Websites are devoted to humor, and an enormous traffic of emails containing humorous messages daily congest PC terminals all over the world. Thus, for instance, recent studies have found that sending and receiving jokes was the most popular online political activity during the U.S. 2004 presidential election (Coleman, 2005) and that over a third of Internet users in the U.K. use the Internet to find jokes, cartoons and other humorous material (Dutton et al., 2005).

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The new phenomenon of Internet-based humor appears highly significant to the understanding of both humor and the Internet. Yet, while the Internet has become a subject of intensive academic research during the last decade, and humor has been investigated since the days of ancient Greece, the encounter between them has been generally overlooked.[1] This study therefore represents a first attempt to explore the implications of the Internet medium on the humorous message. By 'humorous message' I refer in this paper both to the form of the humorous texts (verbal or visual, interactive or non interactive, etc.) and to their content (topics, targets, etc.). By 'Internet medium' I refer mainly to Websites, the 'mass media' interface of the Internet. Humor appears in many kinds of Websites, spanning personal/amateur blogs that provide funny and lighthearted commentary on events to commercial or professional Websites which often link to mass media such as newspapers (e.g. http://www.theonion.com) and television (e.g. www.comedycentral.com). This paper focuses on a Website type that I term 'humor hub.' A humor hub is a large, dynamic repository of visual and verbal humor about various topics. Humor hubs tend to embody the strong linkage between Web and email circulation of humor: They are often based on contributions of material that has been circulated by 'pass along' emails and they also encourage visitors to distribute their content to friends via email. Since humor hubs take part in the creation and dissemination of widely shared online folklore, their analysis may provide us with useful insights about humor in the age of digital reproduction.

The paper addresses two main questions: a) to what extent does the Internet function as a mediator of 'old' or traditional humorous forms and topics (e.g. jokes), and to what extent does it facilitate 'new' humorous forms and topics (e.g. digitally manipulated photographs); b) how do the new forms and topics of online humor relate to fundamental characteristics of the Internet, specifically interactivity, multimedia and global reach? These questions are addressed through content analysis of 400 humorous texts from eight salient humor hubs. The analysis aims not only to detect and define the new forms and topics of Internet-based humor, but also to portray some of their possible social and cultural implications.

Humor and the Internet

The framework for the analysis of humor on the Internet consists of two parts. In the first, which is dedicated to humor, I explore some of the topics and forms of humor in the pre-Internet age. The second part focuses on the Internet, pointing to some of its defining characteristics that might bear significant implications for humorous texts.

Humor in the pre-Internet age: Topics and forms

> 'Humor can be dissected as a frog can, but the thing dies in the process…'
> (White, cited in Pretorius, 1990, p. 259)

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[1] The few pioneering works that deal with Internet-based humor (Ellis, 2002; Foot & Schneider, 2002; Kuipers, 2002; Oring, 2003; Warnick, 2002) tend to focus on specific topics or case studies and do not attempt to provide an overview of the new field. Some of these works, which I will refer to later on, provide important insights about Internet-based humor.

The fear of the fatal consequences of humor research has not deterred scholars from trying to investigate the mysteries of the 'Homo humorous.' From Aristotle, through Hobbes, to Freud and Bergson, scholars have addressed the question of what makes people laugh. During these decades of research, three Meta theories about the causes and functions of humor evolved: the superiority theory, asserting that laughter is generated by a feeling of superiority that people have over others; the incongruity theory, claiming that humor derives from an unexpected encounter between two incongruent components or fields; and the release theory, suggesting that humor provides relief for mental/nervous or psychic energy (Lynch, 2002; Raskin, 1985).

Whereas the Meta theories aim at explaining every instance of humor in the universe, other threads of research focus on specific topics of humor. The range of topics that are used in humorous communication is very wide, and seems to be limited 'only by the number of things there are in the world for us to discuss' (Allen, cited in MacHovec, 1988, p. 11). However, some topics are used as joking material more often then others. Driessen (2004) lists six prominent domains of joking across the world – language, sex and gender, politics, ethnicity, religion and age. Although we do not have empirical tools to judge if these topics are indeed the most salient joking topics in the world (or even in a specific country), most of them fall in line with the topics that have been studied most extensively by humor researchers in the last century.[2]

The six humor topics mentioned by Driessen (2004), as well as other humor topics, can be divided into two categories entitled 'globally oriented' and 'locally oriented.' This division follows a basic tension that characterizes humorous communication: On the one hand, humor is a universal phenomenon, which has accompanied human society from its very beginnings (Boyd, 2004); On the other hand, humor is culture dependent as it relies on the symbols, stereotypes and codes specific to the place and time of its creation and reception (Boskin, 1997).

Globally oriented humorous texts deal with features or social categories that are common to societies all over the world. Humorous texts about sex, gender and age fall readily into this category. To clarify, I do not argue that jokes about sex, gender and age bear the same messages in all cultures, but that they are based on shared universal categories such as men and women or young and old. In contrast, locally oriented joking topics draw more heavily on local categories and cultural patterns. Thus, humor about topics such as language, politics and ethnicity is often based on culture-specific categories, stereotypes and knowledge systems.

The variety and richness of humorous communication is reflected not only in its topics but also in the forms that it takes. Humor is embedded in all basic morphologies of human communication: Sound-based oral communication, written language (script), static images and moving images. It is an important

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[2] To give some examples of the emphasis of these topics in general books about humor: Apte's 'Humor and laughter' (1985) includes chapters on sex/gender, children's humor, ethnicity, religion and language; Raskin's 'Semantic mechanisms of humor' (1985) includes chapters on sexual, ethnic and political humor; and Oring's 'Engaging humor' (2003) deals with ethnic/racial/national humor, humor on sex/gender and political humor.

feature of interpersonal communication and has a salient presence in mass media such as books, television and cinema. Over the last centuries, each modern mass media technology has been linked to distinctive types of humorous texts: Books include jokes, riddles and puns (and also visual types such as comics and cartoons); newspapers print comics, cartoons and humorous columns; the radio has accommodated comedy routines and sketches and later on prank calls; and finally, television has been hosting a wide range of humorous types – from stage-based types such as sketches and stand-up comedy, to medium-based types such as sitcoms and funny home-videos. This distribution of humorous types between different media was shattered in the 1990s due to the emergence of a new communication technology – The World Wide Web.

