

The Content Analysis Guidebook

Second Edition

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Content Analysis in the Interactive Media Age

by Paul D. Skalski, Kimberly
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This chapter addresses the implications of interactive media for content analysis. In the years since the publication of the first edition of this text, interactive media technologies and applications have become a ubiquitous feature of daily life. They span interpersonal, organizational, and mass levels of communication. Their use is stimulated and enhanced by such popular manifestations as touch-screen mobile devices such as Apple's iPhone and iPad, motion-controlled video games such as the Nintendo Wii and Microsoft Kinect, and social-media platforms such as Twitter, Facebook, Instagram, and Snapchat.

Interactive media are rapidly replacing traditional media and modes of communication such as newspapers, magazines, old-school television, and even the traditional telephone. For example, the hypothetical, personalized daily newspaper of the future, the *Daily Me* (compiled and received electronically, as predicted by MIT Media Lab founder Nicholas Negroponte in the 1990s), has pretty much come to pass with online newsfeeds and delivery systems that reinforce users' specific interests. In the future, researchers may not content analyze stories in daily newspapers, but they will need to analyze the universe of individuals' *Daily Me* news content.

Facebook has become the leading interactive media content generator following its dramatic ascension in popularity after being opened to the public in 2006. By the third quarter of 2011, U.S. Internet users were devoting more time to Facebook than to any other web site—a whopping 53.5 billion minutes a month (Nielsen, 2011). In 2013, Facebook accounted for more than 10% of the total time Americans spent online (Weigley, 2013). In 2014, Facebook still ranked number one, with around 71% of Internet users in the United States logging on (Duggan et al., 2015). Social media platforms may rise and fall in popularity, but interactive and social media appear to be here to stay, and they have had a dramatic effect on life globally. In the aftermath

of the Japanese earthquake of 2011, for example, the social media of the world followed and documented the crisis, aided in recovery efforts through online applications such as Google's Person Finder, and, as noted on cable network MSNBC, "The survivors will never forget the terror of that day, and thanks to the growing power of social media, it will also become a part of the collective record preserved for future generations, 140 characters at a time" (Snow, 2011).

In order to content analyze interactive media content, it's important to understand that interactive media users are more than just receivers or consumers, as they were with earlier media. They have an active role in adapting, altering, and even producing content. The interactive media revolution that began with video games in the 1970s, continuing with home computers in the 1980s and the Internet in the 1990s, has grown and evolved in the early 21st century into what has been dubbed the Web 2.0 revolution.

The term *Web 2.0* is attributed to technology guru Tim O'Reilly (2005), who used it to refer to changes happening to the Internet after the dot-com investment bust in 2001. During this time, sites such as Wikipedia, Google, and personal blogs burst onto the scene, revolutionizing content generation on the Internet. Web 2.0 platforms drastically changed the ability of the average user to generate online content by including interfaces that require little or no technical knowledge. The result was an immediate shift from professional writers, editors, and other gatekeepers as the sole producers of mediated content toward the empowerment of nonprofessionals to use sophisticated media for the promulgation of messages. Potter (2011) nicely sums up what most see as the core characteristics of Web 2.0:

Web 2.0 is a perspective about the Internet that fosters a social dynamic where people have the freedom to share their work through all sorts of open web sites. People are free to access all of these sites, use what they want, create their own messages, and make their messages available to anyone. The easy availability of these collective resources celebrates open participation, and this results in an enormous increase in creative activity. (p. 213)

Corresponding to the increase in creative activity described by Potter is an enormous increase in mediated content. Web 2.0 and other digital advances, coupled with the wide diffusion of high-speed wireless Internet connectivity, give today's media user rapid access to and unprecedented power over content. Importantly, the various message functions outlined in Chapter 1—for individual, interpersonal, group, organizational, and mass purposes—are all readily found online, in unprecedented volume, and with unprecedented access. Private interpersonal communications, once studied only in the laboratory or via participant observation in the field, are now archived and available through the content of social media. Public organizational messages, such as corporate responsibility statements, once only

available to and targeted to a select group of employees and stockholders, are found openly on virtually all corporate web sites. And mass messages such as TV programs and commercials, once available to a researcher only if recorded at the time of airing, are now heavily archived for on-demand online access and are immediately accessible even “on the run” via mobile devices such as smartphones and tablets.

Indeed, content has never been so readily available. The Internet has swelled to contain literal libraries of information, and not just of printed content, but of audio and visual material as well. In 2015, YouTube reported that an average of 300 hours of video was uploaded to its site each minute, and more than 1 billion people in 75 countries are users (www.youtube.com, 2015). Streaming audio and video services now account for approximately two thirds of Internet traffic in North America during peak usage periods, led by Netflix, which alone gobbles a third of all traffic (Reisinger, 2012). Print media also continue to thrive in an interactive media age. According to a 2014 Pew Research Poll, 42% of U.S. adults owned tablets, and 32% owned dedicated e-readers, such as Kindle Fire. Of these adults, 42% had read an e-book or listened to an audiobook in the past year (Zickuhr & Rainie, 2014). The Google Books project has digitized more than 20 million titles (Howard, 2012), with the goal of digitizing all of the books in the world by the end of the decade (Jackson, 2010).

In addition to traditional media content such as books and videos, the Internet also contains interactive messages. Much of this newer content appears in ways that make its analysis and even capture difficult. Whereas traditional media content came in “fixed” forms such as the newspaper page, the television episode, or the motion picture, the dynamic or fluid nature of interactive media content, ranging from how users play a video game to what they choose to post on Facebook, makes it much less tangible. Web pages and other interactive content may also be updated moment by moment by their creators. Snapchat and Periscope are platforms built to maximize live and ephemeral communications. *Snaps*, the slang term for messages on Snapchat, last mere seconds and then self destruct. Should a user attempt to capture them with a screenshot on their mobile device, the user who sent the message is notified. Periscope, a live streaming app that allows users to broadcast live events worldwide, archives videos for only 24 hours. Users can save the videos to their mobile device, but in terms of public viewing, the clock is ticking. In addition, Web 2.0 platforms and templates themselves are often changing or evolving, sometimes more rapidly than users can adjust. This poses considerable challenges to the method of content analysis, a problem recognized at the turn of the 21st century by Sally McMillan, who wrote about the difficulties of applying the “microscope” of content analysis to the “moving target” of the World Wide Web (McMillan, 2000).

With the proliferation of online content, researchers are now faced with massive data sets generated by user behavior. As noted in Chapter 5, *big data* is a term used to describe data sets that are too voluminous or complex

for traditional methods of analysis. In the realm of content analysis, big data often take the form of information produced by human behavior and collected and archived by the programs behind social media platforms, web sites, and mobile media applications (Lewis, Zamith, & Hermida, 2013). We now have the ability to search, aggregate, and cross-reference large data sets from a variety of interactive platforms, giving researchers the ability to overcome traditional sampling and coding limitations (boyd & Crawford, 2012). However, by definition, big data implies that the data are too big and complicated to handle or even be fully conceived by humans—computer power must be employed to collate, massage, and analyze. Thus, big data are removed from human experience, so only gross summarizations of the outcomes of analyses can be comprehended, making the implications of findings on big data rather abstract and not always directly applicable to human experience.

There are ethical implications in scraping and analyzing data about human behavior and communication, as well as challenges in acquiring and analyzing data sets that can't be managed by human action. Scientists in a variety of disciplines have expressed concern over big data due to the fact that its use may ignore principles of representative sampling and of the deductive process of scientific investigation (big data analyses typically take an inductive, data-dependent approach to things). Lewis et al. (2013) argue for a hybrid approach that blends computer text analyses and manual methods in order to “preserve the strengths of traditional content analysis, with its systematic rigor and contextual awareness, while maximizing the large-scale capacity of big data and the efficiencies of computational methods” (p. 47). This notion is consistent with the observations in Chapter 5 that CATA and human coding can and should be used in complementary fashion; this seems particularly apropos for dealing with big data. The criticisms of big data should be kept in mind when considering content analyses of social media and other subscription-based media (e.g., Twitter) in that many such investigations do use “very big data.”

The shifting nature of interactive media does not make their content analysis impossible, however. There are a number of parallels between traditional and interactive media content and ways to deal with the differences between the media forms, making content analysis methodologies applicable to even the most challenging of messages. Since the release of the first edition of this book, a great variety of types of content analyses of interactive media has been conducted; some interesting and wide-ranging examples are itemized in Box 7.1. Moreover, newer interactive media empower the content analyst in exciting, never-before-possible ways, at the stages of creating, acquiring, archiving, and coding content. This chapter reviews considerations for each of those stages and offers recommendations for the content analysis of interactive media and other new content forms, as well as for the use of interactive media to facilitate content analyses of all types.

Box 7.1 Interactive Media and Content Analysis

The following are examples of interactive media topics that have been studied using content analysis in the first years of the 21st century, demonstrating the *range* of new topics that have been addressed:

Web Sites

- The rise of event-driven news (e.g., stories captured with a videophone) between 1994 and 2001 (Livingston & Bennett, 2003)
- Position-taking and issue dialogue on campaign web sites during the 2002 election cycle (Xenos & Foot, 2005)
- Rationales provided on web sites posting DVD decryption software (Eschenfelder, Howard, & Desai, 2005)
- Media profiles of living and dead public intellectuals on the Internet and in traditional media (Danowski & Park, 2009)
- Internet coverage of college basketball's March Madness (Kian, Mondello, & Vincent, 2009)
- Health promotion appeals on U.S. and Korean web sites (Baek & Yu, 2009)
- Privacy policy statements on health web sites (Rains & Bosch, 2009)
- Campaign information as unmediated messages on candidate web sites (Druckman et al., 2010; Druckman, Kifer, & Parkin, 2010)
- New forum comments on TV and newspaper web sites (Hoffman, 2015)
- [Corporate] web site localization strategies (Wu et al., 2015)

E-Commerce

- Online video game auctions on eBay (Wu & Neuendorf, 2011)
- The gender marketing of toys on the Disney Store web site (Auster & Mansbach, 2012)
- Online travel agencies as a source of hotel information (Peterkin, 2014)

Social Networking Media

- Social interaction on Usenet newsgroups (Turner et al., 2005)
- Emotion in MySpace comments as a function of gender and age (Thelwall, Wilkinson, & Uppal, 2010)
- Nonverbal displays of self-presentation on MySpace (Kane et al., 2009)
- Level of personal information posted by adolescents on MySpace (Patchin & Hinduja, 2010)
- Political Facebook groups during the 2008 presidential election (Woolley, Limperos, & Oliver, 2010)
- *Fortune 500's* Facebook pages (McCorkindale, 2010)
- NCAA organizational sport pages and Big 12 Conference athletic department pages (Wallace, Wilson, & Miloch, 2011)

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- Companies cultivating relationships with publics on SNS in China and the United States (Men & Tsai, 2012)
- Online social networking in discussions of risk on Facebook (Ledford & Anderson, 2013)
- Facebook pages dedicated to moms (Kaufmann & Buckner, 2014)

Non-Social Networking Media

- Blogs as retrospective sources of public opinion and reactions to news (Thelwall, 2007; Thelwall, Byrne, & Goody, 2007)
- Blog use by libraries and librarians (Aharony, 2009; Bar-Ilan, 2007b)
- Postings on health and medical blogs (Buis & Carpenter, 2009)
- Visual motifs in Jihadi and Cholo videos on YouTube (Weisburd, 2009)
- Twitter during the 2009 H1N1 pandemic (Chew & Eysenbach, 2010)
- Sentiment in Twitter events (Thelwall, Buckley, & Paltoglou, 2011)
- The August 2011 riots in England on Twitter (Procter, Vis, & Voss, 2013)
- A cross-cultural content analysis of Twitter and Weibo (Ma, 2013)
- Childhood obesity on Twitter (Harris et al., 2014)
- Twitter during the Tunisian and Egyptian revolutions (Hermida, Lewis, & Zamith, 2014)
- Direct-to-consumer pharmaceutical ads on YouTube (Muncy, Iyer, & Eastman, 2014)
- World Cup 2014 and U.S. sports fans' tweets (Yu & Wang, 2015)
- Pinterest as a resource for health information on chronic obstructive pulmonary disease (COPD) (Paige et al., 2015)

Asynchronous Communication

- Mapping the communication behavior of the social network of Usenet (Turner et al., 2005)
- Responses to use of pseudonyms in email communication (open-ended coding; Heisler & Crabill, 2006)
- Chat reference service use by public library patrons (Kwon, 2007)
- Trust dynamics in work-oriented virtual teams (Kuo & Yu, 2009)
- Peer tutor behavior in asynchronous online discussion groups (De Smet et al., 2010)

Other Online Activity

- Link analyses of web sites (i.e., the patterns in which web sites are hyper-linked and the meaning assigned to these links; Harries et al., 2004; Thelwall, 2006)
- The impact of Google bombing over time (Bar-Ilan, 2007a)
- "Media catching"—emails and Twitter requests by news reporters seeking information from PR specialists (Waters, Tindall, & Morton, 2010)

Gaming and Simulations

- Violence in popular video games (Smith, Lachlan, & Tamborini, 2003)
- Decision-making in a computer-simulated microworld (Elliott et al., 2007)
- Hypersexuality in video game characters (Downs & Smith, 2010)
- Advertising in popular video games (Lindmark, 2011)
- Racial stereotypes in video game magazines and covers (Burgess et al., 2011)

Considering Interactive Media

Definitions of *interactivity* abound. During the time the Internet was emerging as a mass medium, attempts to define the concept among academics began en masse with work by scholars such as Sheizaf Rafaeli (e.g., Rafaeli & Sudweeks, 1997) and Sally McMillan (e.g., McMillan & Hwang, 2002). Some have argued that interactivity is a perceptual variable (e.g., Bucy & Tao, 2007), while others have focused on how it represents a transaction between a user and system (e.g., Sundar & Kim, 2005). McMillan (2002) delineated among three types of interactivity: user-to-system interactivity (as in video gaming and using a search engine), user-to-document interactivity (as when navigating hypertextual content online), and user-to-user interactivity (as on social networking sites), all of which have implications for the application of content analysis (Ramasubramanian & Martin, 2009).

In this chapter, we subscribe to a “functional view” of interactivity, which defines it in terms of the functions provided by a media interface, including features, attributes, processes, and outcomes (Sundar, Kalyanaraman, & Brown, 2003). Based on this definition, researchers have operationalized interactivity in terms of functional features such as email links, chat rooms, and the ability to download audio or video (e.g., Massey & Levy, 1999). Adopting the functional perspective grounds our interest in interactivity in the realm of media form and content rather than users, whose (perceived) interactivity would be more appropriately studied through survey, experimental, or participant observation methods. Referring to interactive *media* (instead of just *interactivity*) also cements our approach to the concept on the medium/message component of the communication process. There is still, however, much to be learned about users through interactive media, particularly since they play a major role in creating its content.

Content Creation in the Interactive Media Age

Historically, the process of message production has not been of direct concern to the content analyst. But in the interactive age, the creation of mediated

messages has become an issue of critical concern. Although the integrative model discussed in Chapter 2 recommends an empirical look at message producers or sources, this is technically a step beyond the methodology of content analysis itself, which strictly examines the content of messages. Regardless of who created a traditional media product, whether it was a single book author or a team of thousands working on a major Hollywood film, an underlying assumption was that the end product (e.g., the book or the film) existed in a fixed, objective form that could be documented. Further, the notion of message *source* had historically been stable. Whether a single author of a series of diary entries, a dyad in a doctor/patient interaction, a team of employees creating a corporate culture statement, or a reporter on a local TV news story, the sources of messages were clearly identifiable.

This assumption of easy identifiability of source and message no longer holds in the arena of interactive media, in which audience members have the “ability to shape their media environment” (Ramasubramanian & Martin, 2009, p. 114). Much of content creation today depends in part on choices made by a user while interacting with or within a medium. For example, the content of a video game depends on how each individual user plays the game. With a violent video game, some players may fire away and recklessly aggress against foes, while others may adopt a more strategic, stealthy approach. This makes coding for a construct such as “violent activities” more complicated in a video game than with traditional media.

We should note the parallel between this trend in interactive media and a key choice faced even when content analyzing traditional media. As described in Chapter 3, defining a population and drawing a representative sample from that population of mediated content may follow one of two philosophies: (a) an availability-based approach or (b) an exposure-based or use-based approach (i.e., “what’s actually attended to or used”). An availability approach to the study of video game content would attempt to inventory and then sample from all possible gaming sessions/outcomes, a huge and perhaps doomed undertaking. An exposure/use-based approach, sampling from users’ actual gaming sessions, is the method that has been almost universally employed (Pieper, Chan, & Smith, 2009). Similarly, an availability approach to the study of sexually explicit web content would need to attempt to identify all such web sites. An exposure/use-based approach might do as Salazar et al. (2009) did in their panel study of 530 U.S. teens: They used proprietary software to collect and store all of the teens’ web traffic for a 30-day period, then identified which pages contained sexual content, and then executed a content analysis of those pages.

Other forms of interactive media pose similar challenges. How users experience information on a web page, for example, depends on where they choose to navigate, how frequently they click, other interactive choices they make, and their past online behaviors (e.g., when past surfing affects the insertion of tailored web ads). And a related challenge stems from the rise of Web 2.0, which puts users in control of content creation and deletion and has

resulted in a flood of media units and products available for analysis. The popular web site Facebook alone has, as of this writing, more than 1.5 billion active users, each with a personal page akin to a traditional media unit of data collection such as a newspaper article or television program. Within this personal page are a number of smaller units that might be analyzed, including wall posts, photo albums and their captions, reposted content from elsewhere on the web, personal information, and much more.

Another challenging complexity that researchers face is how to determine what content has been created by the profile owner using content generation tools and what content has been reposted from elsewhere on the web. With the proliferation of multimedia content generation tools and applications, it has become increasingly difficult to determine whether or not photo, video, and other multimedia content was created by the profile owner. Given widespread access to photo, video, and multimedia editing programs, which are generally geared toward allowing the unsophisticated individual to create high-quality content, it is not easy to assess whether or not particular users have the ability necessary to generate the content that might be found on their profile. Users often repost photos, memes, and other content that was created by other sources rather than linking to the content. Popular content tends to spread rapidly via social networking sites, making it increasingly difficult to determine the original source of any given update or post. In the end, when everyone becomes a creator and sharing is encouraged, the choices a content analyst must make can be overwhelming.

The challenges do not end there. The content of a web page may also change depending on what a user searches for, or even the user's location, due to technology that detects the location of the user. This applies in particular to advertising content. Targeted ads are sent to web surfers and video game players alike. Dynamic video game advertising received widespread media attention in the midst of the 2008 presidential election campaign, during which billboards promoting Barack Obama were placed in the racing game *Burnout: Paradise* (Simons, 2008). Targeted ads varying by location, demographics, and time zone are the norm in certain games, which update the messages regularly through the Internet connections of players (Kaufman, 2006). With a very robust ad creation platform, Facebook enables marketers to target advertising based on location, age, sex, interest key words, and connection status. The lack of fixed content in computer-based new media eliminates the certainty that once existed with particular types of content.

The Special Nature of Content in the Interactive Media Age

To bring some order to this huge range of content creation options, content analysts should distinguish between *user-generated content*, *user-selected content* (including *user-curated content*), and *interactive media output*. All are

forms of content creation in the interactive media age that are ripe for content analysis, but all challenge our traditional notions of both *source* and *message content*. This three-part typology of interactive media content deserves further elaboration and exemplification:

1. User-generated content (UGC): User-generated content is often considered synonymous with Web 2.0 and marks a shift away from corporate-provided media content (Lanchester, 2006). It refers to content created and provided by users, through easy-to-use (and frequently corporate-owned) tools (Potter, 2011). The wealth of UGC online has been noted in popular media (e.g., *Time* magazine's 2007 recognition of "You"—the online user—as "Person of the Year"), and its proliferation has been scrutinized for legal and policy implications by such bodies as the International Organization for Economic Cooperation and Development (OECD) (see Geist, 2007, and www.oecd.org/dataoecd/44/58/40003289.pdf).

Examples of UGC include Facebook profiles, Vine videos, Instagram photos and videos, Snapchat stories, web logs (blogs), emails, microblogging via services such as Twitter, Wikipedia pages, and many YouTube postings. In this chapter, we distinguish between UGC and user-*selected* content, defined in the following paragraph. Again, it should be remembered that interactive media accommodate all communication functions. That is, a significant portion of UGC is interpersonal in nature (e.g., emails and Facebook messages), other UGC is "personal" but available more widely (e.g., social networking activities, blogs), and some UGC is intended to be "mass" (e.g., Wikis and most YouTube videos).¹ UGC is sometimes referred to alternatively as *user-created content* (UCC).

2. User-selected content (USC): User-selected content (or user-collected content) refers to existing media products posted and shared online, such as when someone uploads a clip from a TV show on YouTube or shares music on Bit Torrent. USC is distinct from UGC, according to our conceptualization, in that the nominal media source is merely an intermediary or broker between content and an interactive medium rather than the creator of content for the interactive medium. Another way that users can select, collect, and share content is through and across Web 2.0 applications. The phenomenon of "viral" content, such as viral videos, is the direct result of the ability to share and repost media content such as videos, photographs, and blog posts via Web 2.0 sites. For example, users browsing videos on YouTube can quickly and easily share a video with their social network by reposting it to their Facebook page or their Twitter feed or by designating it as a favorite video on YouTube itself. In addition, much of the content posted to blogging and microblogging Web 2.0 sites can be collected and shared using a content aggregator, such as an RSS feed.

What is unique about USC is that it is reflective of an individual's message *choices* rather than message content generation. We are just beginning to consider the implications of the analysis of USC as an indicator of how people navigate and make sense of the tremendous volume of online content.