Humor on the Internet

The rapid development of the World Wide Web during the past decade has been accompanied by numerous attempts to define and theorize the nature of the Internet in particular, and new media in general (e.g. Lievrouw & Livingstone, 2002; Lister, 2003; Newhagen & Rafaeli, 1996). From the various defining characteristics of the Internet that were identified in the literature, this paper will focus on three attributes that might bear special significance for the analysis of humorous texts: interactivity, multimedia and global reach.

Interactivity is perceived as an important key to understanding the social implications of the Internet. However, the definitions of interactivity, as well as the methods for their operationalization, remain in dispute. Broadly framed, interactivity alludes to 'the process of reciprocal influence' (Pavlic, 1996, p. 135), in which participants or users have a potential of being 'both sources and recipients of content and interaction' (Sundar et al., 2003, p. 32). Kiousis's (2002) definition of the concept is based on three dimensions: technology – the degree to which a medium facilitates reciprocal message exchange; perception – the degree to which users perceive a certain medium as stimulating interpersonal communication; and the context of the communicative setting – the level of dependency between messages. According to Refaeli (1988), in order to define communication as interactive this dependency should be of a third order. He sees interactivity as 'feedback that relates both to the previous message and to the way previous messages related to those preceding them' (p. 120). In this study, both Rafaeli's specific definition and the more general definitions presented above will be taken into account. The analysis will explore how, and the extent to which, interactivity is imbedded in online humorous texts.

Multimedia, as used in this context, signifies two meanings. The first is the capacity of the Internet, as a digital technology, to convey and combine all existing communication morphologies – script and sound, static pictures and moving images. The second is the competence of the Internet to store and deliver digitized content from media that were formerly differentiated, such as television programs and newspapers articles (Bolter & Grusin, 1999; Walther, Gay & Hancock, 2005). This potential for multi-faceted representation has led to debates about the balance between communication morphologies on the Internet. On the one hand, scholars claim that the most dominant morphology underlying the Internet is script (Levinson, 1999) and that the Internet has restored – through applications such as chats and emails – some of the power that the written word has lost in the 20th century (Shifman & Blondheim, In Press). On the other hand, it is claimed that the Internet is the most recent platform for the much heralded 'turn

to the visual' (Kress, 1998, p. 56), in which new visual forms of communication supersede script-based forms (Natharius, 2004). This process started with the invention of photography and moving picture technologies in the 19th century, continued with their mass diffusion and soaring popularity in the early 20th century, and achieved dominance with the launching of television and later video from mid-century onward (Mirzoeff, 1998). Following this conceptualization, the manifestation of multimedia in Web-based humorous texts will be examined at two levels: a) the extent to which the Internet incorporates humor types from various 'old media'; and b) the variety of communication morphologies and the balance between 'verbal' and 'visual' humor.

The third meta-characteristic of the Internet that this study addresses is global reach. The World Wide Web, as reflected by its name, provides unprecedented possibilities to create and access globally distributed content. This feature has led to optimistic claims about the new relevance of Mcluhan's 'global village' vision, suggesting that the Internet has enabled the transformation of former passive TV viewers into active (global) village citizens (Levinson, 1999). The somewhat romantic metaphor of the global village is accompanied by the more ambivalent concept of 'globalization,' which signifies, according to one of its numerous definitions, the 'rapidly and developing process of complex interconnections between societies, cultures, institutions and individuals world wide' (Tomlinson, 1991, p. 170). However, even such a seemingly neutral construction of globalization has become highly contested on ideological grounds, its critics arguing that the so-called global culture is in fact a self-serving Western or American hegemony. Both sides to this dispute do, however, seem to agree that the same new communication technologies have also been applied to preserve and disseminate local cultures. 'Glocalization' (Robertson, 1995), a term borrowed from Japanese business circles, was coined to portray the interpenetration of the global and the local in the digital age. In relation to this study, it is argued that global reach may be embedded both in the form of humor and in its content. Visual forms of humor are treated here as more 'global' than verbal forms, since visual language can move across cultures more easily than verbal language (Snyder, 2001). In terms of content, texts that focus on universal topics/incongruities rather than local ones are regarded as being closer to the 'global' end. Thus, the study will examine the extent to which online humorous texts reflect global tendencies and the extent to which they are rooted in national and local premises.

Methodology

The study is based on a content analysis of 400 humorous Internet texts (e.g. jokes, cartoons, funny clips, etc.). Content analysis of cyber-humor poses a double challenge, derived both from the enormous size, hyperlinked structure and rapid change of the World Wide Web, which complicates the procedures of sampling and utilizing (Weare & Lin, 2000), and from the ambiguity of humorous texts that often makes them difficult to conceptualize and operationalize (Neuendorf, 2002). However, with careful attention to its limits, this method may prove particularly useful for providing an overview of new phenomena such as cyber-humour.

Sample

As presented above, this study aims to analyze humorous texts which appear in 'humor hubs': large, dynamic, repositories of visual and verbal humor on various topics. Such Websites can be divided to two sub-types: a) sites that are dedicated to humor explicitly; b) sites that are defined as 'viral' email websites. These are dynamic archives of material that has been circulated by 'pass-along' or 'viral' emails. Although these sites do not define themselves explicitly as humor sites, the vast majority of their content is humorous.

Since this study aims to examine widely accepted forms and topics of cyber-humor, I tried to sample the most popular sites of both kinds. Due to the decentralized, fragmented and hyperlinked structure of the World Wide Web, this task seems virtually impossible. Moreover, due to the difficulties in obtaining knowledge about the size of the total population of 'humor hubs', this sample can not be considered representative. However, given these limitations, I have tried to provide a careful assessment of the most salient sites by developing and applying a two phase sampling procedure.

In the first stage, three search engines (Google, Yahoo and MSN) were used to allocate relevant sites. Two sets of search terms were applied: for the viral email sites – the words 'funny' and 'viral emails' and for the general humor sites – 'humor' (or 'humour'), 'jokes,' 'funny pictures' and 'movies' or 'videos' or 'flash.' I then examined the first 30 hits in each search engine. For the viral email sites, this assessment pointed clearly to four Websites ranked highly in all three search engines. Therefore, these sites were chosen as context units from which humorous texts were sampled.[3]

This was not the case in the 'general humor' Websites. The comparative examination of the first 30 hits in the search engines did not point to a distinctive group of prominent sites, and therefore a second stage of sampling was applied. In this phase, I created a population of 90 'candidates' comprising the first thirty hits in the three search engines. Then, the 90 candidates were ranked using four criteria: a) no content limitations (i.e. non- censored sites); b) a wide variety of forms; c) a high number of appearances in the different search engines (at least two); d) a high Google page rank (at least five).[4] I

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[3] The four 'viral' sites are: www.boreme.com, http://viral.3dge.net, http://viral.lycos.co.uk, www.kontraband.com. The sites were sampled in April 2005. A recent visit to them has demonstrated the fluid nature of the Word Wide Web. One of the sites (Kontraband) has been transformed into an explicitly 'sex-oriented' entertainment site. The results therefore reflect the Internet as it was in April 2005.

[4] I have included Google's PageRank as a criteria for selecting the Websites due to my attempt to analyze the most prominent and popular humor hubs on the Web. Google PageRank does not measure popularity – it is a link-analysis algorithm that provides us with information about relative importance of Websites. However, the number of links pointing to a Website has proven to be a powerful predictor of traffic (Hindman et al., 2004). Therefore, Websites with a high Google PageRank scores are on average more frequently visited.

then chose the first four sites in the ranked list [5], to complete a list of eight Websites. From each of the eight sites, I randomly drew 50 texts. The total number of texts in the sample was therefore 400.

Coding categories

The codebook included two types of variables: Content-related (topic, incongruities and targets) and form-related (morphology, type and language). The main variables, their definitions and brief comments about their values appear in Table 1.

Table 1: The main variables, definitions and values

Variable	Description	Values
Topic	The topic(s) that the humorous text deals with (the coder was allowed to choose up to three topics for each unit).	50 values (e.g. blondes, animals, computers and television).
Communication morphology	The communication morphology(s) that the text is based on. Each unit was coded in relation to five sub-variables: script, static image, moving image without sound, moving image with sound and sound.	Five values that describe the appearance of the certain morphology in the text (from 'none' to 'the only morphology').
Language	The language that is used in the text (either written or spoken).	
Type	The textual category to which the humorous text belongs.	20 values (e.g. jokes, funny photos, cartoons and 'home videos').
Incongruity	The two incongruous fields that 'clash' in the unit.	Two identical lists of 22 topics/fields (e.g. sex, children, politics).[a] The coder was asked to choose one topic from each list to describe the humorous 'clash.'
The butt	The target of mockery in the humorous text.	30 values, from specific people (e.g. George W. Bush), through social groups (e.g. blondes), to social institutions (e.g. marriage).[a]

[a] These variables also included 'unable to answer' or 'not relevant' options, since not all of the humorous texts are based on apparent incongruities, and sometimes they do not have clear butts.

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[5] The four 'humor' Websites are: www.lifeisajoke.com, www.extremefunnyhumor.com, www.extremefunnypictures.com, www.ebaumsworld.com.

Two Meta categories divided the values in the variables 'type' and 'topic':

1) Each type in the codebook was categorized as either: a) 'old type' – a humorous type that existed prior to the Internet in mass media or interpersonal mediated communication (e.g. joke); b) 'new type'– a type that was either rare or did not exist prior to the Internet age (e.g. digitally manipulated photographs); c) unable to determine.

2) Each topic in the codebook was categorized as either: a) globally oriented – based on features or categories that are common to societies all over the world; b) locally oriented – draws on local/national categories and cultural patterns; c) unidentified – can be either global or local.

Since each text was coded as consisting of up to three topics, after coding each of the 400 texts was further coded as: a) global – at least one of the three topics coded for the text was globally oriented, and none locally oriented; b) local – at least one topic was locally oriented, and none globally oriented; c) mixed – both globally and locally oriented topics appeared in the text; d) unidentified – at least one topic was unidentified and none were global or local.

Coding procedure and inter-coder reliability

The humorous texts were coded by an external coder and the researcher. To practice coding, the coders used a sample of 30 units that was not included in the final analysis. The training period lasted a month, in which the codebook was modified several times. Once satisfactory inter-coder reliability was achieved, the whole sample was coded. Final inter-coder reliability scores (Scott's pi), calculated for ten percent of the sample (n = 40), were .86 for topic, .82 for language, .92 for type, .84 for incongruity, .86 for butt and between .74 and 1.0 for communication morphology.

Results and discussion

Forms

The results regarding the distribution of humor types, summarized in Table 2, indicate that although both old and new types appear in substantial numbers, the old types dominate: 214 texts are based on old types, in comparison to 138 texts that are based on new types. However, as the following discussion will demonstrate, not all old types of humor did indeed converge into the investigated Websites.

Table 2: 'Old' and 'new' humor types

	Old (214)[a]		New (138)[a]	
	Interpersonal media	Mass media		
Script	Comic lists (25) Comic letters (6)	Jokes (62)		PowerPoint humor (9)
Image	Cartoons (15)		Funny photo (68) Maniphoto (27)	
Moving image		Home videos /Media slapstick (40) Comic commercials (39) Comic animation (11)	Interactive humor (22)[b] Phanimation (5)	
Sound			Celebrity Soundboards (5)	

Note: The numbers in brackets represent the number of texts coded as belonging to the type.

[a] These numbers include several types which do not appear in the table since they are very rare in the sample. The types in the table appear in at least 1% of the sample.

[b] Most of the interactive texts are based on moving images, yet some of them are also based on static images/text.

Old humor types

The most prominent type of old humor in the Websites is the joke (n = 62), which can be defined as a short story with a punch line (Attardo, 2001). This type originated in oral interpersonal communication and was then also transported into mass media such as books. Lately, St. John claimed in the New York Times (2005, May 22) that 'the joke is dead.' According to the writer, comedians today do not tell jokes any more, but use observational humor that captures the amusing aspects of everyday life. The findings of this study seem to both contradict and reinforce St. John's claim: They imply that the joke might indeed be dead as an oral form ('spoken jokes' were not found in the sample), but on the other hand they show that the joke has been transformed to a popular Internet-based written form. This description falls in line with Berger's (Forthcoming) more specific claim that Jewish jokes are disseminated today mainly in written forms over the Internet.