A particular type of USC is user-curated content. Rather than content that is selected based on the user's enjoyment and reposted for others without much thought, curated content is selected and aggregated for the express purpose of meeting the needs of an audience. For example, Flickr, Tumblr, and Pinterest allow users to curate and present content that they have individually reviewed and selected with the intent of creating a useful, beautiful, or otherwise attractive content collection. Lin et al. (2009) analyzed curated content on Flickr, looking at group photo streams, which are connected by agreed upon themes. Etsy.com, a peer-to-peer e-commerce site, features the use of the "Treasury," a curated selection of craft items for purchase created by thousands of Etsy.com users. A "treasury" is usually themed around a color or other thematic thread and showcases a user's favorite items, almost like the editorial picks in a style magazine. These curated collections are categorized by Etsy.com based on "hotness."

3. Interactive media output (IMO): Interactive media output refers to content created as media consumers navigate or use interactive media. Examples of IMO would include web-surfing patterns and how a player interacts with a video game. This type of interactive media content requires more advanced and active capturing methods than the other two in order to prepare for content analysis.

The content analyst must be clear on whether it is assumed that the message source is the media user (e.g., video game player) or the creator of the interface (e.g., video game designer). Either conceptualization is possible, and the choice will dictate the population under investigation. The content analyst should also consider the motivations users might have for sharing content in order to best understand their relationship to that content.

Practical Suggestions

Considering the challenges of working with dynamic interactive media content, what follow are some practical suggestions:

1. Be aware of standardized content on Web 2.0 pages when the goal is to analyze user-generated content. Users control only certain portions of Web 2.0 sites, despite the illusion of creative control. On YouTube, for example, users can post videos and control selected information such as tags, but other content, such as the related links, may be added by the site operators. The same holds for certain aspects of Facebook pages. Facebook users have no control over the ads that

appear on their home or profile page, even though such content may be attributed to them. Content analysts should also distinguish between content posted by a user to their page and content posted on the page by other users, as in the case of a Facebook Timeline or YouTube comments section.

2. On a related note, tags and other “meta” content on a page can be useful tools for content analysis. These may be created by the user or the site itself and can help identify similar content for coding. For example, many digital cameras embed photographs with metadata, which can include the type of camera, camera settings, and geographic location where the photo was taken. In another example, blog users may create tags to help categorize their postings into topical groups, allowing readers or content analysts to easily navigate their content.
3. Remember to distinguish between user-generated, user-selected, and interactive-output content. These distinctions become important, for example, when one wishes to assume that the poster of information on a social media web site is indeed the message “source,” which may be possible with UGC and IMO but is less likely with USC.
4. Finally, it should be noted that the templates provided by web sites may change over time, necessitating fluid codebooks to match the fluidity of interactive media content. In one ongoing analysis of YouTube comedy, the researchers were forced to revise the codebook repeatedly over time due to changes in the layout and options of the social networking system (Neuendorf et al., 2016).

Acquiring Content in the Interactive Media Age

Content has never been easier to acquire. The mass diffusion of the Internet has ushered in a “golden age” of content acquisition. The first edition of this book listed content archives that were often real-world locations, with physical media such as videotapes. Since then, a vast amount of content has been digitized and posted on the Internet, allowing for the easy uploading, downloading, and viewing of audio/video content alongside the text content that dominated the medium in its early days. These range from the venerable LexisNexis, which systematically and exhaustively collects digitized legal documents and print media content such as newspapers and magazines, to YouTube’s haphazard collection of audio and video content to the Internet Archive Wayback Machine, a collection of “classic” web pages dating back to 1996 (Waite & Harrison, 2007).

In addition to these online sources, other interactive technologies for acquiring content have emerged, including subscription-based streaming video services such as Netflix and Hulu and digital video recorders (DVRs). Another

major source for digital audio and video content is iTunes, which was created by Apple to complement the iPod music and video player device and has since blossomed to provide digital media for many platforms. Content purchased from the iTunes store is not streamed live, but is rather digitally archived on the hard drive of the user's computer, which may offer advantages when compared with streaming media. Beyond archives of traditional media, there is also a large body of Web 2.0 content, which includes web logs, microblogging content, and social-media content. This content is created in the digital environment and easily acquired and indexed. The availability and access to digitized content is constantly increasing due to advances in technology. In fact, the available digital acquisition technologies are fast replacing physical acquisition media such as videocassettes, CDs, DVD-Rs, and handwritten journals; some are even being developed with the content analyst in mind.

One example is SnapStream, a server-based system for acquiring television content that includes networked-DVR capability for multiple work stations and "TV search engine technology." The system is marketed explicitly as enabling content analysis. SnapStream users can record thousands of hours of video content, with cloud-sharing available, and can then search the digital archive by topic or key word through the closed captioning in the recorded sample without having to view the content. Simon (2011) used SnapStream to (a) record every local news television broadcast over a one-month period preceding the 2010 Ohio general election, (b) search for every instance of a news story that included mention of one of the seven state and county elections that were the focus of his study, and (c) download the closed captioned text for the relevant segments for use in CATA analyses. He devised his own set of search dictionaries, employing the open-source CATA program Yoshikoder to tabulate occurrences (see Resource 1).

Another example of a digital acquisition technology is Evernote, a software that facilitates the collection of a wide variety of types of messages, typically via use of a mobile device such as a smartphone. Box 7.2 describes this application in more detail. Evernote might be seen as perhaps the most tailor-made for content analysts, but it is certainly not the only application that might be of use in finding, screening, or even coding messages for content analytic studies. For example, a number of mobile apps are available for the instant recognition of music (e.g., Soundhound, Midomi, and Shazam). Apple's iPhoto photo organizer, Google's Picasa image organizer, and Facebook itself all have facial recognition apps.

The vastness of available content presents some challenges at the acquiring stage, particularly with regard to sampling. How can the content analyst sample from such an overwhelming pool of messages? For example, how should a researcher navigate individual users' privacy controls on Facebook to acquire the content they need? And how much of a video game should be sampled, given that a play session does not have set time frames like the half-hour sitcom or two-hour movie? Following are some issues and suggestions for sampling common types of content in the interactive media age.

Box 7.2 Technologies in Archiving: Evernote

The challenges of working with rapidly changing media can be somewhat mitigated with technological advances in archiving technologies. Created in 2008, the popular Evernote software (www.evernote.com), available for desktop and mobile devices, is an example of such an advance in message archiving. Evernote allows users to collect content in various ways, including entering text, taking a photograph of handwritten or printed materials, taking a snapshot of a web page, and recording an audio clip. The content is then processed, indexed, and made searchable. If the content is a photograph of written or printed text, the program interprets that text and makes it searchable. This software has many potential applications in content analysis. For example, the web capture portion of Evernote allows the researcher to take a snapshot of a single tweet or Facebook update or the entire web page. It then catalogs that snapshot or page clipping with a date, time, and title and allows the user to enter key words for additional organization. Thus, the clipping can be retrieved and organized into a data set relatively easily.

Another example of the usefulness of such a program can also be seen in the following example:

A researcher wishes to analyze the content of billboards in her or his city. Evernote allows said researcher to take a photo of each billboard. The photos are not only processed for easy categorization and searching, but they are also embedded with location data that will allow the researcher to create a virtual map of the signage as it appeared around the city and calculate distances from other points and points of view. Further, Evernote is accessible from the desktop to the mobile device and synchs all archived content automatically.

Acquiring Video Game Content

Video games present challenging sampling issues at several levels (Pieper et al., 2009). As Schmierbach (2009) points out, video game content analyses not only require the selection of games for inclusion in a sample, as one might do with movies or TV shows, but also the selection of units *within* a game. Video games have no fixed time frame or time frames that extend far beyond traditional media experiences. Rockstar Games has estimated that their hit game *Grand Theft Auto 4*, for example, takes about 100 hours to finish (Yin-Poole, 2008). And within those 100 hours are undoubtedly widely varying types of content. Moreover, time frames may vary from player to player. A game session for a new player of the classic arcade game *Donkey Kong* may last only a few minutes, while world-record holders Billy Mitchell and Steve Wiebe typically play for hours at a time (Cunningham & Gordon, 2007).

The decision concerning how to select units within games has implications. Haninger and Thompson (2004) modeled the relationship between length of game play and type of content observed (e.g., violence, profanity, drug use, etc.) and found that a 10-minute sample of play likely leads to missing one

or more content types 40% of the time, while playing for an hour leads to missing only 10% of the time. Although this suggests that longer segments more validly represent a game, Schmierbach (2009) argues that the issue is more complex. Sampling the first hour of a game, he says, may misrepresent the frequency with which certain content types happen. Violent acts, for example, may increase as a game character acquires more powerful weapons or fights more enemies as a game progresses. Furthermore, important game modes, such as the multiplayer matches that are popular for players of series like *Halo* and *Call of Duty*, may be missed if only the default mode is selected. The game-sampling problem is further compounded by varying skill levels of players whose interactive output is typically captured as the “content,” and the players’ choice of character, which many games offer. A fighting game character with a spear, for example (e.g., Scorpion in the popular *Mortal Kombat* franchise), may commit more bloody and violent acts than one who uses hand-to-hand moves to battle foes (Smith, 2006).

Just as TV shows have Nielsen ratings and movies have box office figures, games have associated sales data that can aid in sample selection. Assuming the goal is to sample game content reaching the greatest possible number of players (i.e., a use-based approach to population definition and sampling), one can use sales data and select the top 20 or 30 games across different popular consoles, as some content analysts have done (e.g., Smith, Lachlan, & Tamborini, 2003). The NPD Group, a North American market research firm, provides game sales data. If the goal of a study is to generalize to the population of all games, however (i.e., an availability-based approach), it would be preferable to get a complete list of games and randomly sample, with perhaps some stratification across consoles (e.g., 20 games from Wii, 20 games from PS3, 20 games from Xbox 360) or based on other variables that address study questions.

The more difficult sampling decision concerns what within-game units to sample. If the goal of a content analysis is to capture what an entire game is like, then sampling only the first 10 minutes or some other early game play segment does not adequately represent what exists. A more valid approach might be a stratified sample of random time segments (e.g., 10 or 20 minutes) from the first third, middle third, and final third of a game. Or if a game has fixed levels (such as the four different boards in the arcade version of *Donkey Kong*), an appropriate approach would be to sample times from each to get a clear picture of what happens across noteworthy changes in a game. Determining what segments of a game are important might require the researcher to become immersed in the content (i.e., do a lot of playing of the game).

There may be differences between console gaming and computer gaming that are important to the content analysis task; a console functions differently than does a computer. Although with the increasing generations of consoles (e.g., as of this writing, new consoles are of the eighth generation—PS4, Xbox One, Wii-U), it looks as if developers are trying to make multipurpose console

entertainment systems into almost user-friendly computers. This factor should be taken into account when planning a study of video games and will have important implications for sampling (e.g., will the study be of one generation console only, or a comparison across generations?).

Other important considerations for video game content analysis include character selection, player skill level for the participants who will generate the game play sessions, and related message content.

1. Since different characters may have different powers and abilities affecting the interactive media output they produce, there are several options. One is to choose the most popular characters, since they are the ones players are most likely to experience. Popularity data may be available online for games, or it can be determined through a presurvey. An alternative approach is to randomly sample from the available characters, making sure at least 20% are represented. If the study is about character attributes (such as sex, race, body type, etc.), a larger sample is recommended.
2. As for the player skill question, experienced players are most likely to approximate how content would manifest in the population of players. If unskilled players are used, they should at least go through a training period before their content is captured, or they are unlikely to generate much usable content. There are alternate views on this, however, including the notion that a random sample of people from a population of interest should be engaged. Newman (2004) recommended tracking novice players longitudinally as they become better. Smith (2006) suggested having 10 experts and 10 novices play a game and looking at between- and within-group variability. Schmierbach (2009) recommended using a large number of players to produce content, with careful training for novices.
3. If games have multiple play modes, such as single-player and multi-player campaigns, we recommend sampling content from the most popular modes, which can again be determined through online data or a presurvey. As Schmierbach (2009) notes, sampling, for example, only *Halo 3*'s single-player campaign misses a lot of the game's content that would be experienced by players, since much of the title's popularity stems from its multiplayer modes.
4. For online computer gaming, it is possible to record game play data and also messages that are routinely exchanged among multiple game players during play. This may be achieved by buying server space for a game or by obtaining gaming data from game hosters. As with other online activities, there may be terms to joining the server or online service, so consent must be secured from the players in order for the play and message data to be used for research purposes. The intergamer interactions seem to be a promising source for future content analyses, especially

when linked with game play data. This is demonstrated by Lehdonvirta et al.'s (2012) study of players of UWO, a Japanese massively multi-player online game (MMOG) in which the researchers collected user-to-user communications along with player data. They found that when using male avatars, players were less likely to receive sought-for help but more likely to receive indirectly sought help than when using female avatars. Since these differences were independent of actual player sex, the researchers concluded that men “overcome their inhibition for help seeking when using female avatars” (p. 29).

Ultimately, we agree with Sherry (2007), Smith (2006), and others in believing that the choices a researcher makes should be driven by the theoretic processes under investigation. Sampling is probably more difficult with video games than with any other type of content, given the sheer number of considerations and possibilities, but carefully weighing options based on solid theoretic principles and expert advice should lead to sound decisions.

Acquiring Web 2.0 Content

As mentioned earlier, the Web 2.0 revolution has brought with it a deluge of content. While exciting in some ways, it also may seem overwhelming from the standpoint of sampling. A study of Facebook profiles, for example, has hundreds of millions of sampling units to choose from.

Or does it? The first and most important consideration to make when sampling and acquiring content from a Web 2.0 site is to consider the various platforms and their capabilities. With the breakneck pace at which Web 2.0 evolves, it would be impossible to give a comprehensive guide to every platform and program that the content analyst might like to study, especially into the future. But regardless of the platform or the program, there are a number of questions researchers should ask themselves before sampling, unitizing, and acquiring content. First, what is the function of this platform? Is it intended to broadcast a message to a large, undifferentiated audience, or is it meant to share personal messages with a smaller-known network (of friends, family, etc.)? Second, how does the Web 2.0 platform achieve its goal? Does it use public messages only, or are there interpersonal and private message functions? Third, does the platform allow users to create content, to share collected content, or both? Fourth and finally, has a similar platform been studied in the past, and if so, how was it studied at that time? The answers to these questions are invaluable for guiding content acquisition, especially in new or emerging media.

When discussing content acquisition in Web 2.0, it is important to note that Web 2.0 can be broken into several subcategories. Mazur (2010), for example, distinguishes between social networking sites and blogs and presents content analysis issues related to each. We agree that social networking sites are a distinct type of Web 2.0 content; however, blogs are just one of

many other types of social media. In an attempt to be as comprehensive as possible, we divide Web 2.0 content into two primary types: social network sites (SNS) and those that are not SNS (non-SNS). While these categories are not mutually exclusive, the distinction is helpful in the discussion of content acquisition:

1. Social network sites (SNS): SNS were defined by boyd and Ellison (2008) as “Web-based services that (1) allow individuals to construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (p. 210).

Similar to other Web 2.0 sites, SNS allow users to publish both UGC and USC. Unlike other Web 2.0 sites, SNS are not designed to reach a large, undifferentiated audience, but instead, have highly specialized privacy tools, which allow users a great deal of control over who can and cannot access their content based on their connection status. Investigations of social network sites such as Facebook, MySpace, and LinkedIn have been growing in popularity as the focus of inquiries using neutral loci for the study of unfettered, natural communication (Compton, 2008; Grasmuck, Martin, & Zhao, 2009; Jones et al., 2008; Kaufmann & Buckner, 2014; Kim, Klautke, & Serota, 2009; Kobayashi, Spitzberg, & Anderson, 2008; Ledford & Anderson, 2013; Neuendorf & Skalski, 2010; Waters et al., 2009).

2. Non-social network (non-SNS) Web 2.0 sites: These sites include the same ability to publish UGC and USC, but can be distinguished by their lack of (or lack of emphasis on) articulated networks with mutually formed connections. Privacy and limited access are harder to control in many of these Web 2.0 sites due to the lack of a list of users with whom connections are shared. And as the goal for many of these types of sites is to reach the largest audience possible, this eliminates the need for the privacy controls present in SNS. In general, if users of non-SNS sites want to keep their broadcasts private, they can require subscription-for-viewing permission or can employ password protection. Non-SNS Web 2.0 sites include personal blogs, podcasts, microblogging services such as Twitter, wikis such as Wikipedia.com, and media-sharing sites such as YouTube. The content analytic study of such 2.0 content has been wide-ranging (e.g., Abbasi et al., 2008; Birch & Weitkamp, 2010; Habel et al., 2011; Lieberman & Goldstein, 2006; Ma, 2013; Neviarouskaya, Prendinger, & Ishizuka, 2009; Oh, Agrawal, & Rao, 2011; Waters & Jamal, 2011; Weisburd, 2009; Yu & Wang, 2015).

Acquiring Content From Social Networking Sites. A major challenge in acquiring content from SNS is the precision and wide use of privacy tools

for gatekeeping by SNS users. Whereas the goal of Web 2.0 sites like blogs and wikis is often to reach the largest audience possible, SNS are geared toward providing personal content to a network of “friends” or connections that are mutually agreed upon. Because content on SNS may only be accessible to “friends” (as is often the case on Facebook) or other approved entities, it can be difficult to sample from the general population. Recent studies have done a respectable job of overcoming the privacy challenge in acquiring content from SNS. Carr, Schrock, and Dauterman (2009), for example, first recruited students from a class for participation in a Facebook study and then, after gaining their informed consent, told them to “friend request” a page created by the researchers so that their status messages could be viewed for coding. This interesting, creative approach alleviates concerns some may have about human subjects violations from content analyzing messages set to private. Assuming that all data are kept confidential, we do not believe there are significant ethical breaches in sampling from social networks like Facebook if the user gives the researcher access to their information by friend requesting them or if the posted information is open to the public.

It should be noted that some SNS members have variable privacy settings and may make only a portion of their content available to select members, which should be apparent when certain content is searched for and not visible. If this happens, it may necessitate the elimination of that content from further analyses. We recommend that researchers take an in-depth look at the privacy settings for each SNS and use it to help decide the ethics of using information found outside the profiles of consenting research subjects.

When there are no or few restrictions on a population of messages from social networking sites, we recommend looking for site-provided tools to aid in drawing a sample. For example, both Lunk (2008) and Kane (2008; Kane et al., 2009) sampled MySpace profiles by using the site’s “advanced browsing” function available at the time of their studies. This tool allowed them to display a random sample of profiles based on set criteria. Despite having millions of potential cases, they were to draw 3,000 profiles at once, displayed 300 at a time. A small number were blocked, but the advanced browsing function still allowed them to draw solid, representative samples. There were also settings that could have narrowed their searches to include only certain types of users, selected by sex, age, relationship status, and/or other criteria. Other SNS sites have similar features that can be used by the content analyst.

While archived private messages (similar to personal emails) on Facebook, MySpace, and Twitter allow researchers an unprecedented opportunity to study interpersonal communication outside of the laboratory or field setting, these messages are not readily available to the researcher. Researchers will need to acquire the private content from one half of the dyad and then consider the ethical dilemma of whether or not permission from both halves of the dyad is needed in order to include the content analysis of the private message in a study. Overall, methods of getting at difficult-to-sample content like

SNS profiles or private messages are fraught with limitations that should be acknowledged by researchers.

Acquiring Content From Non-Social Network Web 2.0 Sites. Whereas SNS are used to share information within a limited network, non-SNS sites are generally used to broadcast information to as large a group as possible, serving a true mass communication function. Because these non-SNS sites do not rely on mutually agreed upon connections for gatekeeping their content, the challenges in content acquisition for these sites are very different. Because of their function, it is rare to find a blog, microblogging feed, or wiki that is not public. When this does happen, a personal blog or Twitter feed, for example, might offer only limited access to friends and family as a repository of personal thoughts (Nardi, Schiano, & Gumbrecht, 2004). Privacy on these types of sites can be achieved by requiring subscriptions that must be approved by the site owner in order to view or by password protecting the entire site. Because the majority of these sites are completely public, the real challenge in content acquisition is sampling, specifically in the case of blogs and microblogging feeds, which are discussed in detail in the following paragraphs.

While there are many ways to locate web logs on the Internet, sampling them presents a number of unique challenges. Li and Walejko (2008) outlined several of the pitfalls in the study of blogging, including spam blogs, abandoned blogs, access-restricted blogs, and nontraditional blogs. The most problematic are (a) spam blogs, which are also called *link farms* and are created to boost the page rank of web sites in search engines and (b) abandoned blogs, which may make up as much as two thirds of blogs. Access-restricted blogs, although rare as previously discussed, will tend to be underrepresented in studies because they are difficult to locate. This must be taken into account when designing research and addressing study limitations. Finally, there are nontraditional blogs, which include sites with a user-generated content function that would not traditionally be considered a blog. As Li and Walejko (2008) point out, popular SNS sometimes provide users the option to blog within the bounds of the site. MySpace, for example, has an integrated blogging platform, and researchers should remember those nontraditional blogs, which may not appear in blog searches.

In order to adequately sample blogs, the content analyst must successfully navigate all of these pitfalls and create sampling frames that allow them to select, find, and archive their sample. Li and Walejko (2008) examined 24 blogging studies to uncover four strategies for sampling bloggers and blogs on the Internet: (1) a self-selected or convenience sample, (2) sampling through blog hosts, (3) sampling with the assistance of blog aggregators or indexing web sites, and (4) sampling for ready-published lists of blogs. Self-selection is achieved by soliciting bloggers the same way one would solicit participants for any kind of study—“Students who just started a romantic relationship needed,” for example. This type of sampling has all of the advantages and disadvantages of traditional convenience sampling. Researchers may choose to use a blog host, such as blogger.com, to construct their sampling frame.

Often these blog hosts have accessible blog lists or “find-a-random-blog” functions, which may help researchers in sampling. The downside of sampling by blog host is that it excludes self-hosted blogs, which limits the generalizability to other blog hosts and platforms.

Blog aggregators collect, organize, and publish blogs and blog posts. Some blog aggregators allow users to create their own blog aggregation, while others create the aggregation and order using algorithms. Technorati, for example, uses a ranking algorithm and lists blogs in order of their popularity. Li and Walejko (2008) explain the two major limitations of using blog aggregators to create sampling frames as, first, no one aggregator encompasses 100% of blogs, and second, aggregators are constantly changing, potentially making it difficult to replicate the sampling in future studies. Finally, a researcher can use blog lists and rings (or connections between bloggers who write about similar topics) to construct a sampling frame. Li and Walejko (2008) suggest using blog rings as a starting point to create larger samples. The important thing to remember when choosing a method to sample and acquire blog content is that the generalizability of the research depends on the population and the sample. If one randomly selects 500 blogs from Technorati, the population is not “blogs”; it is instead “blogs listed by Technorati.” Keeping this in mind will help in the proper interpretation of such studies.

Acquiring content from microblogging services presents its own unique challenges. As of the writing of this book, the most popular and ubiquitous microblogging service is Twitter. Launched in 2006, Twitter has grown to more than 320 million active users (“Twitter Usage,” 2015; see also Fiegerman, 2012), who generate more than 500 million “tweets,” or short status updates of 140 characters or fewer, per day (“Twitter Usage Statistics,” 2013; see also Terdiman, 2012). One challenge in acquiring content from a massive service like Twitter is simply conceptualizing the medium. The widespread use of the metadata hashtag (#) to organize mass messaged tweets can aid the researcher in reviewing and sampling tweets. However, Twitter also contains interpersonal and “follow” functions that make it similar to social network sites. In addition to the mass communication function of tweets, which are broadcast, Twitter allows users to directly (through “retweeting”) and indirectly (through manual reposting) repost the content of others. It also contains an interpersonal function (using the @ symbol to allow microbloggers to manage interpersonal conversations), which can be started by all Twitter users, regardless of whether or not they follow one another. In addition to @ replies, there also exists the ability for users to private message only those who follow them, echoing, though not equaling, the articulated mutually agreed upon networks in SNS. Upon this closer examination, we see not only that microblogging is extremely platform specific in many ways, but also that there is a large amount of different kinds of content to analyze in this rich medium.

Published studies of Twitter have employed several methods for sampling, using various tools. Honeycutt and Herring (2009) studied collaboration

and user-to-user exchanges on Twitter. In order to create a representative sample, they attempted to collect tweets from Twitter.com's public timeline (a feed of all tweets available to all users in real time). Their sampling strategy attempted to collect tweets in four one-hour samples gathered at intervals. What they realized was that the public timeline was refreshing too quickly to capture all posted tweets, and they ultimately employed a "scraper" program that was able to collect 20 messages at a time in intervals of 3 seconds (Honeycutt & Herring, 2009). Thelwall, Buckley, and Paltoglou (2011) also used a program built to scrape tweets in order to capture them from the public timeline.

Using the public timeline, however, is not the only way to acquire content from a microblogging site. Chew and Eysenbach (2010) used Twitter's own application programming interface (API) to create an "infoveillance" program, which gathered publicly available tweets containing their key words of interest. These researchers archived over two million tweets containing references to swine flu in order to examine trends in the discussion of the global pandemic. Scansfeld, Scansfeld, and Larson (2010) used Twitter's built-in search function to acquire tweets that mentioned antibiotics. "Each individual search returns results from a variable time frame (approximately 1 week), depending on the storage capacity of Twitter's Database," explain the researchers (p. 183). They conducted two searches per week for several months, generating a list of 52,153 status updates or tweets mentioning at least one of their search terms.

External search tools can also be used to acquire content from a microblogging site. Binder (2012) used the Advanced Google search engine to identify relevant messages on Twitter for a study of U.S. commentary about nuclear risk following the 2011 emergency at Japan's Fukushima-Daiichi nuclear power station. The researcher's search criteria returned a sampling frame of 2,359 tweets, and a systematic-random sampling technique was then used to extract a sample of 124 messages for human coding.

Sieben (2014) had a bigger challenge than Binder (2012) in collecting content about the key period of the uprisings in Egypt and Syria in 2011, during the Arab Spring movement. Sieben (2014) was attempting to analyze tweets based on the presence of key words about the Arab Spring movement from more than a year in the past. Because selling data sets has become part of Twitter's business model, the Twitter API limits the ability of users to create large data sets from information tweeted in the past. If a researcher is not collecting at the time of the event, it becomes increasingly difficult to find the information. Ultimately, Sieben borrowed two data sets from other researchers who had been collecting tweets during the Arab Spring movement and used cURL, an open-source command line tool, to access the Twitter API and collect 1% (cURL is limited to 1% by the Twitter API) of the tweets with a given hashtag to round out his sample. A second challenge that Sieben faced was the size of the population. His borrowed data sets, along with his own collection, amounted to more than 400,000 tweets. Sieben (2014) was able to cut down the sample using a random sampling method. Researchers who

wish to study world events on Twitter, especially those that happened in the past, may experience similar challenges.²

Another way to sample and acquire content on Twitter is by selecting a population that contains a select group of Twitter profiles to analyze. In their 2010 study of *Fortune* 500 companies' use of Twitter, Rybalko and Seltzer (2010) selected 170 active Twitter profiles maintained by *Fortune* 500 companies, identified the set as their population, used the list as their sampling frame, and drew a random sample. They utilized two sampling units for their study: Twitter profiles and individual tweets. In their study of Twitter coverage of the 2011 Mumbai terrorist attack, Oh, Agrawal, and Rao (2011) chose to examine only one Twitter profile, www.twitter.com/mumbai. Their content analysis examined each individual tweet as a unit.

Unfortunately, much archived Web 2.0 content is either private or proprietary (Karpf, 2012). In 2014, microblogging platform Twitter had a pilot project called Twitter Data Grants, a competitive program for researchers to gain access to Twitter data sets and the assistance of Twitter's engineers and researchers. This and other collaborative projects between online providers and academic researchers are one way for content analysts to apply their skills to proprietary big data message collections.

Acquiring Online News

Hester and Dougall (2007) offer sound guidelines for acquiring online news content, based on the results of a study they conducted comparing different sampling methods and sizes. The researchers collected 7,438 news articles on Yahoo! News during a 183-day period and then had them coded for the types of content appearing each day to identify population parameters. Then, they drew 50 samples in each of several different manners to test for the representativeness of each approach. Their results indicate that constructed-week sampling, which involves identifying all Mondays, Tuesdays, and so on and then randomly selecting one Monday, one Tuesday, and so forth to construct a composite week, works substantially better than simple random sampling or consecutive-day sampling. Their findings also suggest that a minimum of two constructed weeks are needed and that as many as five may be needed for certain variables (i.e., those with high variability). Hester and Dougall's research not only contains good advice for sampling, but it also serves as an example for how empirical evidence may be generated to guide decisions about what acquisition methods work best for answering particular content analysis questions.

Content Acquisition *by* Interactive Media

In addition to options for acquisition *of* interactive content, there are also options for selection of content *by* interactive media. Well-worn search engines such as Google, Ask Jeeves, and Bing might be the most salient tools

for accessing content through interactive media, but there are other options. Web crawler programs, which systematically browse the web, have the potential to search for and acquire content of interest. For example, Wolfram Alpha is a “computational knowledge engine” that uses a vast collection of expert knowledge to answer questions from users (www.wolframalpha.com). Although this technology has been used for data mining, it could also be programmed to retrieve message content of interest (i.e., text mining). There are also different kinds of content aggregators, including FlipBoard, which allows the collection of multiple types of content, Rotten Tomatoes and Metacritic for film reviews, a variety of feed readers including NewsBlur and Feedly for RSS feeds, Apple News and Google News for news, and a variety of applications that search and track heavily discussed topics on social media. These technologies harness the power of interactive media for automated, and often automatic, content retrieval or collection and are promising options for content acquisition.

Archiving Content in the Interactive Media Age _____

Archiving content for analysis can be a challenge with interactive media. It does not come “pre-packaged” and ready for analysis. Saving video game play, web content, and other forms of interactive output requires a few additional steps, for which there are fortunately a number of viable options. Getting a “snapshot” of this type of content is essential due to its changeability and updating. This section reviews options for archiving interactive content and then shifts to a discussion of how interactive media itself can aid in the archiving of traditional and new media content.

Archiving Video Games

Unlike traditional media, video games have to be played in real time and simultaneously recorded in order to be captured and archived for later analysis. A typical procedure for this had been to have research assistants play games selected for inclusion in a sample and then use video recordings to capture the play (e.g., Lindmark, 2011; Smith, Lachlan, & Tamborini, 2003). Having content in digital form has the advantage of being easily duplicated and shared with other coders for a reliability check. It can also be archived for future analyses and/or shared with other researchers.

Archiving Web 2.0 (and Other Web) Sites

Web pages are more difficult to archive now than they were in the Internet’s early days, when they were simple HTML constructions. Current sites have many disparate elements that may not be captured by using the

“save page” function in a browser. However, there are several options for archiving pages that work with varying degrees of success, depending on the type of page and content. For example, Shelton and Skalski (2014) used Adobe Acrobat to archive Facebook profiles and photo pages by converting them to PDF files, creating virtual “snapshots” of the sites. From these, the researchers were able to code for both pro-academic behavior and anti-academic behavior, in most cases. The only problem they encountered was that the photos in some archived pages were too small to see certain variables, in which cases they instructed coders to return to the profiles and look at the full-sized photos.

Evernote is also useful for archiving social media messages. Evernote, a software that facilitates the collection of a wide variety of types of messages (see Box 7.2), can capture more information than just text or the basic content of the message. It allows the researcher to take a screenshot or photo of the message and archive it on Evernote’s cloud server as well as on the researcher’s desktop. The messages can be kept private or made accessible to other researchers and become searchable through Evernote’s use of optical character recognition (OCR) to convert the text of photographed messages into searchable text, allowing the researcher to search individual words and phrases in a message sample gathered from SNS.

Kane (2008) used an alternative technique for archiving MySpace profiles for her study of self-presentation on social networking sites. She saved the page files in her sample using MHTML, which preserves all HTML, text, and photos in a single file and thereby maintains the integrity of the original display. It does not save all content, however, such as audio or video. Much software has been developed for the express purpose of saving entire web sites, such as TeleportPro. Simon (2011) used HTTrack Website Copier to archive political web sites in his comprehensive study of news, online, and public foci on political races in the 2010 Ohio election.

For Internet filtering, security, and computer protection, services such as IBM’s Internet Security Systems (ISS) use algorithms to detect faces and objects and analyze content for objectionable features (e.g., nudity, illegal activities). Such facilities might be adaptable to content analysis needs for searching and saving.

Traditional Media Archiving With Interactive Technology

Despite some challenges with preserving certain forms of interactive content, newer media also offer a number of useful options for archiving traditional media content. Content analysts no longer have to hunt through dusty physical libraries for magazines, videotapes, or other coding content. Or even if they do, they are able to snap digital photographs of old print ads, for example, posting them online for sharing by the entire research team (Dixit, 2016). Content can now be archived digitally using interactive technology, which saves space and speeds up the rate at which the content may

be pulled for analysis. Options for archiving audio and video content include programs such as Annotape and askSam. As mentioned earlier, SnapStream is another option for storing and maintaining a digital archive of moving image content.

Ample space also exists for storing digital content now, thanks to increasingly large personal hard drives (frequently in the multi-terabyte range) and cloud storage services, which are booming in popularity. Cloud storage is space on a huge remote computer server that users access via the Internet (Walton & Fendell Satinsky, 2013). Examples include Dropbox, Google Drive, Microsoft Skydrive, and Apple iCloud. Most cloud storage services offer some free space and charge a fee for additional space. From our experience, the free space of multiple cloud storage accounts provides enough room for storing most types of content analysis data. Cloud spaces also allow for the easy sharing of content and coding materials among multiple coders. Coders can be granted access to a single cloud server with everything they need. They can even do their coding “on the cloud” (versus downloading a digital coding sheet to their hard drive) and have their work immediately saved and inspected by the content analyst. Cloud computing introduces a host of possibilities for content analysis that we are only beginning to realize.

Coding Content in the Interactive Media Age _____

Coding interactive content involves the usual steps in a content analysis, as discussed in this text, with some new challenges and issues at the stages of unitizing, codebook and coding form creation, and coding itself.

Unitizing Interactive Content

Units of data collection in interactive media often have parallels to traditional units in content analysis. It is up to the researcher to decide which units are appropriate for answering particular hypotheses and research questions of interest. Lunk (2008), for example, was interested in comparing communication patterns of U.S. and Hungarian users of social networking sites, so she sampled 300 comments left on MySpace profiles of U.S. and Hungarian users. Each comment was deemed a codable unit. This unitizing parallels the traditional analysis of sentences, utterances, or turns in real-world communicative interactions (e.g., Bales et al., 1951). Similarly, Martins, Williams, and Harrison (2008) used 368 adult female game characters as units of data collection in their study of women’s body type portrayals in popular video games, which parallels work that has looked at body imagery in print media and on television (e.g., Byrd-Bredbenner, 2003; Greenberg et al., 2003).

The analysis of online discussions might be informed by studies of face-to-face interactions. For example, whether to select the post, the thread, or even the social network as the unit of data collection for research on chat rooms or social media is a perennial question (De Wever et al., 2007; Strijbos & Stahl, 2007). These decisions are analogous to the selection of the turn, the verbal exchange, the discussion, or the dyad or group in research on face-to-face interactions. Further, as Strijbos and Stahl (2007) found, “unit fragmentation” often occurs, which refers to fragmented utterances by a single author spanning multiple chat lines. These fragments make sense only if considered together as a single utterance. Thus, reconstruction of the interaction is necessary.

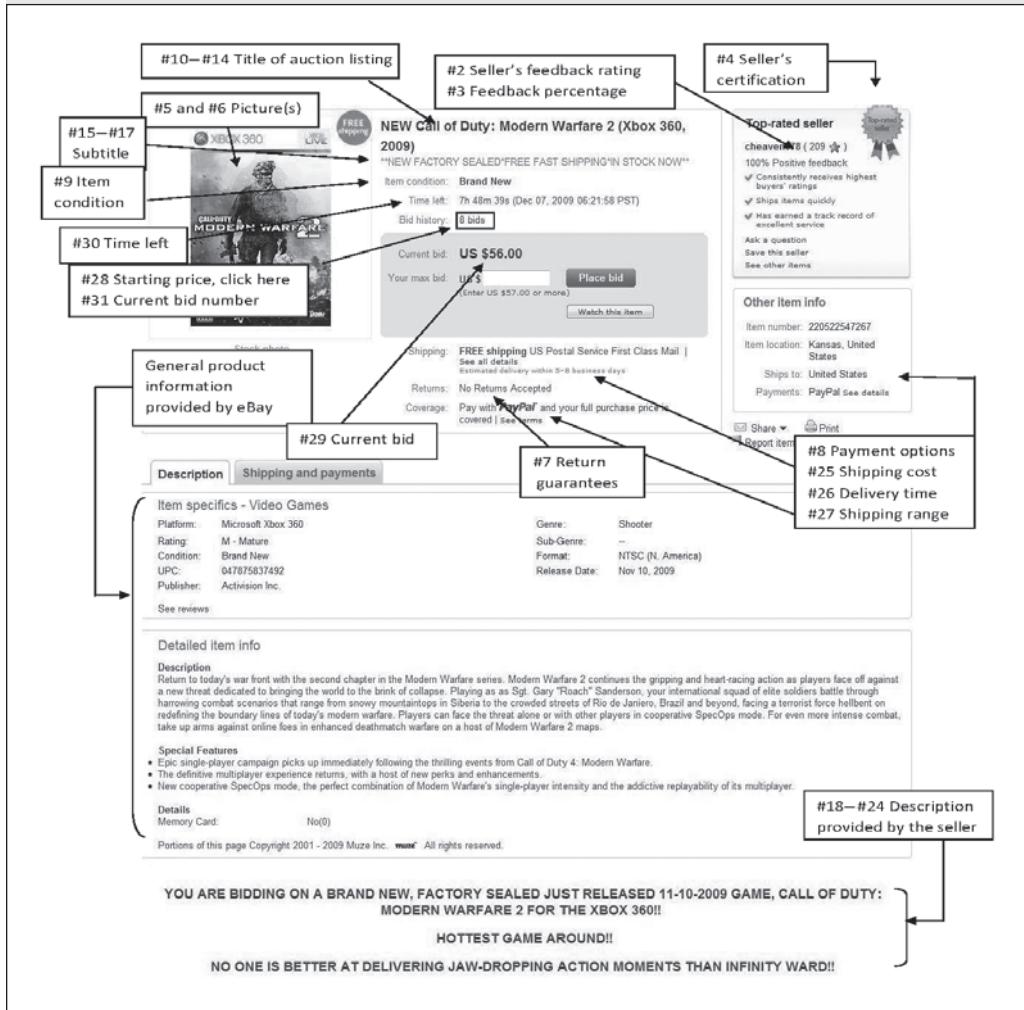
In other instances, the unitizing task for interactive media does not have a clear counterpart in traditional research. The choice of what unit to select within interactive media output (IMO) content has developed via convention among researchers who focus on each type of content. In a typical example, in their study of the computer simulation “Networked Fire Chief,” Elliott et al. (2007) selected 20 five-minute scenarios for each of the 20 participants. Video game researchers face a similar decision process, as described earlier.

Codebooks and Coding Forms

Content analysts have capitalized on technology advances even in the very construction of their codebooks. Electronically produced codebooks can easily include images, diagrams, and links to instructive online materials (such as specific exemplars, should the researcher choose to introduce them). The capability of researchers to create codebooks that include pictorial elements has increased over time. Figure 7.1 shows a typical “demo” page from a codebook, indicating where measured variables (explicated in words on other codebook pages) can be located in the targeted content (eBay auction pages; Wu & Neuendorf, 2011).

Most content analysts have switched from traditional paper coding forms to electronic coding forms, such as Excel files. Coders can leave these files open on a screen beside the medium displaying their content (or on the same screen, in separate windows) and code more quickly and easily than they would on paper. Coding directly into electronic files also makes intercoder reliability checks and subsequent analyses easier since the data are already in an appropriate format. Both Lindmark (2011) and Brown (2011) used Excel files for coding, in slightly different ways. In his study of advertising in popular video games, Lindmark’s coding forms were Excel files with two tabs that allowed for switching between game-level and advertisement-level variables. In her study of disrespectful behaviors on children’s television, Brown had a tab for each show in her sample and coded all program-level variables within each. With careful backups of electronically coded data, electronic coding forms are an obvious advantage.

Figure 7.1 Sample Codebook “Demo” Page (Wu & Neuendorf, 2011)



Coding Interactive Content

Coding of interactive content should follow the advice given earlier in this text, including training, pilot coding, and intercoder reliability checks. Given the complicated nature of some new media content, specialized coding procedures may be required in some cases. Shelton and Skalski (2014), for example, encountered low reliability between certain coders for some variables in their study of Facebook profiles. They therefore made the decision to have the more carefully trained, more reliable coders code certain complicated content and have the other coders handle easier content. This approach is not ideal, but in some cases, it may be the only option to obtain an acceptable level of intercoder reliability.

The Use of Technologies for Medium and Message Management, Message Preparation

There always has been a need for the content analyst to understand the nature of the medium in which the targeted messages are found and the operation of equipment for delivery of the messages. In the past, this could include knowing how to find specific news articles in a newspaper's morgue, learning how to record and play back audiotape or videotape or knowing how to use transcription equipment. But with the proliferation of options in electronic and digital media, new considerations have come into play for the preparation of messages for coding and for message handling during coding.

Advances in technologies for the automatic processing of messages have stemmed largely from the areas of computer science and machine learning, generally without clear applications to the needs of social/behavioral scientists and others who are interested in the research applications of these technologies (Divakaran, 2008). What follows are some examples of key processes that digital technologies have made available for possible message preparation, handling, and even coding.

1. Image measurement: In an inventive study of food portions over time, Wansink and Wansink (2010) used a CAD-CAM system for the simple process of measuring the "food-to-head" ratio in a series of *Last Supper* paintings spanning the last millennium. And Pettijohn and Tesser (1999) used the PhotoMagic software to help in the measurement of facial features of film actresses in a study of facial attractiveness over time.
2. Speech recognition/automatic transcription: There are many systems that provide the support function of the transformation of spoken messages electronic text form (i.e., automatic speech recognition or ASR). This capability has been delivered into the hands of anyone with a computer or smartphone; for example, the Dragon NaturallySpeaking software by Nuance is available in six different languages. Speech recognition has been used for the transcription of speech samples (e.g., Gottschalk & Bechtel, 2005) and broadcast news (e.g., Gauvain, Lamel, & Adda, 2000) for quite some time, in the latter case showing superiority over the use of on-the-fly closed captioning.³ Oger, Rouvier, and Linares (2010) have used speech recognition to automatically transcribe a variety of moving image content, resulting in the correct identification of seven types based solely on linguistic content: cartoons, movies, news, commercials, documentaries, sports, and music.
3. Multimedia content analysis: This term has been appropriated by information technology (IT) specialists seeking ways of filtering, indexing, and retrieving video, audio, and digital images. As noted by Dimitrova (1999, p. 87), "Data compression coupled with the

availability of high-bandwidth networks and storage capacity have created the overwhelming production of multimedia content. . . . For content producers, advertisers, and consumers, there will be increased availability and increased challenges to manage the data.” A number of systems for retrieval of multimedia content have been developed, such as the products of StreamSage, Inc., which include tools for searches and retrieval of “timed media” content, such as streaming audio, streaming video, timed HTML, animations such as vector-based graphics, and slide shows (StreamSage, 2012, p. 1).