The second most prominent type of old humor in the sample is what I have termed 'home video' and 'media slapstick' humor (n = 40). 'Home video' is defined in the codebook as 'A slapstick-based video that captures people in embarrassing/surprising situations.' A man slipping on a banana peel is the classic example for this type. 'Media slapstick' is almost the same, yet it is located in a media environment. These humor types are visible in television programs all over the world, for instance America's Funniest Home Videos (U.S.), You've Been Framed (U.K.) and 'Fisfusim' (Israel). The prominence of these types in the sample is striking in comparison to the absence of other types of television-based humor. Types such as the sitcom, hidden camera, sketch and stand-up either do not appear at all or appear very rarely in the sample.

Why are the types of 'home video' and 'media slapstick' so popular on 'humor hubs' (and in other salient bottom-up Websites such as youtube) in comparison to the other types of televised humor? The

first reason derives from the nature of the sample – stand-up comedy, sketches and sitcoms can be found on professional or commercial Websites such as Comedy Central's popular site, yet they are absent in the more 'folklore-based' Website-type investigated in this paper. Not only are home videos cheaper and simpler to produce than sketches or sitcoms, they do not raise major copyright concerns. Moreover, these are personal pieces that seem to reflect the bottom-up nature of the Internet as a space in which everyone, and not only professional comedians, can create humorous content. A second possible reason for 'home videos' popularity is their length – these types are shorter than sitcoms or even sketches, and therefore, they can be circulated more easily as email attachments. A third explanation lies in the sort of humor that these types are based on, which is physical, visual, childish and slapstick oriented. This kind of humor is not culture specific – a man that slips on a banana peel will probably be regarded as funny in many parts of the globe, by members of various age and gender groups. Part of the Web popularity of these types might therefore lie in their global appeal.

The third most prominent type of old humor is the commercial (n = 39). Recently, 'viral advertisements,' advertisements which are created in order to be circulated via email from person to person, have become a salient part of the Web (Meskauskas, 2001, January 30). Viral advertisements differ from television commercials in several factors, among them the use of humor. Whereas in television commercials humor is only an optional component (Weinberger et al., 1995), in viral Internet-based commercials, humor is an integral, almost obligatory component. Since humorous content is by far the most dominant content type in pass-along/viral emails (Phelps et al., 2004), it is not surprising that humor plays such an important role in viral commercials which are designed for email circulation. Viral commercials can be regarded as the opposite of funny 'home videos': If home videos are amateur 'bottom-up' texts, commercials are made by professionals for profit-making purposes, and their high percentage in the sample may reflect the strong commercial forces that currently influence the Internet.

The fourth most popular old humor type is 'comic lists' (n = 25) – lists of definitions, rules, typologies or advice – for instance, the 'Top ten things men know about women' or 'Twenty excuses to miss a day of work.' This type of humor was identified in the 1970s as a sub-genre of photocopylore and faxlore – urban folklore created and circulated in the modern workplace using photocopiers and fax machines (Dundes, 1983; Dundes & Pagter, 1975; Preston, 1994; Roemer, 1994). This kind of folklore, that also includes letters, cartoons and quizzes, comments on many aspects of the modern world and has been analyzed as expressing rebellion against modern-bureaucratic-standardized demands from workers. The Internet has provided a new tool for the dissemination of this kind of humor, as it liberated people from the dependency on office-based photocopiers/faxes (Dundes & Pagter, 1999).

The fifth most popular old genre in the sample is the cartoon, with only 15 appearances. This low number can be explained as deriving from the superseding of the new types of visual and digital Internet-based humor.

New humor types

The six types that I have identified as new Internet-based humor types are termed here as: interactive humor, funny photos, maniphotos, phanimation, celebrity soundboards and PowerPoint humor.

Although these types appear in numerous Websites, only one type, celebrity soundboards, has an agreed and commonly used name. The other types will be named and defined in the following section.

1.) Interactive humor – A humorous text which requires from its receiver the performance of an activity that is additional to reading, watching or hearing. This activity is a necessary component of the type – the humorous message cannot be fully conveyed without the action taken. Thus, for instance, in an interactive text called the 'squirrel name generator' (www.cheekysquirrel.net/squirrelname/), people are invited to type their names, press the 'submit' button, and wait until their true 'inner squirrel' name appears on the screen (mine was 'Scampy Fluffycheeks'). Another example is the 'crazy horses' chorus, in which every horse that the user touches with the mouse starts singing. Other interactive texts are more game-like, for instance 'give Bush a brain,' in which the player is encouraged to drop a brain into the President's head (www.boreme.com/boreme/funny-2004/f-bush-brain-p1.php).

Twenty-two of the texts (5.5%) were coded as interactive. On one level, these texts might seem to be following Rafaeli's (1988) 'third order' criteria presented above, since they are based on the following process: A (computer) sends a message to B (human) – for instance 'enter your name,' B responds (by entering the name), and A closes the communication circle by responding to B's intervention (in this case, generating a unique 'squirrel name'). However, since the last response is automated, Rafaeli probably would have treated it as equivalent to buying food from a vending machine – as reactive but not interactive. When considering the broader definition of interactivity as a process of reciprocal influence (Pavlic, 1996), this form of humor represents a very limited manifestation of interactivity. The receivers 'help to deliver' a joke that someone else invented and a computer mediated, without being able to alter it.

2.) Funny photo – A photograph that conveys a humorous message, often accompanied by a funny written text. Funny photos did exist prior to the Internet in family albums and formats such as calendars and postcards, yet the form as shared folklore emerged only on the Internet. Two main kinds of funny photos appear in the sample. The first consists of 'natural' photos of bizarre/unexpected phenomena, which seem to be the static version of the 'home video' (for instance, a cat sleeping on a radiator). The second kind is 'staged' photos in which someone has created a special situation for the camera (see Figure 1). Funny photos are the most prominent type in the sample (n = 68). This popularity may reflect the ease of producing such texts – one needs only a digital camera and a sense of humor to create a funny photo ready for international Web-based circulation.

Figure 1. Funny photo: 'The first Mouse on Mars'

3.) Maniphoto – An explicitly manipulated photograph that is usually combined with other visual forms (see Figure 2). The explicit nature of the digital manipulation is very important in the definition of the type – if it is not absolutely clear that a picture has been manipulated, it would not be defined as a 'maniphoto,' but as a 'funny photo.' The type originated in the technique of photomontage, which existed prior to the Internet era mainly as a form of art that was not distributed extensively in mass media. It became popular (and much more humor-oriented) in the last couple of years due to digitization and the development of user friendly applications such as Photoshop. However, the production of maniphotos still requires more skill than the creation of funny photos, which may explain its smaller portion in the sample (n=27).