Two 2012 volumes provide the state of the art of this type of so-called “content analysis” for video (Kompatsiaris, Merialdo, & Lian) and for audio (Lerch). The techniques presented in these volumes include practices for the annotation, retrieval, organizing, and quality control of video and the extraction of metadata and other information from audio signals. The main point of all of these techniques is to automate the indexing and retrieval of video and audio archives. While they do not execute content analysis in the sense defined in this book, these algorithms might be useful adjuncts to the execution of a full content analysis.

Specific functions which seem most applicable to content analysis include the following:

1. Video segmentation: By programming a computer to recognize segmental markers, such programming segments as separate news stories (Boykin & Merlino, 2000; Kubala et al., 2000) or commercials may be identified. SRI International’s Scene Segmentation and Classification (SSC) process provides the real-time indexing and retrieval of individual shots in videos (“Advanced Manipulation and Automation,” n.d.). Further, most video editing systems have built-in shot detection/segmentation. However, Cutting, DeLong, and Nothelfer (2010), in a careful investigation of the utility of such algorithms, note problems with their accuracy to date.
2. Image, facial, object, and behavior recognition: A number of systems have been developed that facilitate computer recognition of static or moving images. *Content-based image retrieval (CBIR)* is the term applied to the process of retrieving desired images from a large collection on the basis of syntactical image features such as color feature, texture, shape, luminosity, and edges (Rorissa, 2007). CBIR avoids the limitations of metadata-based systems, which require human intervention in the description of images in a database. Rather, CBIR uses the image content itself as the data for comparison with other images. The free online system TinEye (www.tineye.com) is an example of such applications; the system will search the Internet for occurrences of a particular image or somewhat-altered versions of that image.

Facial-recognition software is becoming more present in consumer software programs. For example, HP's Automated Publishing can identify faces on web sites. And Apple's iPhoto and iMovie programs both contain facial recognition features. A user could, for example, archive 1,500 photos of political rallies in iPhoto and begin tagging specific attendees. iPhoto would then learn to associate people's names with their photos and search the entire corpus of photos for those people, tagging them when their faces are recognized by the software. Though this is clearly a commercial application, it may have some utility for the content analyst.

Non-research applications of this type of technology show the potential power of the technique while raising significant privacy and civil liberties issues. The surveillance system FaceTrac was used by the Tampa Bay police to scan the fans at the 2001 Super Bowl, comparing their facial characteristics to mug shots of known criminals (Grossman, 2001). No arrests were made that day at what has been called the "Snooper Bowl" (Singel, 2010), and only after \$8 million in system upgrades were the police able to use the system effectively on the street. Tampa police used digital cameras to take pictures of citizens at traffic stops, compared them against a database of 7.5 million mugshots, and made nearly 500 arrests (Singel, 2010).

Human interaction recognition has been the goal of some research, with only modest success to date. For example, Patron-Perez et al. (2010) developed algorithms for the detection of four discrete behaviors in the context of video retrieval: handshakes, high fives, hugs, and kisses. However, the optimal outcome they achieved was a 64% correct identification rate, well below what would be expected via human identification and coding.

3. Streaming video: Streaming video allows Internet users to play video content "anytime anywhere, thereby eliminating the spatial and time constraints of traditional media forms" (Dupagne, 2000, p. 11). The technical deficits to online video noted over a decade ago (Dupagne, 2000; Neuendorf, 2002) have been somewhat overcome, although temporal interruptions to the streaming of films from Netflix and other services remains a user complaint (Campbell, 2012). Further, a content analysis comparing streaming and DVD-based film viewing revealed that distinct differences exist between the quality of streaming films and the DVD-presented film, including aspect ratio, color and sound quality, and picture clarity (Campbell, 2012). Nevertheless, content analysts now routinely conduct their coding of film and television content and of recorded human interaction behaviors streamed directly from online archives. This type of coding has obvious advantages: the elimination of costly materials, such as recording media (e.g., videotapes, DVDs) and playback equipment, and the efficiency of multiple coders having immediate access to the same pool of messages.
4. Metadata: Perhaps no other class of innovation holds greater promise for advances in automated content analysis that does the application

of *metadata*. Metadata means “data about data” and could be anything that summarizes information about a set of data, such as a message. The hypothetical uses of metadata have far exceeded the real-world applications to date, particularly when it comes to moving image metadata.

Perhaps the most familiar use of metadata is in the annotation of computer files, in which date of creation, the creator’s user identity, file type, file size, and other descriptive information are embedded within the file. Digital cameras routinely attach important metadata to still photographs, including make and model of the camera, shutter speed, aperture value, focal length, and ISO.

In the video realm, there have been much contestation and many changes in recent years. Older video systems (such as the American standard NTSC) allowed a small amount of metadata to be carried, such as closed captioning and DVS (descriptive video service, an oral description of action provided for the visually impaired) carried in one line of the vertical blanking interval, the area between video frames. The contemporary digital systems have greatly expanded the opportunities for metadata, which in a digital environment may be stored anywhere in the signal throughout the entire duration of the content. Television engineers noted that with the diffusion of digital content, “the number of distinct varieties of Metadata” became “potentially limitless” (EBU/SMPTE Task Force for Harmonized Standards for the Exchange of Program Material as Bitstreams, 1998) and early on they offered such suggestions for metadata as copyright information, author(s), and origination date and time and such technical indicators as color correction parameters, time code, and edit decision lists used to produce the video.

However, to date, no widely accepted standards for metadata have been adopted for digital video. MPEG-7, released in 2001 by the Motion Picture Experts Group (MPEG), is a multimedia content description standard that provides a rich set of tools for the attaching of metadata to photos, audio, and video. For several years, MPEG-7 annotation software (e.g., IBM’s Annotation Tool) showed promise for the embedding of a wide variety of information as metadata—not just technical specifications, but also data about the content (e.g., “exterior scene,” “water,” “animal-deer”). However, the software was not widely adopted, and alternative applications have left the situation fuzzy. MPEG-21, introduced in 2004, is a standard that provides further metadata capabilities but was developed primarily as a “rights expression language” intended to manage restrictions on digital content usage. The MPEG-21 standard is designed to incorporate metadata on ownership and licensing of digital content and so far has not been used for metadata that might be of significant interest to content analysts.

Thus, metadata is currently viewed having only industry applications, such as copyright protection or for professionals to receive credit on a media product (Robair, 2015). And to complicate things further, metadata

may be thought of as primarily focused only on “production” or “distribution,” and therefore might not be carried through from content creation to audience reception.

In the future, metadata capability may readily be used to store information about message substance and form, such as human characters in the filmic frame, the dialogue being spoken (i.e., the script), and type of shot and transition at each point in time. This type of metadata could pave the way to a fully automated form of content analysis for the moving image.

Automated Technologies and Measurement on the Moving Image

All the systems described in the last section provide assistance to the content analyst but stop short of fully automating the coding process. As described in Chapter 5 and Resource 1, CATA options do provide fully automated coding of text, including both coding with a priori schemes (internal and custom-designed dictionaries) and with “emergent coding” approaches. But computer coding is still essentially limited to CATA—the promise of computer-automated coding of moving image content (e.g., “Teaching Computers to Watch TV”; Evans, 2000) has not yet been fully realized. However, several initiatives have provided indications that certain types of computer-driven measurements might be useful.

First, the full range of “mining” functions ought to be considered. The original notion of “data mining,” the aggregate, strategic, and nondirected (i.e., atheoretic) application of statistical techniques to large sets of data in order to find meaningful patterns, has been expanded to other informational forms. “Text mining,” as has been mentioned, is a broad-brush application of emergent-coding CATA techniques (e.g., Thelwall, Wilkinson, & Uppal, 2010). And “video mining” may prove to be a useful set of tools for the wholesale identification of moving image patterns in form and content (Rosenfeld, Doermann, & DeMenthon, 2003).⁴

To date, some researchers have successfully harnessed the capabilities of computing for the automatic content analysis of specific moving image material. For example, Kearns and O’Connor (2004) used Autonomy Virage video search software in their extension of the notion of entropy for the moving image (originated by Watt, 1979, and Watt and Welch, 1983, as a specific application of the notion of message complexity). Entropy is the degree of randomness or unpredictability in a set of elements such as words, numbers, or [television] program production elements (Watt, 1979, p. 59). Watt (1979) provides six different formulae for the measurement of visual and auditory entropy. The higher the entropy, “the less predictable is the appearance of any unit, and the more complex is the message” (p. 59). Greater viewer attention occurs with “a greater element of surprise, greater information, and greater entropy” (Kearns & O’Connor, 2004, p. 146). Thus, the researchers were

concerned with measuring entropy at multiple points in a video presentation and used the Autonomy Virage module to extract key frames. In other words, the program grabbed video frames at points of detectable change in the data stream (p. 153), with those points being the units that needed to be identified for systematic coding of entropy.

In a unique combination of technology and critical/cultural film analysis, Anderson and O'Connor (2009) analyzed a small segment of the Alfred Hitchcock film *The Birds* in order to compare electronically deduced "structural" characteristics with a close semiotic analysis by film scholar Raymond Bellour. Using an AVI file version of the sequence, they extracted 12,803 JPG image files, each of which generated an RGB (red-green-blue) histogram, from which a Gini coefficient was calculated for each of the frames. Each Gini coefficient represented the color distribution of the video frame. These coefficients were graphed in several ways, including an analysis of frame-to-frame change, providing a ready comparison of these "hard data" on color distribution with Bellour's shot-by-shot critical analysis of the film sequence. As Anderson and O'Connor note, their technique "demonstrates the validity of this approach to numerical and graphical representation of filmic structure" (2009, p. 39). They suggest further analyses of film soundtracks and other moving image elements.

However, Cutting et al. (2010) provide evidence that even the simple task of dividing moving image content into separate shots is not yet fully achievable via automated methods. They note,

We were unimpressed with purely digital methods. Cut-finding algorithms often confuse motion across frames within a shot with spatial discontinuities across shots. They also do poorly with fades, dissolves, and wipes . . . [with] hit and false alarm rates of about 95% and 5%. (p. 2)

Cutting et al. (2010) were interested in content analyzing the editing rhythm of 150 Hollywood films released between 1935 and 2005. They used a combined coding process of a MATLAB-based identification of candidate cuts/transitions, with human coder inspection of the 12 frames surrounding each candidate transition to confirm computer-identified transitions and check for missed transitions. Their findings, by the way, identified a trend over the 70 years toward greater correlation of shot length with adjacent shot lengths, with recent films more closely matching a human tendency for changes in attention to follow a spectral patterning known as $1/f$. They conclude that contemporary films more naturally "help harness observers' attention to the narrative of a film" (p. 1).

There have been noteworthy advancements in the digital/electronic measurement of message features for one particular type of content—music. In an interesting example using both text analysis of lyrics (specifically, via the General Inquirer CATA program) and automated computer analysis of

acoustic attributes of the music (using the WEKA package for machine learning), Yang and Lee (2004) applied psychological models (e.g., Tellegen, Watson, & Clark, 1999) to study negative emotion in alternative rock music. The General Inquirer measures of hostility, sadness, guilt, love, excitement, pride, attentive, reflective, and calm best distinguished the song lyrics, while such acoustic attributes as beats per minute and timbral features such as spectral centroid and spectral kurtosis were used to correlate with volunteer assessments of the music's emotion intensity.

Some scholars have been exploring machine-learning applications to music information retrieval (MIR; www.ismir.net/), the interdisciplinary field that is concerned with extracting information from music. The goals range from the automatic generation of a musical score to the machine measurement of features such as timbre, chords, harmonies, and rhythms to the automated categorization of music genre. Others have applied similar models to the continued development of alternative algorithms for the automated detection of emotion in music (e.g., Trohidis et al., 2008), culminating in a full volume devoted to “automatic music emotion recognition (MER) systems” (Yang & Chen, 2011; see also Lerch, 2012).

Almost Content Analysis

Processes that are almost (but not quite) content analysis have become widely available to the average interactive media consumer, ranging from simple text-to-visual converters/compilers such as Wordle and Leximancer to interactive big data text mining compilers and summarizers like Radian6. Some applications provide personalized message analytics, such as ThinkUP's ability to provide individual social media users with such information as whether they retweet more men than women and how much they talk about themselves. Other applications exemplify the power of the web to convey summaries of message information on virtually any topic—for example, based on true scholarly research on logos and their strategic importance to organizations, James I. Bowie's Emblematic web site (www.emblematic.com/) reports on trends in logo design, using quantitative data from the U.S. Patent and Trademark Office. Analyzing more than 1.2 million logos dating back to 1884, Emblematic presents patterns over time and across industries, including new styles, deaths of old trends, color use, and geography.

While not meeting the criteria of a scientifically motivated investigation of messages that is content analysis, these message analytic services and adjuncts provide us with new ways to summarize messages, often using big data sources. They can provide the content analyst with the grounding to develop future investigations. (They are also, we find, a good way to get students interested in content analysis!) Box 7.3 gives examples of these popular, not-quite content analysis options.

Conclusion

Clearly, there are numerous content analysis capabilities, limitations, and challenges that have emerged in the interactive media age. All continue to proliferate. For updates, visit *The Content Analysis Guidebook Online (CAGO)*.

Box 7.3 Not-Quite Content Analysis

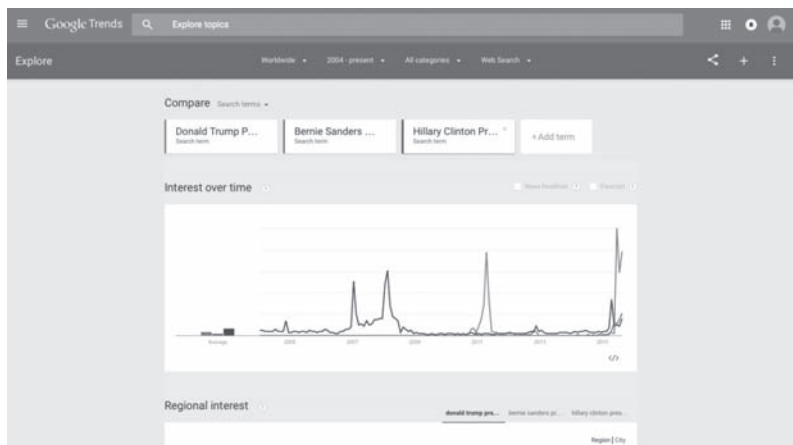
With the proliferation of online content and messages, the analysis of content—or in many instances its close cousin, text mining—has become big business. Depending on your background, you may be familiar with robust social media analytics software such as Radian6 or Sprout Social, which are able to pull content data sets from platforms including Twitter, Facebook, YouTube, blogs, online communities, and more. These programs are geared toward business users rather than social scientists, but they can offer ways to capture and analyze content that are helpful to researchers and professionals alike. In addition to often expensive, business-oriented services like these, free tools that claim to analyze content are also becoming readily available. Open access to social media platform APIs (application programming interfaces) by developers and users alike has caused a proliferation of free or nearly free apps that offer to analyze everything from post sentiment and user influence levels to “your personality.”

With all of these new online interfaces, however, the question “Is it content analysis?” still applies. In many cases, these programs are specialized applications that mine text, or use atheoretic- and emergent-coding schemes to analyze content. Some of these new apps, however, are beginning to use more established coding schemes. Whether scholastically sound content analysis or something else, these apps, which are popping up left and right as data become more accessible, are prime examples of the power of computing in the swift analysis of massive quantities of messages.

What’s an API? You may have heard the term *API* when discussing the analysis of new media content. An API is an application programming interface, or a way for developers and users to interact with social media platforms. Most developers interact with a platform’s API in order to create an application for that program. Periscope and Meerkat, for example, are two live video-streaming applications that interact with Twitter’s API to allow users to tweet while they are broadcasting. APIs also function to allow third parties access to the data gathered by the platform (Wang, Callan, & Zheng, 2015). In order to pull data from Twitter’s stream API, a researcher will either need to use an application created for that purpose or create one using a programming language such as Python. Luckily, there are many applications that allow users some level of access to social media data. In fact, Twitter has made its own analytics package available to users, though it doesn’t complete any true content analyses at the time of this writing.

From Twitter's trending topics to the capabilities of Google Analytics, there are many places where content is being quantified and repackaged with new meaning for end users. Since it would be impossible to create a list of all such applications available, what follows is a more in-depth look at a few examples in which content is analyzed in some fashion online today:

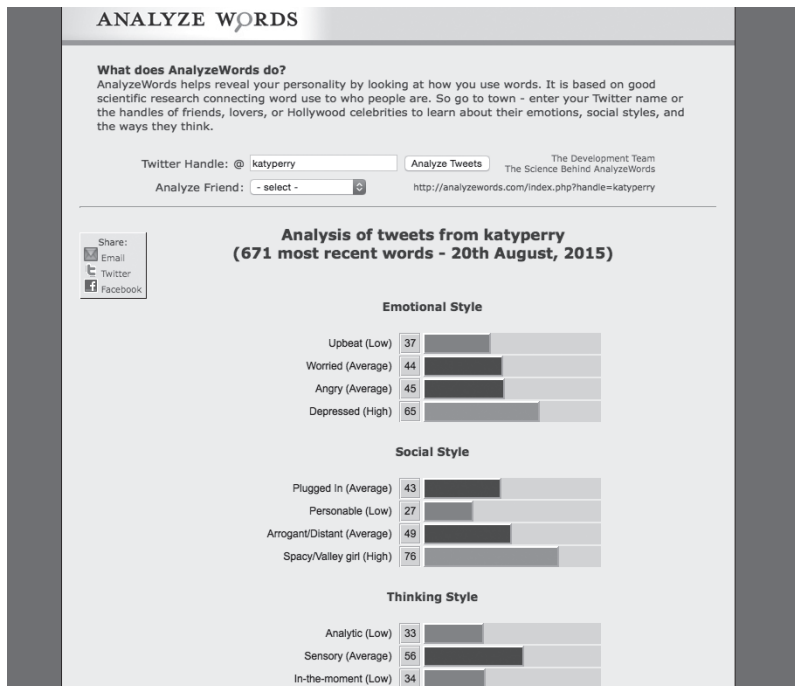
1. Google Trends is an analysis tool that allows online inquiries into the data of the billions of Google searches that users execute each month (www.google.com/trends/). These trends can be examined by time period, topic, and geographic location of users. Google Trends allows users to search not only individual topic trends but also to search for multiple topics in order to create useful comparisons. In the following figure, the names of three early presidential candidates for the 2016 election have been searched along with the word *president*. Upon a cursory review, it's evident that Hillary Clinton has been associated with a presidential run longer than the other two candidates, and her name trends along with *president* in 2008, at the time of the last presidential election with no incumbent. In 2012, when President Barack Obama was running for a second term, we see the emergence of Donald Trump and *president*, as he was considering entering the field of Republican candidates at that time. It's clear to see how Google Trends provides a useful analysis of search term content. However, it's important to note that the numbers displayed on the graphs are not absolute search volume, but representative numbers assigned by Google based on an algorithm. Google Trends is free to use, but there are additional premium features and options.



Screenshot of Google Trends™ captured August 20, 2015

(Continued)

3. Analyze Words (www.analyzewords.com) is a novelty program that allows you to input a Twitter handle for anyone and generate a “personality” analysis that includes the source’s emotional style, social style, and thinking style. Below, Katy Perry’s Twitter handle has been analyzed. We can see that she scores high for *Depressed* under emotional style, and high for *Spacey/Valley Girl* under social style. While an application of this nature certainly might not at first blush seem scientific, James W. Pennebaker and Roger J. Booth, who together created the Linguistic Inquiry and Word Count (LIWC) computer program, are the development team for Analyze Words and have used LIWC as the engine for the analyses it creates. Booth and Pennebaker also note on the site that they are keeping data from analyzed handles to create a larger set for future analysis.



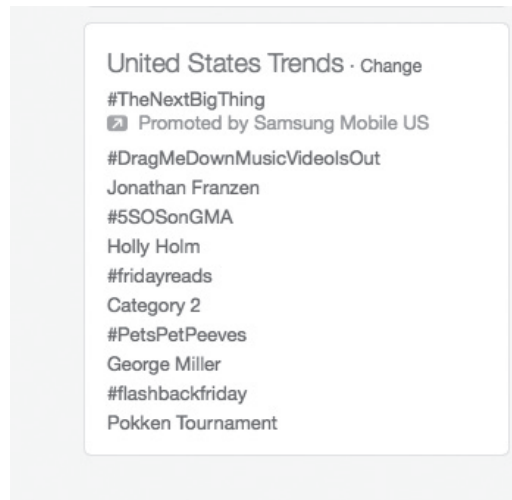
Screenshot of Analyze Words captured August 20, 2015

4. Twitter Trends are divided into two types: location trends, which are determined by the user selecting a geographic location, and tailored trends, which are created by an algorithm that claims to identify topics that are popular now based on each user’s location, followers, and other factors (“FAQs About Trends on Twitter,” 2015; Wang, Callan, & Zheng, 2015). The display of these trends has become more integrated into the

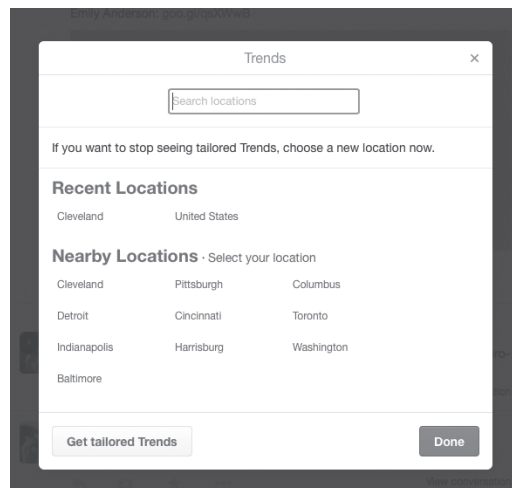
(Continued)

(Continued)

Twitter platform over time, and Facebook has followed suit, offering trends of its own that are also integrated into the basic user experience. Twitter trends appear in the bottom left-hand corner of each user's main profile screen. Users can switch between location trends and tailored trends easily and can select any location they would like to monitor. Another addition to Twitter Trends is "promoted trends," where companies place a sponsored trend in the trend space.