Figure 2. 'Maniphoto'
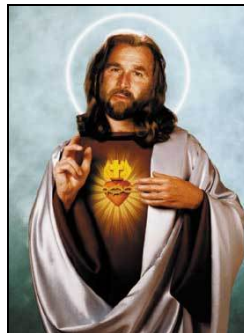
4.) Phanimation – A crude animation of static photos (Phanimation stands for photo+animation). This is the moving version of the maniphoto. Since the creation of phanimations requires high technical and creative skills, phanimations are often produced by professionals. This might explain the low representation of phanimations in the sample (n = 5). However, some of these texts tend to be extremely popular. Thus, for instance, the JibJab phanimation 'This Land' (www.boreme.com/boreme/funny-2004/f_this_land-p1.php), which depicted presidential candidates George W. Bush and John Kerry, was accessed by over ten million people in July 2004 alone (Owen and Davies, 2005).

5.) Celebrity Soundboards – Collections of digitized celebrity sound bites taken from movies, radio and TV, which are presented on the Internet to facilitate prank calls. The prank calls in which the

celebrity voices are used to poke fun at 'ordinary people' are also available on some of the sites (for instance www.ebaumsworld.com).

6.) PowerPoint humor – A humorous text that takes the form of a PowerPoint presentation. The sample includes nine examples of such humor, which can be further divided into two subgroups – similarity-based texts and narrative-based texts. The larger group (six texts) includes collections of images that are linked by similarity (for instance, photos of various funny road signs). In these cases, the order or number of pictures/photos does not matter, and each one of them also makes sense as a separate comic unit. Only three presentations are based on narrative, all combining words and photos in creative ways.

Communication morphologies

As demonstrated in Table 2, the old and new types differ in their morphologies: Whereas the old types are based both on writing and visual images, none of the new types are based on written language. The dominance of the visual over the verbal is apparent also when we examine the basic communication morphologies underlying the whole sample: 234 texts are image based (either static or moving), in comparison to 122 texts that are script based. Of the visual texts, 107 texts are based either solely or mostly on static images and 124 texts are based on moving images, of which the vast majority (n = 111) are accompanied by sound. Humorous texts that are based only on sound are rare (n = 7). Out of the 232 texts that are mainly visual, 137 also combine written words as a 'minor' form. When language is used, it is mainly English: 319 texts use only English (either spoken or written), in comparison to 21 texts that use other languages.

Topics

As shown in Table 3, the distribution of topics in the sample is uneven – some topics appear in the texts extensively whereas others are utterly ignored. The most prominent topic is sex (n = 114), followed by gender (n = 93) and animals (n = 59). 'Capitalist humor' that focuses on a certain product or company takes the fourth place (n = 49). Texts referring to mass media are rated fifth (n = 45).

In relation to the balance between global and local topics, the analysis points to the dominance of the global over the local. Firstly, the three most popular topics in the sample – sex, gender and animals, are globally oriented, as they deal with features or social groups that are common to societies all over the world. In contrast, locally oriented topics such as politics[6], sports and ethnicity appear much less frequently (places 7, 9 and 11 in the list). Secondly, the analysis of the whole sample according to the meta-division of the texts (described in the methods section) to 'global' (n = 221), 'local' (n = 68), 'mixed' (n = 72) and 'unidentified' (n = 39) reveals a strong tendency towards the global.

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[6] I have treated politics as 'local' since it tends to be embedded in nation states. However, some politicians, like George W. Bush, can be regarded at the same time as a part of a 'global' culture, thus reinforcing the findings about the 'global tendencies' of the sample.

Table 3: Topic distribution

Topic	Sub-topic	Frequency	Percent
Sex	Heterosexual	62	15.5
	Homosexual	10	2.5
	Not specified	42	10.5
	Total	114	28.5
Gender	Blondes	14	3.5
	Gender differences	16	4
	Marriage	24	6
	Men	12	3
	Women	11	2.8
	Other	16	4
	Total	93	23.3
Animals		59	14.8
Product/Company		49	12.3
Mass Media	Television	23	5.8
	Cinema	13	3.3
	Newspapers	7	1.8
	Radio	2	0.5
	Total	45	11.3
Children/Teenagers	Parent – child	19	4.8
	Other	24	6
	Total	43	10.8
Politics	G.W Bush	27	6.8
	Other politicians	12	3
	Other	2	0.8
	Total	41	10.5
Computers/Technology	Computers	19	4.75
	Microsoft	9	2.25
	Other	8	2
	Total	36	9
Sports		34	8.5
Specific People		33	8.3
Ethnicity		31	7.8
Transportation		28	7
Habits	Drinking	18	4.5
	Drugs	6	1.5
	Other	3	0.8
	Total	27	6.8
Workplace		25	6.3
Profession	Doctor	6	1.5
	Other	15	3.75
	Total	21	5.3

Note: The table consists only of topics which appeared in more than 5% of the sample (n = 20). The total count and percentage are higher than n = 400 (100%), since each text could have been coded as dealing with up to three topics.

The positioning of sex at the top of the list is not surprising. Sex has been one of the major themes in folk humor all over the world for many decades (Legman, 1969). According to Freud (1905/1976), humor about sex functions as a socially accepted outlet for repressed sexual urges – whereas sexuality is suppressed in most social arenas, telling jokes about sex is 'allowed.' The Internet is a suitable medium for sexual jokes, as the anonymity and isolated reading process may encourage people who find it embarrassing to tell or hear sexual jokes in the 'offline world' to send or read them online. In addition – sex, maybe more than any other topic – is global in its nature. The appearance of gender at the second place is not surprising, given the high linkage between sex and gender. However, further analysis of jokes about gender is required in order to understand the role of the Internet in the dissemination of new kinds of gender humor, for instance 'gender difference' jokes (Figure 3).

Figure 3. 'Gender Differences' Humor

Taken as a whole, the list of humor topics may serve as a comic reflection of some of the characteristics of contemporary Western society: The high number of 'product-oriented' texts reflects its consumerist nature; the high percent of jokes about children and youth (in comparison to just a few jokes about the elderly) reflects its youth-oriented tendencies; and the salience of texts about mass media reflects the pivotal place of media in contemporary popular culture.