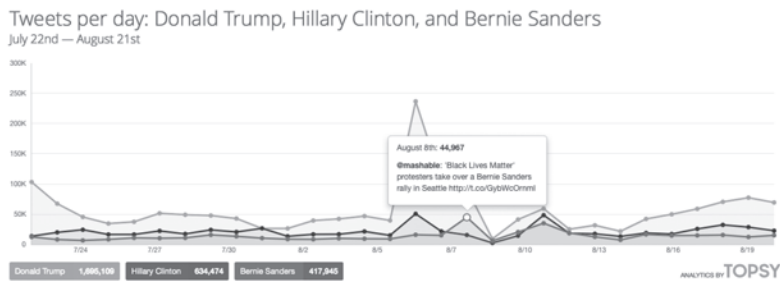


Screenshot of location trends for the United States captured at 1 p.m. on August 21, 2015



Screenshot of Twitter Trend options captured August 21, 2015

5. Users who want to further analyze trending terms can use third-party sites such as Topsy (www.topsy.com) to compare trends and view trend performance over time. Some of these sites offer limited free analyses, but most, like Topsy, have a premium or pro version where users can get more detailed data and analyses. The following analysis compares tweets per day with the key words Donald Trump, Hillary Clinton, and Bernie Sanders. Topsy.com displays the tweets that garnered the most attention during peak trend periods, like the following mashable tweet, which caused Bernie Sanders to trend when Black Lives Matter protesters interrupted one of his campaign events. The large peak for Donald Trump occurred during the first Republican debate.



Screenshot from Topsy.com captured August 20, 2015

Notes for Chapter 7

1. The occurrence of unexpected crossovers of functions is worth noting and perhaps deserving of future study. For example, the family of one of this chapter's authors posts home videos on YouTube for viewing by relatives in distant locations. Nevertheless, one of these videos has over 500 views—clearly people other than family members have found the video worth a look. Although intended for family–interpersonal communication purposes, the video has ended up with a “mass” (large, undifferentiated) audience.
2. Commercial firms such as Crimson Hexagon have begun to provide samples of archived content for a fee from such 2.0 sources as Twitter and Facebook.
3. Although seemingly a ready source of message information, closed captioning has not proved to be an attractive source because of frequent inaccuracies. Even classic films often have closed captioning that is grossly abbreviated or simplified, not accurately representing the spoken dialogue. And real-time captioning is full of errors (Dellinger, 2000); for example, when Meryl Streep won the Academy Award for *Sophie's Choice*, the word *Holocaust* appeared on-screen as *holly cost*. On April 19, 2013, closed captioning for a broadcast by *Fox News*

declared that the suspect in the Boston Marathon bombing was “19-year-old Zoey Deschanel.” Exceptionally bad closed captioning has attracted the attention of collectors of “found” humor—to wit, a 2009 local weather broadcast in Cleveland, Ohio, attracted over 12,000 YouTube viewers with the forecast, “My cats got weeded down again, other and said they don’t get what it down. Licking here again at a fairly isolated pattern . . . the Duracell could pop up camel’s clouds begin to build it in Akron can area. Kinsman have a little benders night” (“Fox 8 News,” 2009).

4. Non-research applications of video mining include the unobtrusive and automatic surveillance of shoppers in order to detect types of in-store behaviors (e.g., www.videomining.com).

References

- Aalberg, Toril, Papathanassopoulos, Stylianos, Soroka, Stuart, Curran, James, Hayashi, Kaori, Iyengar, Shanto, et al. (2013). International TV news, foreign affairs interest and public knowledge: A comparative study of foreign news coverage and public opinion in 11 countries. *Journalism Studies*, 14, 387–406.
- Abbasi, Ahmed, & Chen, Hsinchun. (2008). CyberGate: A design framework and system for text analysis of computer-mediated communication. *MIS Quarterly*, 32, 811–837.
- Abbasi, Ahmed, Chen, Hsinchun, & Nunamaker, Jay E., Jr. (2008). Stylometric identification in electronic markets: Scalability and robustness. *Journal of Management Information Systems*, 25(1), 49–78.
- Abbasi, Ahmed, Chen, Hsinchun, Thoms, Sven, & Fu, Tianjun. (2008). Affect analysis of web forums and blogs using correlation ensembles. *IEEE Transactions on Knowledge and Data Engineering*, 20, 1168–1180.
- Abelman, Robert, & Dalessandro, Amy. (2009). The institutional vision of historically Black colleges and universities. *Journal of Black Studies*, 40(2), 105–134.
- Abelman, Robert I., & Neuendorf, Kimberly A. (1984a, May). *The demography of religious television programming*. Paper presented to the Mass Communication Division at the annual meeting of the International Communication Association, San Francisco, CA.
- Abelman, Robert I., & Neuendorf, Kimberly A. (1984b). *The type and quantity of physical contact on religious television programming*. Report to UNDA–USA, Washington, DC.
- Abelman, Robert, & Neuendorf, Kimberly. (1985a). The cost of membership in the electronic church. *Religious Communication Today*, 8, 63–67.
- Abelman, Robert, & Neuendorf, Kimberly. (1985b). How religious is religious television programming? *Journal of Communication*, 35(1), 98–110.
- Abelman, Robert, & Neuendorf, Kimberly. (1987). Themes and topics in religious television programming. *Review of Religious Research*, 29, 152–174.
- Abernethy, Avery M., & Franke, George R. (1996). The information content of advertising: A meta-analysis. *Journal of Advertising*, 25(2), 1–17.
- Abrahams, Alan S., Jiao, Jian, Wang, G. Alan, & Fan, Weiguo. (2012). Vehicle defect discovery from social media. *Decision Support Systems*, 54(1), 87–97.
- Advanced manipulation and automation. (n.d.). Retrieved from <https://www.sri.com/research-development/advanced-manipulation-automation>

- Agresti, Alan. (1992). Modeling patterns of agreement and disagreement. *Statistical Methods in Medical Research*, 1, 201–218.
- Aharony, Noa. (2009). An exploratory analysis of librarians' blogs: Their development, nature and changes. *Aslib Proceedings: New Information Perspectives*, 61, 587–604.
- Ahmad, Farah, Hogg-Johnson, Sheilah, Stewart, Donna E., Skinner, Harvey A., Glazier, Richard H., & Levinson, Wendy. (2009). Computer-assisted screening for intimate partner violence and control. *Annals of Internal Medicine*, 151, 93–102.
- Ahuvia, Aaron. (2001). Traditional, interpretive, and reception based content analyses: Improving the ability of content analysis to address issues of pragmatic and theoretical concern. *Social Indicators Research*, 54, 139–172.
- Aickin, Mikel. (1990). Maximum likelihood estimation of agreement in the constant predictive probability model, and its relation to Cohen's kappa. *Biometrics*, 46, 293–302.
- Alden, Dana L., Hoyer, Wayne D., & Lee, Chol. (1993). Identifying global and culture-specific dimensions of humor in advertising: A multinational analysis. *Journal of Advertising*, 57(2), 64–75.
- Aldenderfer, Mark S., & Blashfield, Roger K. (1984). *Cluster analysis*. Beverly Hills, CA: Sage.
- Alexa, Melina, & Zuell, Cornelia. (1999). A review of software for text analysis. *ZUMA Nachrichten Spezial 5*. Mannheim, Germany: ZUMA.
- Alonge, Antonietta, Calzolari, Nicoletta, Vossen, Piek, Bloksma, Laura, Castellon, Irene, Marti, Maria Antonia, & Peters, Wim. (1998). The linguistic design of the EuroWordNet database. *Computers and the Humanities*, 32, 91–115.
- Altheide, David. (1996). *Qualitative media analysis*. Newbury Park, CA: Sage.
- Altheide, David, L., & Schneider, Christopher J. (2013). *Qualitative media analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Altman, Rick. (2008). *A theory of narrative*. New York: Columbia University Press.
- Ames, Susan L., Andsager, Julie L., Houska, Brian, Leigh, Barbara C., & Stacy, Alan W. (2005). Content analysis of drug offenders' sketches on the Draw-an-Event Test for risky sexual situations. *American Journal of Health Behaviors*, 29, 407–412.
- An, Daechun, & Kim, Sanghoon. (2007). Relating Hofstede's masculinity dimension to gender role portrayals in advertising. *International Marketing Review*, 24, 181–207.
- Anderson, Richard L., & O'Connor, Brian C. (2009). Reconstructing Bellour: Automating the semiotic analysis of film. *Bulletin of the American Society for Information Science and Technology*, 35(5), 31–40.
- Andrews, Frank M., Klem, Laura, Davidson, Terrence N., O'Malley, Patrick M., & Rodgers, Willard L. (1981). *A guide for selecting statistical techniques for analyzing social science data* (2nd ed.). Ann Arbor: University of Michigan, Institute for Social Research, Survey Research Center.
- Andsager, Julie L., & Miller, M. Mark. (1994, November). *Exploring patterns of controversy: Newspaper coverage of RU-486*. Paper presented at the annual meeting of the Midwest Association for Public Opinion Research, Chicago, IL.
- Andsager, Julie L., & Powers, Angela. (1999). Social or economic concerns: How news and women's magazines framed breast cancer in the 1990s. *Journalism & Mass Communication Quarterly*, 76, 531–550.

- Angeli, Charoula, & Schwartz, Neil H. (2016, in press). Differences in electronic exchanges in synchronous and asynchronous computer-mediated communication: The effect of culture as a mediating variable. *Interactive Learning Environments*. doi:10.1080/10494820.2014.961484
- Archer, Dane, Iritani, Bonita, Kimes, Debra D., & Barrios, Michael. (1983). Face-ism: Five studies of sex differences in facial prominence. *Journal of Personality and Social Psychology*, *45*, 725–735.
- Aristotle. (1991). *Aristotle on rhetoric: A theory of civic discourse* (George A. Kennedy, Trans.). New York: Oxford University Press.
- Armstrong, Cory L., & Boyle, Michael P. (2011). Views from the margins: News coverage of women in abortion protests, 1960–2006. *Mass Communication & Society*, *14*, 153–177.
- Aronow, Edward, Reznikoff, Marvin, & Moreland, Kevin. (1994). *The Rorschach technique: Perceptual basics, content interpretation, and applications*. Boston: Allyn & Bacon.
- Arthur, Heather, Johnson, Gail, & Young, Adena. (2007). Gender differences and color: Content and emotion of written descriptions. *Social Behavior and Personality*, *35*, 827–834. doi: <http://dx.doi.org/10.1017/S1366728909990046>.
- Assessing cognitive impairment. (1999, Winter). *UCI Journal*. Retrieved from <http://www.communications.uci.edu/journal/winter99/ip/05.html> [5/8/00]
- Atkin, Charles K., Neuendorf, Kimberly A., & McDermott, Steven. (1983). The role of alcohol advertising in excessive and hazardous drinking. *Journal of Drug Education*, *13*, 313–325.
- Atkin, David, & Fife, Marilyn. (1993–1994). The role of race and gender as determinants of local TV news coverage. *Howard Journal of Communications*, *5*, 123–137.
- Atkinson, Jaye L., & Herro, Steven K. (2010). From the chartreuse kid to the wise old gnome of tennis: Age stereotypes as frames describing Andre Agassi at the U.S. Open. *Journal of Sport & Social Issues*, *34*(1), 86–104. doi:10.1177/0193723509358966.
- Aubrey, Jennifer Stevens, & Frisby, Cynthia M. (2011). Sexual objectification in music videos: A content analysis comparing gender and genre. *Mass Communication & Society*, *14*, 475–501. doi:10.1080/15205436.2010.513468.
- Auster, Carol J., & Mansbach, Claire S. (2012). The gender marketing of toys: An analysis of color and type of toy on the Disney Store website. *Sex Roles*, *67*, 375–388.
- Babbie, Earl. (1986). *Observing ourselves: Essays in social research*. Belmont, CA: Wadsworth.
- Babbie, Earl. (1995). *The practice of social research* (7th ed.). Belmont, CA: Wadsworth.
- Babbie, Earl. (2013). *The practice of social research* (13th ed.). Belmont, CA: Wadsworth Cengage.
- Baddeley, Jenna L., Daniel, Gwyneth R., & Pennebaker, James W. (2011). How Henry Hellyer's use of language foretold his suicide. *Crisis*, *32*, 288–292.
- Baek, Tae Hyun, & Yu, Hyunjae. (2009). Online health promotion strategies and appeals in the USA and South Korea: A content analysis of weight-loss websites. *Asian Journal of Communication*, *19*(1), 18–38.
- Bailey, Ainsworth Anthony. (2006). A year in the life of the African-American male in advertising: A content analysis. *Journal of Advertising*, *35*(1), 83–104.
- Bakeman, Roger. (2000). Behavioral observation and coding. In Harry T. Reis & Charles M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 138–159). Cambridge, U.K.: Cambridge University Press.

- Baldwin, Thomas F., & Lewis, Colby. (1972). Violence in television: The industry looks at itself. In George A. Comstock & Eli A. Rubinstein (Eds.), *Television and social behavior, reports and papers, volume I: Media content and control. A technical report to the Surgeon General's Scientific Advisory Committee on Television and Social Behavior* (pp. 290–373). Rockville, MD: National Institute of Mental Health.
- Bales, Robert F. (1950). *Interaction process analysis: A method for the study of small groups*. Cambridge, MA: Addison-Wesley.
- Bales, Robert F., & Cohen, Stephen P., with the assistance of Williamson, Stephen A. (1979). *SYMLOG: A system for the multiple level observation of groups*. New York: Free Press.
- Bales, Robert F., Strodtbeck, Fred L., Mills, Theodore M., & Roseborough, Mary E. (1951). Channels of communication in small groups. *American Sociological Review*, 16, 461–468.
- Bandura, Albert. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, Albert. (1994). Social cognitive theory of mass communication. In Jennings Bryant & Dolf Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 61–90). Hillsdale, NJ: Lawrence Erlbaum.
- Bandura, Albert. (2009). Social cognitive theory of mass communication. In Jennings Bryant & Mary Beth Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 94–124). New York: Routledge.
- Banerjee, Madira, & Moore, Nicole Casal. (2015, May 27). How well does technology solve social problems? *Michigan News*. Retrieved from <http://ns.umich.edu/new/multimedia/videos/22913-how-well-does-technology-solve-social-problems>
- Banerjee, Mousumi, Capozzoli, Michelle, McSweeney, Laura, & Sinha, Debajyoti. (1999). Beyond kappa: A review of interrater agreement measures. *Canadian Journal of Statistics*, 27(1), 3–23.
- Bantum, Erin O'Carroll, & Owen, Jason E. (2009). Evaluating the validity of computerized content analysis programs for identification of emotional expression in cancer narratives. *Psychological Assessment*, 21(1), 79–88.
- Baran, Stanley J., & Davis, Dennis K. (1995). *Mass communication theory: Foundations, ferment, and future*. Belmont, CA: Wadsworth.
- Barber, John T., & Gandy, Oscar H., Jr. (1990). Press portrayal of African American and white U.S. representatives. *Howard Journal of Communications*, 2, 213–225.
- Bar-Ilan, Judit. (2007a). Google bombing from a time perspective. *Journal of Computer-Mediated Communication*, 12, 910–938.
- Bar-Ilan, Judit. (2007b). The use of Weblogs (blogs) by librarians and libraries to disseminate information. *Information Research*, 12(4).
- Barker, Richard, & Imam, Shahed. (2008). Analysts' perceptions of "earnings quality." *Accounting and Business Research*, 38(4), 313–329.
- Barner, Mark R. (1999). Sex-role stereotyping in FCC-mandated children's educational television. *Journal of Broadcasting & Electronic Media*, 43, 551–564.
- Barnett, George A., & Park, Han Woo. (2014). Examining the international internet using multiple measures: New methods for measuring the communication base of globalized cyberspace. *Quality and Quantity*, 48, 563–575. doi:10.1007/s11135-012-9787-z

- Barnett, George A., & Woelfel, Joseph J. (Eds.). (1988). *Readings in the Galileo system: Theory, methods and applications*. Dubuque, IA: Kendall/Hunt.
- Barnhart, Huiman X., Haber, Michael J., & Lin, Lawrence I. (2007). An overview on assessing agreement with continuous measurements. *Journal of Biopharmaceutical Statistics, 17*, 529–569.
- Baron, Reuben M., & Kenny, David A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Baron-Cohen, Simon, & Harrison, John E. (Eds.). (1997). *Synaesthesia: Classic and contemporary readings*. Oxford, U.K.: Blackwell.
- Barrett, E., & Lally, V. (1999). Gender differences in an on-line learning environment. *Journal of Computer Assisted Learning, 15*(1), 48–60.
- Bartko, John J., & Carpenter, William T., Jr. (1976). On the methods and theory of reliability. *Journal of Nervous and Mental Disease, 163*, 307–317.
- Baruh, Lemi. (2009). Publicized intimacies on reality television: An analysis of voyeuristic content and its contribution to the appeal of reality programming. *Journal of Broadcasting & Electronic Media, 53*, 190–210.
- Bates, Madeleine, & Weischedel, Ralph M. (Eds.). (1993). *Challenges in natural language processing*. Cambridge: Cambridge University Press.
- Bateson, Gregory. (1958). *Naven* (2nd ed.). Stanford, CA: Stanford University Press.
- Bauer, Christian, & Scharl, Arno. (2000). Quantitative evaluation of Web site content and structure. *Internet Research: Electronic Networking Applications and Policy, 10*, 31–43.
- Baxter, Richard L., de Riemer, Cynthia, Landini, Ann, Leslie, Larry, & Singletary, Michael. (1985). A content analysis of music videos. *Journal of Broadcasting & Electronic Media, 29*, 333–340.
- Bayerl, Petra Saskia, & Paul, Karsten Ingmar. (2011). What determines inter-coder agreement in manual annotations? A meta-analytic investigation. *Computational Linguistics, 37*, 699–725.
- Bayulgen, Oksan, & Arbatli, Ekim. (2013). Cold War redux in US–Russia relations? The effects of US media framing and public opinion of the 2008 Russia–Georgia war. *Communist and Post-Communist Studies, 46*, 513–527.
- Bazeley, Pat, & Jackson, Kristi. (2013). *Qualitative data analysis with NVivo* (2nd ed.). Los Angeles, CA: Sage.
- Beach, Mary Catherine, Saha, Somnath, Korhuis, P. Todd, Sharp, Victoria, Cohn, Jonathon, Wilson, Ira B., et al. (2011). Patient–provider communication differs for Black compared to White HIV-infected patients. *AIDS and Behavior, 15*, 805–811. doi:10.1007/s10461-009-9664-5
- Beaumont, Sherry L. (1995). Adolescent girls’ conversations with mothers and friends: A matter of style. *Discourse Processes, 20*, 109–132.
- Beckwith, Douglas Charles. (2009). Values of protagonists in best pictures and blockbusters: Implications for marketing. *Psychology & Marketing, 26*, 445–469.
- Beeman, Angie K. (2007). Emotional segregation: A content analysis of institutional racism in US films, 1980–2001. *Ethnic and Racial Studies, 30*, 687–712.
- Bell, Robert A., Berger, Charles R., Cassidy, Diana, & Townsend, Marilyn S. (2005). Portrayals of food practices and exercise behavior in popular American films. *Journal of Nutrition Education & Behavior, 37*, 27–32.
- Belstock, Sarah A., Connolly, Gregory N., Carpenter, Carrie M., & Tucker, Lindsey. (2008). Using alcohol to sell cigarettes to young adults: A content analysis of cigarette advertisements. *Journal of American College Health, 56*, 383–389.