However, some results, such as the prominence of animal jokes (n = 59) and the relative marginality of ethnic jokes (n = 31) seem to be more surprising. These two results tend to contradict humorous trends in the 'offline world' – whereas ethnic humor is considered a dominant theme of humor around the world (Davies, 1990), jokes about animals are not considered in the research literature as so prominent.

Turning firstly to the 'animal humor,' I suggest that a key to its popularity may be found in the basic incongruities which underlay it. 34 of the 59 texts about animals are based on an incongruity between humans and non-humans, i.e. they present animals that behave or look like human beings (or, less commonly, humans who behave like animals). The human traits that are marked by the jokes are universal, as demonstrated in Figure 4.

Figure 4. Animal/human incongruity

The social meaning of this kind of humor can be analyzed according to the concept of 'appropriate incongruity' (Oring, 2003), which captures humor as deriving from a perception of a connection between categories that otherwise would be incongruous. For instance, Figure 4 is based on an incongruity between human and animal behavior patterns, which is 'bridged' by the common feature of the female biological organs. Thus, this kind of joke may on the one hand highlight the difference between humans and animals, but on the other hand hint at the similarities between them. In both cases, the 'pan-human'/global component of the message is evident.

A second explanation to the popularity of animal humor derives from the comparison between Web-based animal humor and the ancient genre of the fable. Like Internet animal jokes, fables depict animals acting as humans. They are also universal, and in many cases their original author is unknown. The major difference between the two types lies in their relation to moral values: fables are always value-oriented – they tell us what is right and what is wrong in a very clear way. In comparison – Internet animal jokes are in most cases non-political and non-contradictory. Since values vary across societies, these 'neutral' jokes may therefore be transported from place to place more easily then politically charged jokes.

The mirror image of the universal animal humor is ethnic humor, which tends to be embedded into nation states (Shifman and Katz, 2005). 'Irish' jokes are told in the UK and America but not in Israel, where there is no large Irish population. The low percentage of ethnic jokes in the Web-based sample might therefore reinforce the finding that 'humor hubs' tend to be more global than local in their orientation.

Another possible explanation is that ethnic humor is not politically correct today in many cultures. According to Apte (1987), American society has changed its attitude toward ethnic humor during the course of the 20th century. Whereas in the melting pot era, ethnic humor was considered as a positive contribution to the fight against unique ethnic identities, in the multicultural age it is perceived as oppressive. Websites – which in this case act like broadcasters – therefore may tend not to present such jokes. In order to verify this explanation, further studies can investigate whether ethnic humor tends to be more prominent in 'private' Internet domains such as emails.

A third explanation to the low percentage of ethnic humor might be connected to the forms of cyber-humor. As mentioned earlier, traditional verbal jokes are only 15.5% of the sample (n = 62). In these jokes, ethnicity tends to be explicit – Whenever one opens a joke with 'a Russian, an American and a Frenchman' – It's clear that the joke is about ethnicity. In other forms of humor (e.g. videos and photos), ethnic origin is usually not explicitly stated and therefore was not coded as a 'topic.' However, ethnicity does appear in such texts: an examination of the identity of the texts' butts revealed that in four percent of the texts the butt's ethnic origin is 'marked' (n = 16). For instance, one of the videos mocks a Chinese person who tries to become a singer, yet it does not address explicitly the whole ethnic group. Thus, it might be concluded that the new forms of humor, combined with political correctness rules, create a new, implicit kind of ethnic humor.

Links between form and content

So far, the forms and topics of humor have been treated as separate entities. The analysis of the data, however, points to a highly significant association between the two. This association is demonstrated in Figure 5, which compares the topics found in the most popular old humor type – the joke, and the most popular new type – the funny photo.

Figure 5. The Most popular topics in funny photos and jokes
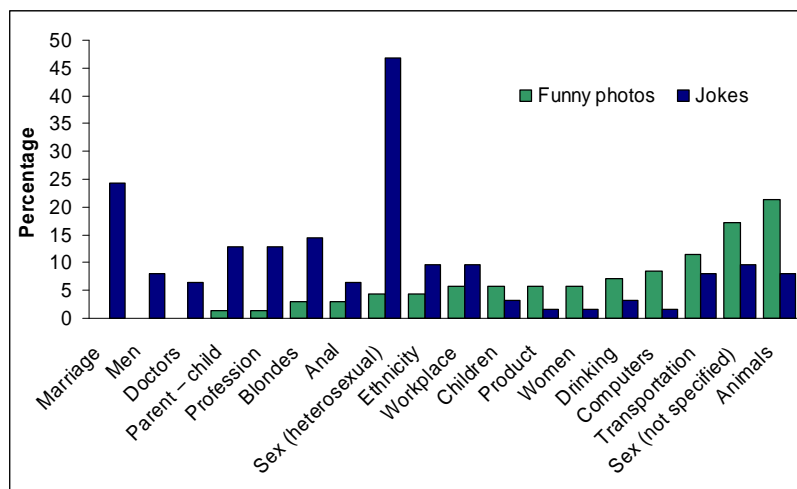
Note: The chart contains topics that were counted in more than five percent of the jokes or funny photos.

A chi-square statistic was calculated to test the differences in distribution of topics between jokes and funny photos. This statistic, however, could not be used directly to calculate the significance of the association due to: a) possible correlations between the different topics selected for each unit; b) cells with low counts. Therefore, an empirical p-value was calculated using permutations. The permutation p-value was computed by fixing the three topics and randomly permuting the humor types (jokes vs. funny photos). A chi-square statistic was calculated for 1,000,000 permuted tables. The permutation p-value (p

< 10-6) was calculated as the proportion of chi-square statistics equal or larger then the statistic value of the original table (χ^2 = 105.06, df = 42).

The analysis thus reveals a significant difference between 'old' and 'new' humor types: whereas the new form of funny photo deals extensively with new topics such as computers and animals, the traditional joke tends to deal with more traditional humor topics such as sex and marriage.