- Belt, Todd L. (2015). Is laughter the best medicine for politics? Commercial versus noncommercial YouTube videos. In Victoria A. Farrar-Myers & Justin S. Vaughn (Eds.), *Controlling the message: New media in American political campaigns* (pp. 200–218). New York: New York University Press.
- Bem, Sandra. (1981). *Bem sex role inventory professional manual*. Palo Alto: Consulting Psychologists Press.
- Bennett, W. Lance, Lawrence, Regina G., & Livingston, Steven. (2006). None dare call it torture: Indexing and the limits of press independence in the Abu Ghraib scandal. *Journal of Communication*, 56, 467–485.
- Bentley, R. Alexander, Acerbi, Alberto, Ormerod, Paul, & Lampos, Vasilelos. (2014). Books average previous decade of economic misery. *PLOS ONE*, 9(1), 1–7.
- Berelson, Bernard. (1952). *Content analysis in communication research*. New York: Hafner.
- Berger, Arthur Asa. (1998). *Media research techniques* (2nd ed.). Thousand Oaks, CA: Sage.
- Berger, Arthur Asa. (2014). *Media analysis techniques* (5th ed.). Los Angeles, CA: Sage.
- Berger, Peter L., & Luckman, Thomas. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. New York: Anchor.
- Berkowitz, Leonard. (1964). Aggressive cues in aggressive behavior and hostility catharsis. *Psychological Review*, 71(2), 104–122.
- Berkowitz, Leonard. (1973). Words and symbols as stimuli to aggressive responses. In John F. Knutson (Ed.), *The control of aggression: Implications from basic research* (pp. 113–143). Chicago: Aldine.
- Berkowitz, Leonard, & LePage, Anthony. (1967). Weapons as aggression-eliciting stimuli. *Journal of Personality and Social Psychology*, 7(2), 202–207.
- Berlin Ray, Eileen, & Donohew, Lewis. (1990). *Communication and health: Systems and applications*. Hillsdale, NJ: Lawrence Erlbaum.
- Berlo, David K. (1960). *The process of communication*. New York: Holt, Rinehart, and Winston.
- Berlyne, D. E. (1971). *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts.
- Berry, John W. (1990). Imposed etics, emics, and derived etics: Their conceptual and operational status in cross-cultural psychology. In Thomas N. Headland, Kenneth L. Pike, & Marvin Harris (Eds.), *Emics and etics: The insider/outsider debate* (pp. 84–99). Newbury Park, CA: Sage.
- Beullens, Kathleen, Roe, Keith, & Van den Bulck, Jan. (2008). Television news' coverage of motor-vehicle crashes. *Journal of Safety Research*, 39, 547–553.
- Beullens, Kathleen, Roe, Keith, & Van den Bulck, Jan. (2011). The portrayal of risk-taking in traffic: A content analysis of popular action movies. *Journal of Communication Research*, 2(1), 21–27.
- Beyer, Christine E., Ogletree, Roberta J., Ritzel, Dale O., Drolet, Judy C., Gilbert, Sharon L., & Brown, Dale. (1996). Gender representation in illustrations, text, and topic areas in sexuality education curricula. *Journal of School Health*, 66(10), 361–364.
- Bholat, David, Hansen, Stephen, Santos, Pedro, & Schonhardt-Bailey, Cheryl. (2015). Text mining for central banks. *Centre for Central Banking Studies*, 33, 1–19. Retrieved from <http://eprints.lse.ac.uk/62548/>
- Billett, Simon. (2010). Dividing climate change: Global warming in the Indian mass media. *Climatic Change*, 99(1–2), 1–16. doi:10.1007/s10584-009-9605-3

- Binder, Andrew R. (2012). Figuring out #Fukushima: An initial look at functions and content of US Twitter commentary about nuclear risk. *Environmental Communication: A Journal of Nature and Culture*, 6(2), 268–277.
- Birch, Hayley, & Weitkamp, Emma. (2010). Podologues: Conversations created by science podcasts. *New Media & Society*, 12, 889–909. doi:10.1177/1461444809356333
- Bird, Alexander. (1998). *Philosophy of science*. Montreal: McGill-Queen's University Press.
- Bird, Steven, Klein, Ewan, & Loper, Edward. (2009). *Natural language processing with Python*. Sebastopol, CA: O'Reilly Media.
- Bistrova, Julia, & Lace, Natalja. (2012). Defining key factors to sustain maximum shareholder value. *Journal of Financial Studies & Research*, 2012(1), 1–14.
- Blair, Nicole A., Yue, So Kuen, Singh, Ranbir, & Bernhardt, Jay M. (2005). Depictions of substance use in reality television: A content analysis of *The Osbournes*. *British Medical Journal*, 331, 1517–1519.
- Blake, Brian F., Hamilton, Rhiannon L., Neuendorf, Kimberly A., & Murcko, Ryan. (2010). Individuals' preference orientations toward facets of Internet shopping sites: A conceptual and measurement model. *National Social Science Journal*, 33(2), 11–20.
- Bleakley, Amy, Jamieson, Patrick E., & Romer, Daniel (2012). Trends of sexual and violent content by gender in top-grossing U.S. films, 1950–2006. *Journal of Adolescent Health*, 51(1), 73–79.
- Bligh, Michelle C., & Hess, Gregory D. (2007). The power of leading subtly: Alan Greenspan, rhetorical leadership, and monetary policy. *Leadership Quarterly*, 18(2), 87–104.
- Bligh, Michelle C., Kohles, Jeffrey C., & Meindl, James R. (2004). Charting the language of leadership: A methodological investigation of President Bush and the crisis of 9/11. *Journal of Applied Psychology*, 89, 562–574.
- Bligh, Michelle C., & Robinson, Jill L. (2010). Was Gandhi “charismatic”? Exploring the rhetorical leadership of Mahatma Gandhi. *Leadership Quarterly*, 21, 844–855.
- Blumenthal, Robin Goldwyn. (2013, January 12). Future perfect? Frank talk, fine returns. *Barron's*. Retrieved from <http://online.barrons.com/article/SB50001424052748703792204578219740219485364.html>
- Boiarsky, Greg, Long, Marilee, & Thayer, Greg. (1999). Formal features in children's science television: Sound effects, visual pace, and topic shifts. *Communication Research Reports*, 16(2), 185–192.
- Bond, Bradley J. (2013). Physical disability on children's television programming: A content analysis. *Early Education and Development*, 24, 408–418.
- Booth-Butterfield, Steven, & Booth-Butterfield, Melanie. (1991). Individual differences in the communication of humorous messages. *Southern Communication Journal*, 56, 205–218.
- Borke, Helene. (1967). The communication of intent: A systematic approach to the observation of family interaction. *Human Relations*, 20, 13–28.
- Borke, Helene. (1969). The communication of intent: A revised procedure for analyzing family interaction from video tapes. *Journal of Marriage and Family*, 31, 541–544.
- Botta, Renée. (2000). *Body image on prime-time television*. Unpublished manuscript. Cleveland, OH: Cleveland State University.

- Bourret, Pascale, Mogoutov, Andrei, Julian-Reynier, Claire, & Cambrosio, Alberto. (2006). A new clinical collective for French cancer genetics: A heterogeneous mapping analysis. *Science, Technology, & Human Values, 31*(4), 431–164.
- Bowen, William M., Dunn, Ronnie A., & Kasdan, David O. (2010). What is “urban studies”? Context, internal structure, and content. *Journal of Urban Affairs, 32*, 199–227. doi:10.1111/j.1467-9906.2009.00474.x
- Boxman-Shabtai, Lillian, & Shifman, Limor. (2014). Evasive targets: Deciphering polysemy in mediated humor. *Journal of Communication, 64*, 977–998.
- boyd, danah, & Crawford, Kate. (2012). Critical questions for big data. *Information, Communication & Society, 15*, 662–679.
- boyd, danah m., & Ellison, Nichole B. (2008). Social network sites: Definition, history and scholarship. *Journal of Computer-Mediated Communication, 13*, 210–230.
- Boykin, Stanley, & Merlino, Andrew. (2000). Machine learning of event segmentation for news on demand. *Communications of the ACM, 43*(2), 35–41.
- Boyle, Gregory J., Saklofske, Donald H., & Matthews, Gerald. (Eds.). (2015). *Measures of personality and social psychological constructs*. London: Academic Press.
- Brader, Ted. (2006). *Campaigning for hearts and minds: How emotional appeals in political ads work*. Chicago: University of Chicago Press.
- Bradley, Margaret M., & Lang, Peter J. (1999). *Affective norms for English words (ANEW): Instruction manual and affective ratings*. Technical Report C-1, The Center for Research in Psychophysiology, University of Florida, Gainesville, FL.
- Bravo, Rafael, de Chernatony, Leslie, Matute, Jorge, & Pina, José M. (2013). Projecting banks’ identities through corporate websites: A comparative analysis of Spain and the United Kingdom. *Journal of Brand Management, 20*, 533–557. doi:10.1057/bm.2012.59
- Bray, James H., & Maxwell, Scott E. (1985). *Multivariate analysis of variance*. Beverly Hills, CA: Sage.
- Brayack, Barbara. (1998). *A content analysis of housing messages targeting the elderly* (Unpublished master’s thesis). Cleveland State University, Cleveland, OH.
- Breen, Michael J. (1997). A cook, a cardinal, his priests, and the press: Deviance as a trigger for intermedia agenda setting. *Journalism & Mass Communication Quarterly, 74*, 348–356.
- Brentar, James E., Neuendorf, Kimberly A., & Armstrong, G. Blake. (1994). Exposure effects and affective responses to music. *Communication Monographs, 61*, 161–181.
- Bretz, Rudy. (1971). *A taxonomy of communication media*. Englewood Cliffs, NJ: Educational Technology.
- Bridges, Ana J., Wosnitzer, Robert, Scharrer, Erica, Sun, Chyng, & Liberman, Rachael. (2010). Aggression and sexual behavior in best-selling pornography videos: A content analysis update. *Violence against Women, 10*, 1065–1085.
- Bridges, Judith S. (1993). Pink or blue: Gender-stereotypic perceptions of infants as conveyed by birth congratulations cards. *Psychology of Women Quarterly, 17*(2), 193–205.
- Brier, Alan P., & Hopp, Bruno. (2005). HAMLET—A multidimensional scaling approach to text-oriented policy analysis. *Journal of Diplomatic Language, 2*(1).
- Brier, Alan P., & Hopp, Bruno. (2011). Computer assisted text analysis in the social sciences. *Quality & Quantity, 45*(1), 103–128.

- Brinson, Susan L., & Winn, J. Emmett. (1997). Talk shows' representations of interpersonal conflicts. *Journal of Broadcasting & Electronic Media*, 41, 25–39.
- Broehl, Wayne G., Jr., & McGee, Victor E. (1981). Content analysis in psychohistory: A study of three lieutenants in the Indian mutiny, 1857–1858. *Journal of Psychohistory*, 8(3), 281–306.
- Brosius, Hans-Bernd, & Kepplinger, Hans Mathias. (1992). Linear and nonlinear models of agenda-setting in television. *Journal of Broadcasting & Electronic Media*, 36, 5–23.
- Broughton, Elizabeth, & Molasso, William R. (2006). College drinking: Content analysis of 30 years of research. *Journal of College Student Development*, 47, 609–627.
- Brown, Amy. (2011). *Promoting disrespect through children's television* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Browne, Beverly A. (1998). Gender stereotypes in advertising on children's television in the 1990s: A cross-national analysis. *Journal of Advertising*, 27(1), 83–96.
- Bryant, Jennings, Hezel, Richard, & Zillmann, Dolf. (1979). Humor in children's educational television. *Communication Education*, 28, 49–59.
- Buchanan, Gregory McClellan, & Seligman, Martin E. P. (Eds.). (1995). *Explanatory style*. Hillsdale, NJ: Lawrence Erlbaum.
- Bucklow, Spike L. (1998). A stylometric analysis of craquelure. *Computers and the Humanities*, 31, 503–521.
- Bucy, Erik P., & Tao, Chen-Chao. (2007). The mediated moderation model of interactivity. *Media Psychology*, 9(3), 647–672.
- Buijzen, Moniek, Van Reijmersdal, Eva A., & Owen, Laura H. (2010). Introducing the PCMC Model: An investigative framework for young people's processing of commercialized media content. *Communication Theory*, 20, 427–450.
- Buis, Lorraine R. (2008). Emotional and informational support messages in an online hospice support community. *CIN: Computers, Informatics, Nursing*, 26, 358–367.
- Buis, Lorraine R., & Carpenter, Serena. (2009). Health and medical blog content and its relationships with blogger credentials and blog host. *Health Communication*, 24(8), 703–710.
- Burgess, Melinda R., Dill, Karen E., Stermer, S. Paul, Burgess, Stephen R., & Brown, Brian P. (2011). Playing with prejudice: The prevalence and consequences of racial stereotypes in video games. *Media Psychology*, 14, 289–311. doi:10.1080/15213269.2011.596467
- Burke, Philip A., & Dollinger, Stephen J. (2005). "A picture's worth a thousand words": Language use in the autophotographic essay. *Personality and Social Psychology Bulletin*, 31(4), 536–548.
- Busby, Linda J. (1975). Sex-role research on the mass media. *Journal of Communication*, 25(4), 107–131.
- Butler, Jeremy G. (2014). Statistical analysis of television style: What can numbers tell us about TV editing? *Cinema Journal*, 54(1), 25–45.
- Buzinde, Christine N., Santos, Carla Almeida, & Smith, Stephen L. J. (2006). Ethnic representations: Destination imagery. *Annals of Tourism Research*, 33, 707–728.
- Byrd-Bredbenner, Carol. (2003). A comparison of the anthropometric measurements of idealized female body images in media directed to men, women, and mixed gender audiences. *Topics in Clinical Nutrition*, 18(2), 117–129.

- Calvert, Sandra L., Kotler, Jennifer A., Zehnder, Sean M., & Shockey, Erin M. (2003). Gender stereotyping in children's reports about education and information televised programs. *Media Psychology, 5*, 139–162.
- Camden, Carl, & Verba, Steve. (1986). Communication and consciousness: Applications in marketing. *Western Journal of Speech Communication, 50*, 64–73.
- Campbell, Colin, Pitt, Leyland F., Parent, Michael, & Berthon, Pierre. (2011). Tracking back-talk in consumer-generated advertising. *Journal of Advertising Research, 51*(1), 224–238.
- Campbell, Donald, & Stanley, Julian. (1963). *Experimental and quasi-experimental designs for research*. Boston, MA: Houghton Mifflin.
- Campbell, Rachel M. (2012). *Film viewing in the interactive age* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Campopiano, Giovanna, & De Massis, Alfredo. (2015). Corporate social responsibility reporting: A content analysis in family and non-family firms. *Journal of Business Ethics, 129*, 511–534. doi:10.1007/s10551-014-2174-z
- Capwell, Amy. (1997). *Chick flicks: An analysis of self-disclosure in friendships* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Carletta, Jean. (1996). Assessing agreement on classification tasks: The kappa statistic. *Computational Linguistics, 22*(2), 249–254.
- Carley, Kathleen. (1993). Coding choices for textual analysis: A comparison of content analysis and map analysis. In Peter V. Marsden (Ed.), *Sociological Methodology, Vol. 23* (pp. 75–126). Oxford, U.K.: Blackwell.
- Carley, Kathleen M. (1997a). Extracting team mental models through textual analysis. *Journal of Organizational Behavior, 18*, 533–558.
- Carley, Kathleen M. (1997b). Network text analysis: The network position of concepts. In Carl W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 79–100). Mahwah, NJ: Lawrence Erlbaum.
- Carlyle, Kellie E., Slater, Michael D., & Chakroff, Jennifer L. (2008). Newspaper coverage of intimate partner violence: Skewing representations of risk. *Journal of Communication, 58*, 168–186.
- Carmines, Edward G., & Zeller, Richard A. (1979). *Reliability and validity assessment*. Beverly Hills, CA: Sage.
- Carney, T. F. (1971). Content analysis: A review essay. *Historical Methods Newsletter, 4*(2), 52–61.
- Carr, Caleb, Schrock, David, & Dauterman, Patricia. (2009). Speech act analysis within social network sites' status messages. *Conference Papers—International Communication Association, 1–38*. Retrieved from EBSCOhost.
- Carroll, David W. (2007). Patterns of student writing in a critical thinking course: A quantitative analysis. *Assessing Writing, 12*(3), 213–227.
- Casey, Mary. (2016, expected). *Our community online: A look at local community web sites* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Cassady, Diana, Townsend, Marilyn, Bell, Robert A., & Watnik, Mitchell. (2006). Portrayals of soft drinks in popular American movies: A content analysis. *International Journal of Behavioral Nutrition and Physical Activity, 3*, 1–8. doi:10.1186/1479-5868-3-4
- Cecil, Denise Wigginton. (1998). Relational control patterns in physician–patient clinical encounters: Continuing the conversation. *Health Communication, 10*(2), 125–149.

- Ceron, Andrea, Curini, Luigi, Iacus, Stefano M., & Porro, Giuseppe. (2014). Every tweet counts? How sentiment analysis of social media can improve our knowledge of citizens' political preferences with an application to Italy and France. *New Media & Society*, 16, 340–358. doi:10.1177/1461444813480466
- Chamblee, Robert, Gilmore, Robert, Thomas, Gloria, & Soldow, Gary. (1993). When copy complexity can help ad readership. *Journal of Advertising Research*, 33(3), 23–28.
- Chang, Tsan-Kuo. (1998). All countries not created equal to be news: World system and international communication. *Communication Research*, 25, 528–563.
- Chappell, Kelly K. (1996). Mathematics computer software characteristics with possible gender-specific impact: A content analysis. *Journal of Educational Computing Research*, 15(1), 25–35.
- Cheng, Hong, & Patwardhan, Padmini. (2010). One region, two worlds? Cultural values in Chinese and Indian TV commercials. *Asian Journal of Communication*, 20(1), 69–89.
- Cheng, Hong, & Schweitzer, John C. (1996). Cultural values reflected in Chinese and U.S. television commercials. *Journal of Advertising Research*, 36(3), 27–45.
- Chew, Cynthia, and Eysenbach, Gunter. (2010). Pandemics in the age of Twitter: Content analysis of tweets during the 2009 H1N1 outbreak. *PLOS ONE*, 5(11), e14118. doi:10.1371/journal.pone.0014118
- Chinchilli, Vernon M., Martel, Juliann, K., Kumanyika, Shiriki, & Lloyd, Tom. (1996). A weighted concordance correlation coefficient for repeated measurement designs. *Biometrics*, 52, 341–353.
- Chipperfield, Judith G., Perry, Raymond P., Weiner, Bernard, & Newall, Nancy E. (2009). Reported causal antecedents of discrete emotions in late life. *International Journal of Aging and Human Development*, 68(3), 215–241.
- Chizema, Amon. (2008). Institutions and voluntary compliance: The disclosure of individual executive pay in Germany. *Corporate Governance: An International Review*, 16, 359–374. doi:10.1111/j.1467-8683.2008.00689.x
- Cho, Hyunyi, Hall, Jennifer G., Kosmoski, Carin, Fox, Rebekah L., & Mastin, Teresa. (2010). Tanning, skin cancer risk, and prevention: A content analysis of eight popular magazines that target female readers, 1997–2006. *Health Communication*, 25, 1–10.
- Christenfeld, Nicholas, Glynn, Laura M., Phillips, David P., & Shrira, Ilan. (1999). Exposure to New York City as a risk factor for heart attack mortality. *Psychosomatic Medicine*, 61, 740–743.
- Christenfeld, Nicholas, Phillips, David P., & Glynn, Laura M. (1999). What's in a name: Mortality and the power of symbols. *Journal of Psychosomatic Research*, 47(3), 241–254.
- Christie, Ian. (1999). Commentary for *The Red Shoes*. Audio recording accompanying DVD. Criterion Collection, <http://www.criterionco.com>.
- Chu, Donna, & McIntyre, Bryce T. (1995). Sex role stereotypes on children's TV in Asia: A content analysis of gender role portrayals in children's cartoons in Hong Kong. *Communication Research Reports*, 12, 206–219.
- Chung, Chung Joo, Barnett, George A., & Park, Han Woo. (2014). Inferring international dotcom Web communities by link and content analysis. *Quality and Quantity*, 48, 1117–1133. doi:10.1007/s11135-013-9847-z
- Chung, Chung Joo, & Cho, Sung-Ho. (2013). News coverage analysis of SNS and the Arab Spring: Using mixed methods. *Global Media Journal: American Edition*, 1–26.