Conclusions

The humor and Internet nexus features interpenetrating dynamics of continuity and change, as popular online 'humor hubs' function both as 'carriers' of old humor types and as 'generators' of new types and topics of humor. In generating new types of humor three fundamental characteristics of the Internet come into play: Interactivity, multimedia, and global reach. The Internet's interactivity allows users to 'participate' in the joke telling process. This feature, which is not far removed of the traditional oral condition of joke-telling, may significantly alter the experience of reading a scripted humorous text. Nevertheless, 'interactive humor' usually doesn't affect major alterations when it comes to the humorous message's content or structure, and therefore represents a very limited manifestation of interactivity.

Multimedia is reflected both in the morphological variety of the humorous texts and in the convergence of types that originated in various 'old' media under one meta-medium. Although all communication morphologies are represented in the sample, the visual seems to triumph over the verbal: Most of the texts are image-based and the new types of Internet humor tend to be visual.

Since visual language can move across cultures more easily than verbal language, this triumph of the visual appears to reflect the global overcoming the local in the 'humor hubs.' This encroachment of the global may also be seen in the topical foci of cyber-humor: Globally oriented topics such as sex, gender and animals dominate while locally oriented topics such as ethnicity and politics are only secondary. In addition, global tendencies are reflected in the comic techniques used in the humorous texts. Thus, the popularity of the 'home video'/'media slapstick' types has been ascribed partly to the visual-physical-slapstick humor that characterises them. This does not mean, however, that the humorous texts reflect a universal set of values. Not only are the vast majority of texts in English, but they also reflect the values and priorities of Western, capitalist and youth-oriented cultures.

These observations should be examined in further cross-cultural studies that will compare between English-based humor Websites such as those examined in this study and non English-based Websites. They should also be examined in comparative studies of different types of humor Websites – it may well be that other Website types (such as blogs or Websites that are linked to 'old' media) are more local in their orientation.

Three features that are common to three of the new humor types (maniphoto, phanimation and soundboards) illustrate the implications of the findings to the understanding of contemporary culture. The first feature is highlighted incongruity. According to Kuipers' (2002) analysis of online disaster jokes, Internet humor is based on visual collages of incongruous elements. The use of the collage technique is

self conscious, as if the creators want to insure that 'the process of "cut and paste" underlying the joke remains evident' (p. 462). Whereas Kuipers' innovative analysis focuses on the type termed here as 'maniphoto,' it is also relevant to the other new types of 'phanimation' and 'soundboard.' The ideological implications of this feature are double edged: On the one hand, texts that are based on emphasized incongruities can be seen as forms of subversive deconstruction, in which powerful symbols such as 'Bush' or 'Jesus' (see Figure 3) are exposed as artificial cultural constructs. On the other hand, such texts may represent a non-critical play with genres, following what Jameson (1991) terms the postmodern 'pastiche.'

The 'postmodern spirit' of the new humor types is also evident in their second common feature: The mixture of fiction and reality. All three types are based on funny incongruities between real people and fictional components. In soundboards, one is invited to take the fictional (e.g. sound bites from movies) and integrate it into a 'real' everyday experience through prank calls. Similarly, maniphoto and phanimation are based on the 'relocation' of a photo of a 'real' person in a fictional context. The ideological implications of this feature may, again, be multi-faceted. If, as Oring (2003) argues, humorous communication is based on 'appropriate incongruities', humor that is based on the incongruity between the real and fictional may carry a dual message: On the one hand, it highlights the modernist differentiation between the two (if they weren't perceived as incongruous, the joke wouldn't have been judged as funny), but at the same time the 'appropriateness' of this incongruity also blurs the borders between the real and fictional.

The third common feature of the new types is what I term the comic commodification of celebrities. Many of the new texts focus on famous people, from various spheres such as sports, politics and entertainment. In this process, iconic images of celebrities are chopped into visual and audible pieces, which are then manipulated in order to generate scornful laughter. This process may represent shifts in celebrity-'ordinary people' relationships, as it allows the latter to gain symbolic power over the former. However, such texts may also serve as status markers and preservers, as they convey the message that a certain person is important enough to be ridiculed.

This study focused on humor in a specific type of Websites, leaving aside humor in other Internet popular interfaces. It also concentrated on the 'medium' and the 'message' components of Internet-based humor rather than on its actual senders and receivers. Further studies of a broader range of Internet interfaces, especially popular 'professional' humor Websites, as well as more user-oriented analysis of patterns of circulation and interpretation of online jokes, are crucial to a fuller understanding of cyber-humor. In many ways, this paper has been designed to serve as a 'road map' for the new research arena of humor on the Internet – a 'wide-angle' that highlights new types and topics that should be addressed in further 'close-up' research.

References

Apte, M. L. (1985). Humor and laughter: An anthropological approach. Ithaca; London: Cornell University Press.

Apte, M. L. (1987). Ethnic humor versus sense of humor - an American sociocultural dilemma. American Behavioral Scientist, 30(3), 27-41.

Attardo, S. (2001). Humorous texts: A semantic and pragmatic analysis. Berlin: Mouton de Gruyter.

Berger, A. A. (Forthcoming, new addition). The genius of the Jewish joke. Somerset, NJ: Transaction.

Bolter, J. D., & Grusin, R. A. (1999). Remediation: Understanding new media. Cambridge, Mass.; London: MIT Press.

Boskin, J. (1997). The humor prism in 20th-century America. Detroit: Wayne State University Press.

Boyd, B. (2004). Laughter and literature: A play theory of humor. Philosophy and Literature, 28(1), 1-22.

Coleman, S. (2005). U.S. Internet users and the 2004 presidential election campaign. Paper presented at the Oxford Internet Institute, University of Oxford.

Davies, C. (1990). Ethnic humor around the world: A comparative analysis. Bloomington, Ind: Indiana University Press.

Driessen, H. (2004). Jokes and joking. In N. J. B. Smeler, P.B. Baltes (Ed.), International encyclopedia of the social and behavioral sciences (pp. 7992-7995). Amsterdam, New York: Elsevier Science Ltd.

Dundes, A. (1983). Office folklore. In R. M. Dorson (Ed.), Handbook of American folklore (pp. 116-120). Bloomington: Indiana University Press.

Dundes, A., & Pagter, C. R. (1975). Urban folklore from the paperwork empire. Austin, Tex: American Folklore Society.

Dundes, A., & Pagter, C. R. (1999). Why don't sheep shrink when it rains? A further collection of photocopier folklore. New York: Syracuse University Press.