- Chung, Cindy K., & Pennebaker, James W. (2007). The psychological functions of function words. In Klaus Fiedler (Ed.), *Social communication* (pp. 343–359). New York: Psychology Press.
- Chusmir, Leonard H. (1985). Short-form scoring for McClelland's version of the TAT. *Perceptual and Motor Skills*, *61*, 1047–1052.
- Cicchetti, Domenic V. (2007). Assessing the reliability of blind wine tasting: Differentiating levels of clinical and statistical meaningfulness. *Journal of Wine Economics*, *2*, 196–202.
- Cicchetti, Domenic, Bronen, Richard, Spencer, Susan, Haut, Sheryl, Berg, Anne, Oliver, Patricia, & Tyrer, Peter. (2006). Rating scales, scales of measurement, issues of reliability: Resolving some critical issues for clinicians and researchers. *Journal of Nervous and Mental Disease*, *194*, 557–564.
- Cicchetti, Domenic V., & Feinstein, Alvan R. (1990). High agreement but low kappa: II. Resolving the paradoxes. *Journal of Clinical Epidemiology*, *43*, 551–558.
- Cicognani, Elvira, Mancini, Tiziana, & Nicoli, Maria Augusta. (2007). Criteria for the allocation of medical resources: Citizens' perspectives. *Journal of Applied Biobehavioral Research*, *12*(1), 13–34.
- Ciemleja, Guna, Lace, Natalja, & Titko, Jelena. (2014). Financial literacy as a prerequisite for citizens' economic security: Development of a measurement instrument. *Journal of Security and Sustainability Issues*, *4*(1), 29–40.
- Cissel, Margaret. (2012). Media framing: A comparative content analysis on mainstream and alternative news coverage of Occupy Wall Street. *The Elon Journal of Undergraduate Research in Communications*, *3*(1), 67–77.
- Coe, Kevin, & Chenoweth, Sarah. (2015). The evolution of Christian America: Christianity in presidential discourse, 1981–2013. *International Journal of Communication*, *9*, 753–773.
- Coe, Kevin, & Reitzes, Michael. (2010). Obama on the stump: Features and determinants of a rhetorical approach. *Presidential Studies Quarterly*, *40*(3), 391–413.
- Coffey, Amy Jo, & Cleary, Johanna. (2011). Promotional practices of cable news networks: A comparative analysis of new and traditional spaces. *International Journal on Media Management*, *13*(3), 161–176.
- Coffey, Daniel J. (2011). More than a dime's worth: Using state party platforms to assess the degree of American party polarization. *Political Science and Politics*, *44*(2), 331–337.
- Cohen, Jacob. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, *20*(1), 37–46.
- Cohen, Jacob. (1968). Weighted kappa: Nominal scale agreement with provision for scaled disagreement of partial credit. *Psychological Bulletin*, *70*(4), 213–220.
- Cohen, Jacob, Cohen, Patricia, West, Stephen G., & Aiken, Leona S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Collins, Caroline L., & Gould, Odelle N. (1994). Getting to know you: How own age and other's age relate to self-disclosure. *International Journal of Aging and Human Development*, *39*, 55–66.
- Collins, Linda M., & Horn, John L. (Eds.). (1991). *Best methods for the analysis of change: Recent advances, unanswered questions, future directions*. Washington, DC: American Psychological Association.
- Collins, Rebecca L. (2011). Content analysis of gender roles in media: Where are we now and where should we go? *Sex Roles*, *64*, 290–298. doi:10.1007/s11199-010-9929-5

- Collins, Rebecca L., Elliott, Marc N., & Miu, Angela. (2009). Linking media content to media effects: The RAND television and adolescent sexuality study. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 154–172). New York: Routledge.
- Colson, Angela S. (2010). Framing autism causes and prevalence: A content analysis of television evening news coverage—1994 through April 2010. *Communication Theses*. Paper 65.
- Compton, Jordan. (2008, November). *Mixing friends with politics: A functional analysis of '08 presidential candidates social networking profiles*. Paper presented at the annual conference of the National Communication Association.
- Comstock, George A., & Rubinstein, Eli A. (Eds.). (1972). *Television and social behavior, reports and papers, volume I: Media content and control. A technical report to the Surgeon General's Scientific Advisory Committee on Television and Social Behavior*. Rockville, MD: National Institute of Mental Health.
- Connaughton, Stacey L., & Jarvis, Sharon E. (2004). Invitations for partisan identification: Attempts to court Latino voters through televised Latino-oriented political advertisements, 1984–2000. *Journal of Communication*, 54, 38–54.
- Conrad, Kate, Dixon, Travis, & Zhang, Yuanyuan. (2009). Controversial rap themes, gender portrayals and skin tone distortion: A content analysis of rap music videos. *Journal of Broadcasting & Electronic Media*, 53, 134–156.
- Conway, Mike. (2006). The subjective precision of computers: A methodological comparison with human coding in content analysis. *Journalism & Mass Communication Quarterly*, 83, 186–200. doi:10.1177/107769900608300112
- Cooper, Damon. (2010). Finding the spirit within: A critical analysis of film techniques in *Spirited Away*. *Babel*, 45(1), 30–37.
- Cooper, Kimberly S. (2016, expected). *Urban agriculture: A multi-method examination* (Unpublished doctoral dissertation). Cleveland State University, Cleveland, OH.
- Copeland, Gary A. (1989). Face-ism and primetime television. *Journal of Broadcasting & Electronic Media*, 33, 209–214.
- Corder, Gregory W., & Foreman, Dale I. (2009). *Nonparametric statistics for non-statisticians: A step-by-step approach*. Hoboken, NJ: John Wiley & Sons, Inc.
- Corley, J. Ken, II, Jourdan, Zack, & Ingram, W. Rhea. (2013). Internet marketing: A content analysis of the research. *Electronic Markets*, 23(3), 177–204.
- Correa, Teresa. (2010). Latino reporters' ethnic identification with sources affects newspaper content. *Newspaper Research Journal*, 31(3), 75–82.
- Council on Interracial Books for Children. (1977). *Stereotypes, distortions and omissions in U. S. history textbooks*. New York: Racism and Sexism Resource Center for Educators.
- Courtright, John A., Millar, Frank E., & Rogers-Millar, Edna. (1979). Domineeringness and dominance: Replication and expansion. *Communication Monographs*, 46, 179–192.
- Cowan, Gloria, & Campbell, Robin R. (1994). Racism and sexism in interracial pornography: A content analysis. *Psychology of Women Quarterly*, 18, 323–338.
- Cowan, Gloria, Lee, Carole, Levy, Daniella, & Snyder, Debra. (1988). Dominance and inequality in X-rated video-cassettes. *Psychology of Women Quarterly*, 12, 299–311.
- Coyne, Sarah M., & Whitehead, Emily. (2008). Indirect aggression in animated Disney films. *Journal of Communication*, 58, 382–395. doi:10.1111/j.1460-2466.2008.00390.x

- Cozby, Paul C. (1973). Self-disclosure: A literature review. *Psychological Bulletin*, 79, 73–91.
- Crawford, Mary, & Gressley, Diane. (1991). Creativity, caring, and context: Women's and men's accounts of humor preferences and practices. *Psychology of Women Quarterly*, 15(2), 217–231.
- Creed, W. E. Douglas, DeJordy, Rich, & Lok, Jaco. (2010). Being the change: Resolving institutional contradiction through identity work. *Academy of Management Journal*, 53, 1336–1364.
- Cregan, Christina. (2005). Can organizing work? An inductive analysis of individual attitudes toward union membership. *Industrial & Labor Relations Review*, 58(2), 282–304.
- Cressman, Dale L., Callister, Mark, Robinson, Tom, & Near, Chris. (2009). Swearing in the cinema: An analysis of profanity in US teen-oriented movies, 1980–2006. *Journal of Children and Media*, 3(2), 117–135.
- Cryer, Jonathan D. (1986). *Time series analysis*. Boston: Duxbury.
- Cunningham, Ed (Producer), & Gordon, Seth (Director). (2007). *The king of Kong: A fistful of quarters* [Motion picture]. United States: LargeLab.
- Cunningham, Michael R. (1986). Measuring the physical in physical attractiveness: Quasi-experiments on the sociobiology of female facial beauty. *Journal of Personality and Social Psychology*, 50, 925–935.
- Cupchik, Gerald C., & Berlyne, Daniel E. (1979). The perception of collative properties in visual stimuli. *Scandinavian Journal of Psychology*, 20(2), 93–104.
- Curry, Phillip, & O'Brien, Marita. (2006). The male heart and the female mind: A study in the gendering of antidepressants and cardiovascular drugs in advertisements in Irish medical publication. *Social Science & Medicine*, 62, 1970–1977.
- Custen, George F. (1992). *Bio/pics: How Hollywood constructed public history*. New Brunswick, NJ: Rutgers University Press.
- Cutting, James E., DeLong, Jordan E., & Nothelfer, Christine E. (2010). Attention and the evolution of Hollywood film. *Psychological Science*, 21, 432–439.
- Cytowic, Richard E. (1999). *The man who tasted shapes*. Cambridge: MIT Press.
- Cytowic, Richard E., & Eagleman, David M. (2009). *Wednesday is indigo blue: Discovering the brain of synesthesia*. Cambridge: MIT Press.
- Dale, Edgar. (1935). *The content of motion pictures*. New York: Macmillan.
- Dale, Robert. (2010). Classical approaches to natural language processing. In Nitin Indurkha & Fred J. Damerau (Eds.), *Handbook of natural language processing* (2nd ed., pp. 3–8). Boca Raton, FL: CRC Press.
- Dalton, Madeline A., Tickle, Jennifer J., Sargent, James D., Beach, Michael L., Ahrens, M. Bridget, & Heatherton, Todd F. (2002). The incidence and context of tobacco use in popular movies from 1988 to 1997. *Preventive Medicine*, 34, 516–523. doi:10.1006/pmed.2002.1013
- Danaher, Brian G., Boles, Shawn M., Akers, Laura, Gordon, Judith S., & Severson, Herbert H. (2006). Defining participant exposure measures in web-based health behavior change programs. *Journal of Medical Internet Research*, 8, Article 3.
- Danes, Sharon M., Haberman, Heather R., & McTavish, Donald. (2005). Gendered discourse about family business. *Family Relations*, 54(1), 116–130.
- Danescu-Niculescu-Mizil, Cristian, Cheng, Justin, Kleinberg, Jon, & Lee, Lillian. (2012). *You had me at hello: How phrasing affects memorability*. Proceedings of the Association for Computational Linguistics.
- Danielson, Wayne A., & Lasorsa, Dominic L. (1997). Perceptions of social change: 100 years of front-page content in the *New York Times* and the *Los Angeles*

- Times*. In Carl W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 103–115). Mahwah, NJ: Lawrence Erlbaum.
- Danielson, Wayne A., Lasorsa, Dominic L., & Im, Dae S. (1992). Journalists and novelists: A study of diverging styles. *Journalism Quarterly*, 69, 436–446.
- Danowski, James A., & Edison-Swift, Paul. (1985). Crisis effects on intraorganizational computer-based communication. *Communication Research*, 12, 251–270.
- Danowski, James A., & Park, David W. (2009). Networks of the dead or alive in cyberspace: Public intellectuals in the mass and internet media. *New Media & Society*, 11(3), 337–356. doi:10.1177/1461444808101615
- Danowski, Jessica L. (2011). The portrayal of older characters in popular children's picture books: A content analysis from 2000 to 2010. *All Theses and Dissertations*. Paper 2469.
- Dates, Jannette L., & Barlow, William. (Eds.). (1990). *Split image: African Americans in the mass media*. Washington, DC: Howard University Press.
- Debreceeny, Roger S., & Gray, Glen L. (2011). Data mining of electronic mail and auditing: A research agenda. *Journal of Information Systems*, 25(2), 195–226.
- de Groot, E. B., Korzilius, H., Nickerson, C., & Gerritsen, M. (2006). A corpus analysis of text themes and photographic themes in managerial forewords of Dutch–English and British annual general reports. *IEEE Transactions on Professional Communication*, 49(3), 217–235.
- Dejong, William, & Atkin, Charles K. (1995). A review of national television PSA campaigns for preventing alcohol-impaired driving, 1987–1992. *Journal of Public Health Policy*, 16, 59–80.
- Dellinger, Matt. (2000, March 27). Steno dept. meets Oscar's transcriber. *New Yorker*, p. 39.
- De Ros, Ky M. (2008). *A content analysis of television ads: Does current practice maximize cognitive processing?* (Unpublished doctoral dissertation). Indiana University, Bloomington, IN.
- de Schryver, Gilles-Maurice, & Prinsloo, Daan J. (2000). The compilation of electronic corpora, with special reference to the African languages. *Southern African Linguistics and Applied Language Studies*, 18, 89–106.
- De Smet, Marijke, Van Keer, Hilde, De Wever, Bram, & Valcke, Martin. (2010). Cross-age peer tutors in asynchronous discussion groups: Exploring the impact of three types of tutor training on patterns of tutor support and on tutor characteristics. *Computers & Education*, 54, 1167–1181.
- DeVellis, Robert F. (2012). *Scale development: Theory and applications* (3rd ed.). Thousand Oaks, CA: Sage.
- De Wever, B., Schellens, T., Valcke, M., & Van Keer, H. (2006). Content analysis schemes to analyze transcripts of online asynchronous discussion groups: A review. *Computers & Education*, 46, 6–28.
- De Wever, Bram, Van Keer, Hilde, Schellens, Tammy, & Valcke, Martin. (2007). Applying multilevel modeling to content analysis data: Methodological issues in the study of role assignment in asynchronous discussion groups. *Learning and Instruction*, 17, 436–447.
- De Wever, Bram, Van Keer, Hilde, Schellens, Tammy, & Valcke, Martin. (2010). Roles as a structuring tool in online discussion groups: The differential impact of different roles on social knowledge construction. *Computers in Human Behavior*, 26, 516–523.

- Dewhirst, Timothy. (2008). Tobacco portrayals in U.S. advertising and entertainment media. In Patrick E. Jamieson & Daniel Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 250–283). Oxford: Oxford University Press.
- DiCarlo, Margaret A., Gibbons, Judith L., Kaminsky, Donald C., Wright, James D., & Stiles, Deborah A. (2000). Street children's drawings: Windows into their life circumstances and aspirations. *International Social Work, 43*(1), 107–120.
- Diefenbach, Donald L. (1997). The portrayal of mental illness on prime-time television. *Journal of Community Psychology, 25*(3), 289–302.
- Diehl, K., Thielmann, I., Thiel, A., Mayer, J., Zipfel, S., & Schneider, S. (2014). Possibilities to support elite adolescent athletes in improving performance: Results from a qualitative content analysis. *Science & Sports, 29*(6), 115–125.
- Diels, Janie, & Gorton, William. (2014). Scientific abstraction in presidential debates. In Roderick P. Hart (Ed.), *Communication and language analysis in the public sphere* (pp. 1–16). Hershey, PA: IGI Global.
- Diesner, Jana, & Carley, Kathleen M. (2005a, April). *Exploration of communication networks from the Enron email corpus*. Paper presented at the SIAM International Conference on Data Mining: Workshop on Link Analysis, Counterterrorism and Security, Newport Beach, CA.
- Diesner, Jana, & Carley, Kathleen M. (2005b). Revealing social structure from texts: Meta-matrix text analysis as a novel method for network text analysis. In V. K. Narayanan & D. J. Armstrong (Eds.), *Causal mapping for research in information technology* (pp. 81–108). Hershey, PA: Idea Group.
- Dietz, Tracy L. (1998). An examination of violence and gender role portrayals in video games: Implications for gender socialization and aggressive behavior. *Sex Roles, 38*, 425–442.
- Di Eugenio, Barbara, & Glass, Michael. (2004). The Kappa statistic: A second look. *Computational Linguistics, 30*, 95–101.
- Dimitrova, N. (1999). Multimedia content analysis and indexing for filtering and retrieval applications. *Informing Science, 2*(4), 87–100.
- Dindia, Kathryn. (1987). The effects of sex of subject and sex of partner on interruptions. *Human Communication Research, 13*, 345–371.
- DiSanza, James R., & Bullis, Connie. (1999). "Everybody identifies with Smokey the Bear": Employee responses to newsletter identification inducements at the U.S. Forest Service. *Management Communication Quarterly, 12*, 347–399.
- Divakaran, Ajay. (Ed.). (2008). *Multimedia content analysis: Theory and applications (signals and communication technology)*. New York: Springer.
- Dixit, Ashutosh, & others. (2016, in progress). *The changing nature of print advertising for U.S. automobiles*. Research project, School of Business, Cleveland State University.
- Dixon, Travis L. (2016, in press). Good guys are still always in white? Positive change and continued misrepresentation of race and crime on local television news. *Communication Research*. doi:10.1177/0093650215579223
- Dixon, Travis L., & Linz, Daniel. (2000). Overrepresentation and underrepresentation of African Americans and Latinos as lawbreakers on television news. *Journal of Communication, 50*(2), 131–154.
- Dixon, Travis L., & Linz, Daniel. (2002). Television news, prejudicial pretrial publicity, and the depiction of race. *Journal of Broadcasting & Electronic Media, 46*, 112–136.

- Dixon, Travis L., Schell, Terry L., Giles, Howard, & Drogos, Kristin L. (2008). The influence of race in police–civilian interactions: A content analysis of videotaped interactions taken during Cincinnati police traffic stops. *Journal of Communication*, 58, 530–549. doi:10.1111/j.1460-2466.2008.00398.x
- Dixon, Travis L., & Williams, Charlotte L. (2015). The changing misrepresentation of race and crime on network and cable news. *Journal of Communication*, 65, 24–39.
- Dodds, Peter Sheridan, & Danforth, Christopher M. (2010). Measuring the happiness of large-scale written expression: Songs, blogs, and presidents. *Journal of Happiness Studies*, 11, 441–456.
- Doerfel, Marya L., & Barnett, George A. (1999). A semantic network analysis of the International Communication Association. *Human Communication Research*, 25, 589–603.
- Domhoff, G. William. (1999). New directions in the study of dream content using the Hall and Van de Castle coding system. *Dreaming: Journal of the Association for the Study of Dreams*, 9(2–3), 115–137.
- Dominick, Joseph R. (1999). Who do you think you are? Personal home pages and self-presentation on the World Wide Web. *Journalism & Mass Communication Quarterly*, 76, 646–658.
- Dominick, Joseph R. (2009). *The dynamics of mass communication: Media in the digital age* (10th ed.). Boston, MA: McGraw-Hill.
- Domke, David, Fan, David P., Fibison, Michael, Shah, Dhavan V., Smith, Steven S., & Watts, Mark D. (1997). News media, candidates and issues, and public opinion in the 1996 presidential campaign. *Journalism & Mass Communication Quarterly*, 74, 718–737.
- Donath, Bob. (1982, August). Ad copy clinic: Q: What makes the perfect ad? A: It depends. *Industrial Marketing*, 67, 89–92.
- Donohue, William A. (1991). *Communication, marital dispute, and divorce mediation*. Hillsdale, NJ: Lawrence Erlbaum.
- Doris, John. (1994). Commentary on criteria-based content analysis. *Journal of Applied Developmental Psychology*, 15, 281–285.
- Dowling, Grahame R., & Kabanoff, Boris. (1996). Computer-aided content analysis: What do 240 advertising slogans have in common?. *Marketing Letters*, 7(1), 63–75.
- Downing, Joe R. (2007). No greater sacrifice: American Airlines employee crisis response to the September 11 attack. *Journal of Applied Communication Research*, 35, 350–375.
- Downs, Cal W., & Adrian, Allyson D. (2004). *Assessing organizational communication: Strategic communication audits*. New York: Guilford Press.
- Downs, Edward, & Smith, Stacy L. (2010). Keeping abreast of hypersexuality: A video game character content analysis. *Sex Roles*, 62, 721–733. doi:10.1007/s11199-009-9637-1
- Dozier, D. M., Lauzen, M. M., Day, C. A., Payne, S. M., & Tafoya, M. R. (2005). Leaders and elites: Portrayals of smoking in popular films. *Tobacco Control*, 14, 7–9.
- Drewniany, Bonnie. (1996). Super Bowl commercials: The best a man can get (or is it?). In Paul Martin Lester (Ed.), *Images that injure: Pictorial stereotypes in the media* (pp. 87–92). Westport, CT: Praeger.
- Druckman, James N. (2005). Media matter: How newspapers and television news cover campaigns and influence voters. *Political Communication*, 22, 463–481.

- Druckman, James N., Hennessy, Cari Lynn, Kifer, Martin J., & Parkin, Michael. (2010). Issue engagement on Congressional candidate web sites, 2002–2006. *Social Science Computer Review*, 28, 3–23.
- Druckman, James N., Kifer, Martin J., & Parkin, Michael. (2009). Campaign communications in U.S. Congressional elections. *American Political Science Review*, 103, 343–366.
- Druckman, James N., Kifer, Martin J., & Parkin, Michael. (2010). Timeless strategy meets new medium: Going negative on congressional campaign Web sites, 2002–2006. *Political Communication*, 27(1), 88–103. doi:10.1080/10584600903502607
- Druckman, James N., & Parkin, Michael. (2005). The impact of media bias: How editorial slant affects voters. *Journal of Politics*, 67, 1030–1049.
- Dudo, Anthony, Dunwoody, Sharon, & Scheufele, Dietram A. (2011). The emergence of nano news: Tracking thematic trends and changes in U.S. newspaper coverage of nanotechnology. *Journalism & Mass Communication Quarterly*, 88, 55–75.
- Duggan, Maeve, Ellison, Nicole B., Lampe, Cliff, Lenhart, Amanda, & Madden, Mary. (2015, January 9). *Social media update 2014*. Pew Research Center. Retrieved from <http://www.pewinternet.org/2015/01/09/social-media-update-2014/>
- Dukes, Richard L., Bisel, Tara M., Borega, Karoline N., Lobato, Eligio A., & Owens, Matthew D. (2003). Expressions of love, sex, and hurt in popular songs: A content analysis of all-time greatest hits. *Social Science Journal*, 40, 643–650.
- Duncan, Judith. (1996). “For the sake of the children” as the worth of the teacher? The gendered discourses of the New Zealand national kindergarten teachers’ employment negotiations. *Gender and Education*, 8(2), 159–170.
- Dunwoody, Sharon, & Peters, Hans. (1992). Mass media coverage of technological and environmental risks: A survey of research in the United States and Germany. *Public Understanding of Science*, 1, 199–230.
- Dupagne, Michel. (2000). How to setup a video streaming operation: Lessons from a University of Miami project. *Feedback*, 41(2), 11–21.
- Dupagne, Michel, & Garrison, Bruce. (2009). The meaning and influence of convergence: A qualitative case study of newsroom work at the Tampa News Center. In August E. Grant & Jeffrey S. Wilkinson (Eds.), *Understanding media convergence: The state of the field* (pp. 182–203). New York: Oxford University Press.
- Durahim, Ahmet Onur, & Coşkun, Mustafa. (2015). #iamhappybecause: Gross National Happiness through Twitter analysis and big data. *Technological Forecasting and Social Change*, 99, 92–105.
- Durkin, Kevin. (1985). *Television, sex roles and children: A developmental social psychological account*. Milton Keynes, U.K.: Open University Press.
- Duthler, Kirk W. (2006). The politeness of requests made via email and voicemail: Support for the Hyperpersonal Model. *Journal of Computer-Mediated Communication*, 11, 500–521.
- Dyson, Stephen Benedict. (2009). “Stuff happens”: Donald Rumsfeld and the Iraq War. *Foreign Policy Analysis*, 5, 327–347.
- Dyson, Stephen Benedict, & Raleigh, Alexandra L. (2014, April-June). Public and private beliefs of political leaders: Saddam Hussein in front of a crowd and behind closed doors. *Research and Politics*, 1–7.
- Ealy, James Allen. (1991). *Nonverbal communication on film: The career of Bette Davis* (Unpublished master’s thesis). Cleveland State University, Cleveland, OH.