Dutton, W. H., Di Gennero, C.& Milood Hargrave, A. (2005). The Oxford Internet survey (OxIS) report 2005: The Internet in Britain. Oxford Internet Institute, University of Oxford.

Ellis, B. (2002). Making a big apple crumble: The role of humor in constructing a global response to disaster. New Directions in Folklore, 6. Retrieved January 14, 2006, from http://www.temple.edu/isllc/newfolk/bigapple/bigapple11.html

Foot, K. A., & Schneider, S. M. (2002). Online action in campaign 2000: An exploratory analysis of the U.S. political Web sphere. Journal of Broadcasting & Electronic Media, 46(2), 222-244.

Freud, S. (1905/1976). Jokes and their relation to the unconscious. Harmondsworth: Penguin.

Jameson, F. (1991). Postmodernism, or, the cultural logic of late capitalism. Durham, NC: Duke University Press.

Hindman, M. Tsioutsiouliklis, K. & Johnson, JA (2004) Measuring media diversity online and offline: evidence from political websites. A paper presented at TPRC: The Research Conference on Communication, Information and Internet, 17 September 2004. Retrieved Jan 16 2007, from http://web.si.umich.edu/tprc/papers/2004/362/Hindman_Media_Diversity_TPRC.pdf

Kiousis, S. (2002). Interactivity: a concept explication. New Media & Society, 4(3), 355-383.

Kress, G. (1998). Visual and verbal modes of representation in electronically mediated communication: The potentials of new forms of texts. In I. Snyder (Ed.) Page to screen: Taking literacy into the electronic era (pp. 53-79). St Leonards, Sydney: Allen and Unwin.

Kuipers, G. (2002). Media culture and Internet disaster jokes. European Journal of Cultural Studies, 4(4), 450-470.

Legman, G. (1969). Rationale of the dirty joke: An analysis of sexual humor. London: Cape.

Levinson, P. (1999). Digital McLuhan: A guide to the information millennium. London: Routledge.

Lievrouw, L. A., & Livingstone, S. M. (Eds.) (2002). Handbook of new media: social shaping and consequences of ICTs. London: Sage.

Lister, M. (2003). New media: A critical introduction. London: Routledge.

Lynch, O. H. (2002). Humorous communication: Finding a place for humor in communication research. Communication Theory, 12(4), 423-445.

MacHovec, F. J. (1988). Humor: Theory, history, applications. Springfield, Illinois: Charles Thomas.

Maynard, M., & Tian, Y. (2004). Between global and glocal: Content analysis of the Chinese Web Sites of the 100 top global brands. Public Relations Review, 30(3), 285-291.

Meskauskas, J. (2001 January 30). I Think I Caught Something: Viral Marketing. Retrieved December 1, 2005, from http://www.clickz.com/experts/archives/media/plan_buy/article.php/836131

Mirzoeff, N. (Ed.). (1998). The visual culture reader. London and New York: Routledge.

Natharius, D. (2004). The more we know, the more we see. The American Behavioral Scientist,48 (2), 238-247.

Neuendorf, K. A. (2002). The content analysis guidebook. Thousand Oaks, Calif. ; London: Sage.

Newhagen, J. E., & Rafaeli, S. (1996). Why communication researchers should study the Internet: A dialogue. Journal of Communication, 46(1), 4-13.

Oring, E. (2003). Engaging humor. Urbana: University of Illinois Press.

Owen, D. & Davies, R. (2005). Internet and elections: The United States. Paper presented at the Workshop on comparative analysis of the Internet's electoral role. UK, University of Oxford.

Pavlik, J. (1996). New media technology: Cultural and commercial perspectives. Boston: Allyn & Bacon.

Phelps, J. E., Lewis, R., Mobilio, L., Perry, D., & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. Journal of Advertising Research, 44(4), 333-348.

Preston, M. J. (1994). Traditional fax Humor from the fax-machine - All of a kind. Western Folklore, 53(2), 147-169.

Pretorius, E. J. (1990). Humor as defeated discourse expectations: Conversational exchange in a Monty Python text. Humor, 3(3), 259-276.

Rafaeli, S. (1988). Interactivity: From media to communication. In R. P. Hawkins, J. M. Wiemann & S. Pingree (Eds.), Advancing communication science: Merging mass and interpersonal processes (pp. 312). Newbury Park: Sage.

Raskin, V. (1985). Semantic mechanisms of humor. Dordrecht; Boston Hingham, MA: D. Reidel Pub. Co.

Robertson, R. (1995). Glocalization: Time space and homogeneity-heterogeneity. In M. Featherstone, S. Lash & R. Robertson (Eds.), Global modernities. London: Sage.

Roemer, D. M. (1994). Photocopy Lore and the naturalization of the corporate-body. Journal of American Folklore, 107(423), 121-138.

Shifman, L. and Katz, E. (2005), Just call me Adonai: A case study of ethnic humor and immigrant assimilation. American Sociological Review, 70 (5), pp 843-859.

Shifman, L. & Blondheim, M. (In Press). From the spider to the Web: Innis' ecological approach to the evolution of communication technologies. In: M. Blondheim & R. Watson (Eds.). The Toronto school of communication theory: Interpretations, extensions, applications (pp. 339-56). University of Toronto Press and Hebrew University Magnes Press.

Snyder, I. (2001). A New communication order: Research literacy practices in the network society. Language and Education, 15(2&3), 117-131.

St. John, W. (2005, May 22). Seriously, the joke is dead. New York Times, section 9, p 1.

Sundar, S. S., Kalyanaraman, S., & Brown, J. (2003). Explicating website interactivity - Impression formation effects in political campaign sites. Communication Research, 30(1), 30-59.

Tomlinson, J. (1991). Cultural imperialism: A critical introduction. London: Pinter.

Walther, J. B., Gay, G., & Hancock, J. T. (2005). How do communication and technology researchers study the Internet? Journal of Communication, 55(3), 632-657.

Warnick, B. (2002). Critical literacy in a digital era: Technology, rhetoric, and the public interest. Mahwah, N.J.; London: Lawrence Erlbaum Associates.

Weare, C., & Lin, W. Y. (2000). Content analysis of the World Wide Web - opportunities and challenges. Social Science Computer Review, 18(3), 272-292.

Weinberger, M. G., Spotts, H., Campbell, L., & Parsons, A. L. (1995). The use and effect of humor in different advertising media. Journal of Advertising Research, 35(3), 44-56.