- EBU/SMPTE Task Force for Harmonized Standards for the Exchange of Program Material as Bitstreams. (1998, September). Final report: Analyses and results, July 1998. *SMPTE Journal*, 107(9), 603–815.
- Eco, Umberto. (1976). *A theory of semiotics*. Bloomington: Indiana University Press.
- Eggly, Susan, Brennan, Simone, & Wiese-Rometsch, Wilhelmine. (2005). “Once when I was on call. . .”: Theory versus reality in training for professionalism. *Academic Medicine: Journal of the Association of American Medical Colleges*, 80, 371–375.
- Eggly, Susan, Penner, Louis A., Greene, Meredith., Harper, Felicity W. K., Ruckdeschel, John C., & Albrecht, Terrance L. (2006). Information seeking during “bad news” oncology interactions: Question asking by patients and their companions. *Social Science & Medicine*, 63, 2974–2985.
- Ekman, Paul, & Friesen, Wallace. (1978). *Facial Action Coding System: A technique for the measurement of facial movement*. Palo Alto, CA: Consulting Psychologists Press.
- Ekman, Paul, Friesen, Wallace V., & Hager, Joseph C. (2002). *Facial Action Coding System: The manual on CD ROM*. Salt Lake City, UT: Network Information Research.
- Ekman, Paul, & Rosenberg, Erika L. (Eds.). (1997). *What the face reveals: Basic and applied studies of spontaneous expression using the Facial Action Coding System (FACS)*. New York: Oxford University Press.
- El Damanhoury, Kareem R. (2015). *In-film product placement an emergent advertising technique: Comparative analysis between top Hollywood and Egyptian films 2010–2013* (Unpublished master’s thesis). Ohio University, Athens, OH.
- Elder, Glen H., Jr., Pavalko, Eliza K., & Clipp, Elizabeth C. (1993). *Working with archival data: Studying lives*. Newbury Park, CA: Sage.
- Elliott, Taryn, Welsh, Matthew, Nettelbeck, Ted, & Mills, Vanessa. (2007). Investigating naturalistic decision making in a simulated microworld: What questions should we ask? *Behavior Research Methods*, 39, 901–910.
- Elliott, Ward E. Y., & Valenza, Robert J. (1996). And then there were none: Winnowing the Shakespeare claimants. *Computers and the Humanities*, 30, 191–245.
- Ellis, Donald G. (1979). Relational control in two group systems. *Communication Monographs*, 46, 153–166.
- Emanuel, Steven L. (1997). *LEXIS-NEXIS for law students* (3rd ed.). Larchmont, NY: Emanuel.
- Emons, Pascale, Wester, Fred, & Scheepers, Peer. (2010). “He works outside the home; she drinks coffee and does the dishes”: Gender roles in fiction programs on Dutch television. *Journal of Broadcasting & Electronic Media*, 54, 40–53.
- England, Dawn Elizabeth, Descartes, Lara, & Collier-Meek, Melissa A. (2011). Gender role portrayal and the Disney princesses. *Sex Roles*, 64, 555–567. doi:10.1007/s11199-011-9930-7
- Entman, Robert M. (1992). Blacks in the news: Television, modern racism, and cultural change. *Journalism Quarterly*, 69, 341–361.
- Entman, Robert M. (1993). Framing: Towards a clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51–58.
- Eschenfelder, Kristin R., Howard, Robert Glenn, & Desai, Anuj C. (2005). Who posts DeCSS and why? A content analysis of web sites posting DVD circumvention software. *Journal of the American Society for Information Science and Technology*, 56, 1405–1418.

- Eschholz, Sarah, Bufkin, Jana, & Long, Jenny. (2002). Symbolic reality bites: Women and racial/ethnic minorities in modern film. *Sociological Spectrum*, 22, 299–334.
- Evans, Lorraine, & Davies, Kimberly. (2000). No sissy boys here: A content analysis of the representation of masculinity in elementary school reading textbooks. *Sex Roles*, 42, 255–270.
- Evans, William. (1996). Computer-supported content analysis: Trends, tools, and techniques. *Social Science Computer Review*, 14, 269–279.
- Evans, William. (2000). Teaching computers to watch television: Content-based image retrieval for content analysis. *Social Science Computer Review*, 18, 246–257.
- Eyberg, Sheila M., & Robinson, Elizabeth A. (1983, December). Dyadic parent-child interaction coding system (DPICS): A manual. *Psychological Documents*, 13(2), 24.
- Eysenck, Hans J. (1990). Biological dimensions of personality. In Lawrence A. Pervin (Ed.), *Handbook of personality theory and research* (pp. 244–276). New York: Guilford.
- Fairhurst, Gail T., & Cooren, Francois. (2004). Organizational language in use: Interaction analysis, conversation analysis, and speech act schematics. In David Grant, Cynthia Hardy, Cliff Oswick, & Linda Putnam (Eds.), *The SAGE handbook of organizational discourse* (pp. 131–152). London: Sage.
- Fairhurst, Gail T., Rogers, L. Edna, & Sarr, Robert A. (1987). Manager-subordinate control patterns and judgments about the relationship. In Margaret L. McLaughlin (Ed.), *Communication yearbook 10* (pp. 395–415). Newbury Park, CA: Sage.
- Falotico, Rosa, & Quatto, Piero. (2015). Fleiss' kappa statistic without paradoxes. *Quality & Quantity*, 49, 441–454.
- Fan, David P. (1988). *Predictions of public opinion from the mass media: Computer content analysis and mathematical modeling*. New York: Greenwood.
- Fan, David P. (1997). Computer content analysis of press coverage and prediction of public opinion for the 1995 sovereignty referendum in Quebec. *Social Science Computer Review*, 15, 351–366.
- Fan, David, & Bengston, David. (1997). *Attitudes toward roads on the National Forests: An analysis of the news media*. Report prepared for the USDA Forest Service, Office of Communications, Washington, DC. Retrieved from http://www.fs.fed.us/eng/road_mgt/DOCSattitudes.shtml.
- Fan, David P., & Shaffer, Carol L. (1989, November). *Opinion survey using open ended essays and computer content analysis: College students' knowledge of AIDS*. Paper presented at the annual meeting of the Midwest Association for Public Opinion Research, Chicago, IL.
- FAQs about trends on Twitter. (2015, September 30). *Twitter.com*. Retrieved from <https://support.twitter.com/articles/101125?lang=en#>
- Farley, Jennie. (1978). Women's magazines and the Equal Rights Amendment: Friend or foe? *Journal of Communication*, 28(1), 187–192.
- Farrell, Marie, Wallis, Nancy C., & Evans, Marci Tyler. (2007). A replication study of priorities and attitudes of two nursing programs' communities of interest: An appreciative inquiry. *Journal of Professional Nursing*, 23, 267–277.
- Farrow, R., Arensman, E., Corcoran, P., Williamson, E., & Perry, I. J. (2009). Irish coroners' attitudes towards suicide and its prevention. *Irish Journal of Medical Science*, 178(1), 61–67. doi:10.1007/sl 1845-008-0261-9

- Feinstein, Alvan R., & Cicchetti, Domenic V. (1990). High agreement but low kappa: I. The problems of two paradoxes. *Journal of Clinical Epidemiology*, 43, 543–549.
- Fellbaum, Christiane. (1998). A semantic network of English: The mother of all WordNets. *Computers and the Humanities*, 32, 209–220.
- Feng, Guangchao Charles. (2015). Mistakes and how to avoid mistakes in using intercoder reliability indices. *Methodology*, 11, 13–22.
- Fenton, D. Mark. (1985). Dimensions of meaning in the perception of natural settings and their relationship to aesthetic response. *Australian Journal of Psychology*, 37, 325–339.
- Fernández-Villanueva, Concepción, Revilla-Castro, Juan Carlos, Domínguez -Bilbao, Roberto, Gimeno-Jimenez, Leonor, & Almagro, Andrés. (2009). Gender differences in the representation of violence on Spanish television: Should women be more violent? *Sex Roles*, 61, 85–100.
- Ferrante, Carol L., Haynes, Andrew M., & Kingsley, Sarah M. (1988). Image of women in television advertising. *Journal of Broadcasting & Electronic Media*, 32, 231–237.
- Feyereisen, Pierre, & Harvard, Isabelle. (1999). Mental imagery and production of hand gestures while speaking in younger and older adults. *Journal of Nonverbal Behavior*, 23(2), 153–171.
- Fiegerman, Seth. (2012, December 18). Twitter now has more than 200 million monthly active users. Retrieved from <http://mashable.com/2012/12/18/twitter-200-million-active-users/>
- Fink, Edward L. (2009). The FAQs on data transformation. *Communication Monographs*, 76, 379–397.
- Fink, Edward, & Gantz, Walter. (1996). A content analysis of three mass communication research traditions: Social science, interpretive studies and critical analysis. *Journalism & Mass Communication Quarterly*, 73, 114–134.
- Finkel, Steven E., & Geer, John G. (1998). A spot check: Casting doubt on the demobilizing effect of attack advertising. *American Journal of Political Science*, 42, 573–595.
- Finn, T. Andrew, & Strickland, Donald E. (1982). A content-analysis of beverage alcohol advertising. 2. Television advertising. *Journal of Studies on Alcohol*, 43, 964–989.
- Fischer, Peter, Greitemeyer, Tobias, Kastenmüller, Andreas, Vogrincic, Claudia, & Sauer, Anne. (2011). The effects of risk-glorifying media exposure on risk-positive cognitions, emotions, and behaviors: A meta-analytic review. *Psychological Bulletin*, 137, 367–390.
- Fisher, B. Aubrey. (1970). Decision emergence: Phases in group decision-making. *Speech Monographs*, 31, 53–66.
- Fleiss, Joseph L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin*, 76, 378–382.
- Floress, Kristin, Baumgart-Getz, Adam, Prokopy, Linda Stalker, & Janota, Jessica. (2009). The quality of greenways planning in northwest Indiana: A focus on sustainability principles. *Journal of Environmental Planning and Management*, 52(1), 61–78. doi:10.1080/096405608012504654
- Floud, Roderick. (1977). Quantitative history: Evolution of methods and techniques. *Journal of the Society of Archivists*, 5, 407–417.
- Folger, Joseph P., Hewes, Dean E., & Poole, Marshall Scott. (1984). Coding social interaction. In Brenda Dervin & Melvin J. Voigt (Eds.), *Progress in communication sciences* (pp. 115–161). Norwood, NJ: Ablex.

- Folger, Joseph P., & Poole, Marshall Scott. (1982). Relational coding schemes: The question of validity. In Michael Burgoon (Ed.), *Communication yearbook 5* (pp. 235–247). New Brunswick, NJ: Transaction.
- Forsythe, Alexandra M. (2004). Mapping the political language of the 1998 Good Friday agreement. *Current Psychology, 23*(3), 215–224.
- Fouts, Gregory, & Burggraf, Kimberley. (1999). Television situation comedies: Female body images and verbal reinforcements. *Sex Roles, 40*, 473–481.
- Fox 8 News (Cleveland) and their closed captioning. (2009, July 27). Retrieved from <https://www.youtube.com/watch?v=7MzmihWo-tk>
- Fox, Julia R., Park, Byungho, & Lang, Annie. (2007). When available resources become negative resources: The effects of cognitive overload on memory sensitivity and criterion bias. *Communication Research, 34*, 277–296.
- Franke, Michael. (2000). *Social perception and attribution of responsibility in news magazine coverage of the Manson family*. Unpublished manuscript, Department of Communication, Cleveland State University, Cleveland, OH.
- Frankl, Razelle. (1987). *Televangelism: The marketing of popular religion*. Carbondale: Southern Illinois University Press.
- Franzosi, Roberto. (1998). Narrative analysis—Or why (and how) sociologists should be interested in narrative. *Annual Review of Sociology, 24*, 517–554.
- Freelon, Deen G. (2010). ReCal: Intercoder reliability calculation as a web service. *International Journal of Internet Science, 5*(1), 20–33.
- Freelon, Deen G. (2013). ReCal OIR: Ordinal, interval, and ratio intercoder reliability as a web service. *International Journal of Internet Science, 8*(1), 10–16.
- Freeman, Edward H. (2001). Electronic reprints of freelance works: *New York Times v. Tasini*. *Publishing Research Quarterly, 17*(3), 50–55.
- Freimuth, Vicki S., Massett, Holly A., & Meltzer, Wendy. (2006). A descriptive analysis of 10 years of research published in the *Journal of Health Communication*. *Journal of Health Communication, 11*, 11–20.
- Friedman, Daniela B., & Hoffman-Goetz, Laurie. (2006). A systematic review of readability and comprehension instruments used for print and web-based cancer information. *Health Education & Behavior, 33*, 352–373.
- Fruth, Laurel, & Padderud, Allan. (1985). Portrayals of mental illness in daytime television serials. *Journalism Quarterly, 62*, 384–387, 449.
- Friday-Field, Karen, Eliasziw, Michael, Young, S. Lorraine, & Woodbury, M. Gail. (1994). Statistical assessment of interrater and intrarater reliability: Using goniometric measurements as an example. *Physical Therapy, 74*, 777–788.
- Fujioka, Yuki. (2005). Emotional TV viewing and minority audience: How Mexican Americans process and evaluate TV news about in-group members. *Communication Research, 32*, 566–593.
- Fukkink, Ruben, & Hermanns, Jo. (2009). Counseling children at a helpline: Chatting or calling? *Journal of Community Psychology, 37*, 939–948.
- Gabriel, Ignatow. (2009). Culture and embodied cognition: Moral discourses in internet support groups for overeaters. *Social Forces, 88*(2), 643–689.
- Gabrielatos, Costas, & Baker, Paul. (2008). Fleeing, sneaking, flooding: A corpus analysis of discursive constructions of refugees and asylum seekers in the UK Press 1996–2005. *Journal of English Linguistics, 36*(1), 5–38.
- Gagnard, Alice, & Morris, Jim R. (1988). CLIO commercials from 1975–1985: Analysis of 151 executional variables. *Journalism Quarterly, 65*, 859–869.

- Gambetti, Rossella C., & Graffigna, Guendalina. (2010). The concept of engagement. A systematic analysis of the ongoing marketing debate. *International Journal of Market Research*, 52, 801–826.
- Garcia, Luis T., & Milano, Lauren. (1990). A content analysis of erotic videos. *Journal of Psychology & Human Sexuality*, 3(2), 95–103.
- Gardstrom, Susan C. (1999). Music exposure and criminal behavior: Perceptions of juvenile offenders. *Journal of Music Therapy*, 36(3), 207–221.
- Garner, June, Davidson, Karen, & Williams, Virginia Kay. (2008). Identifying serials trends through twenty years of NASIG conference proceedings: A content analysis. *Serials Review*, 34(2), 88–103.
- Garner, W. R. (1978). Aspects of a stimulus: Features, dimensions, and configurations. In Eleanor Rosch & Barbara B. Lloyd (Eds.), *Cognition and categorization* (pp. 99–133). Hillsdale, NJ: Lawrence Erlbaum.
- Garson, G. David. (2003). Doing web-based content profile analysis. *Social Science Computer Review*, 21, 250–256.
- Gauvain, Jean-Luc, Lamel, Lori, & Adda, Gilles. (2000). Transcribing broadcast news for audio and video indexing. *Communications of the ACM*, 43(2), 64–70.
- Geist, Michael. (2007, January). *The policy response to the user-generated content boom*. Paper presented to the NSF/OECD Workshop on Social & Economic Factors Shaping the Future of the Internet, Washington, DC. Retrieved from <http://www.oecd.org/dataoecd/60/51/37985757.pdf>
- Genovese, Jeremy E. C. (2002). Cognitive skills valued by educators: Historical content analysis of testing in Ohio. *Journal of Educational Research*, 96, 101–114.
- Gerbner, George, Gross, Larry, Morgan, Michael, & Signorielli, Nancy. (1980). The mainstreaming of America: Violence profile number 11. *Journal of Communication*, 30(3), 10–29.
- Gerbner, George, Gross, Larry, Signorielli, Nancy, Morgan, Michael, & Jackson-Beeck, Marilyn. (1979). The demonstration of power: Violence profile number 10. *Journal of Communication*, 29(3), 177–196.
- Gerbner, George, Morgan, Michael, & Signorielli, Nancy. (1982). Programming health portrayals: What viewers see, say, and do. In David Pearl, Lorraine Bouthilet, & Joyce Lazar (Eds.), *Television and behavior: Ten years of scientific progress and implications for the eighties, Vol. II, Technical reviews* (pp. 291–307). Rockville, MD: U.S. Department of Health and Human Services.
- Gerbner, George, Signorielli, Nancy, & Morgan, Michael. (1995). Violence on television: The Cultural Indicators Project. *Journal of Broadcasting & Electronic Media*, 39, 278–283.
- Gerding, Ashton, & Signorielli, Nancy. (2014). Gender roles in tween television programming: A content analysis of two genres. *Sex Roles*, 70, 43–56.
- Ghose, Sanjoy, & Dou, Wenyu. (1998). Interactive functions and their impacts on the appeal of Internet presence sites. *Journal of Advertising Research*, 38(2), 29–43.
- Gibbons, Jean Dickinson, & Chakraborti, Subhabrata. (2010). *Nonparametric statistical inference* (5th ed.). Boca Raton, FL: Chapman and Hall/CRC.
- Gibbons, Judith L., & Stiles, Deborah A. (2004). *The thoughts of youth: An international perspective on adolescents' ideal persons*. Greenwich, CT: Information Age.
- Gibson, Martin L. (1991). *Editing in the electronic era* (3rd ed.). Ames: Iowa State University Press.
- Gilbert, Adrienne, MacCauley, Marilyn I., & Smale, Bryan J. A. (1997). Newspaper portrayal of persons with disabilities over a decade. *Therapeutic Recreation Journal*, 31(2), 108–120.

- Ginossar, Tamar. (2008). Online participation: A content analysis of differences in utilization of two online cancer communities by men and women, patients and family members. *Health Communication, 23*, 1–12. doi:10.1080/10410230701697100
- Gleick, James. (1987). *Chaos: Making a new science*. New York: Penguin.
- Goble, John F. (1997). A qualitative content analysis of case studies presenting the therapist's conceptualization and treatment of sexual desire disorders. *Dissertation Abstracts International, A: The Humanities and Social Sciences, 58*(2), 596–A.
- Godfrey, Donald G. (1992). *Reruns on file: A guide to electronic media archives*. Hillsdale, NJ: Lawrence Erlbaum.
- Goffman, Erving. (1959). *The presentation of self in everyday life*. Garden City, NY: Doubleday Anchor.
- Goffman, Erving. (1979). *Gender advertisements*. Cambridge, MA: Harvard University Press.
- Golan, Guy. (2006). Inter-media agenda setting and global news coverage: Assessing the influence of the *New York Times* on three network television evening news programs. *Journalism Studies, 7*, 323–333. doi:10.1080/14616700500533643
- Goldberg, Lewis R. (1981). Language and individual differences: The search for universals in personality lexicons. In Ladd Wheeler (Ed.), *Review of personality and social psychology, 2* (pp. 141–165). Beverly Hills, CA: Sage.
- Gonzenbach, William J. (1992). A time-series analysis of the drug issue, 1985–1990: The press, the president and public-opinion. *International Journal of Public Opinion Research, 4*(2), 126–147.
- Goodwin, Laura D. (2001). Interrater agreement and reliability. *Measurement in Physical Education and Exercise Science, 5*, 13–34.
- Gormly, Eric. (2004). Peering beneath the veil: An ethnographic content analysis of Islam as portrayed on *The 700 Club* following the September 11th attacks. *Journal of Media and Religion, 3*, 219–238.
- Gossett, Jennifer Lynn, & Byrne, Sarah. (2002). “Click here”: A content analysis of Internet rap sites. *Gender & Society, 16*, 689–709. doi:10.1177/089124302236992
- Gottschalk, Louis A. (1995). *Content analysis of verbal behavior: New findings and clinical applications*. Hillsdale, NJ: Lawrence Erlbaum.
- Gottschalk, Louis A. (2007). *Autobiographical notes of Louis A. Gottschalk*. New York: Nova.
- Gottschalk, Louis A., & Bechtel, Robert. (1993). *Psychological and neuropsychiatric assessment survey: Computerized content analysis of natural language or verbal texts*. Redwood City, CA: Mind Garden.
- Gottschalk, Louis A., & Bechtel, Robert J. (2005). Computerized content analysis of speech plus speech recognition in the measurement of neuropsychiatric dimensions. *Computer Methods and Programs in Biomedicine, 77*(1), 81–86.
- Gottschalk, Louis, & Bechtel, Robert. (2007). *Psychiatric content and diagnosis: The PCAD 3*. Brighton, MI: GB Software.
- Gottschalk, Louis A., & Bechtel, Robert J. (Eds.). (2008). *Computerized content analysis of speech and verbal texts and its many applications*. New York: Nova Science.
- Gottschalk, Louis A., Fronczek, Janny, & Buchsbaum, Monte S. (1993). The cerebral neurobiology of hope and hopelessness. *Psychiatry, 56*, 270–281.
- Gottschalk, Louis A., & Gleser, Goldine, C. (1969). *The measurement of psychological states through the content analysis of verbal behavior*. Berkeley: University of California Press.
- Gottschalk, Louis A., & Gottschalk, Leah H. (1999). Computerized content analysis of the Unabomber's writings. *American Journal of Forensic Psychiatry, 20*, 5–31.

- Gottschalk, Louis A., Stein, Marsha K., & Shapiro, Deane H. (1997). The application of computerized content analysis of speech to the diagnostic process in a psychiatric outpatient clinic. *Journal of Clinical Psychology, 53*, 427–441.
- Gottschall, Jonathan, et al. (2008). The “beauty myth” is no myth: Emphasis on male–female attractiveness in world folktales. *Human Nature, 19*, 174–188.
- Graham, John L., Kamins, Michael A., & Oetomo, Djoko S. (1993). Content analysis of German and Japanese advertising in print media from Indonesia, Spain, and the United States. *Journal of Advertising, 22*(2), 5–15.
- Grana, Rachel A., & Ling, Pamela M. (2014). “Smoking revolution”: A content analysis of electronic cigarette retail websites. *American Journal of Preventive Medicine, 46*, 395–403.
- Grasmuck, Sherri, Martin, Jason, & Zhao, Shanyang. (2009). Ethno-racial identity displays on Facebook. *Journal of Computer-Mediated Communication, 15*(1), 158–188.
- Gravlee, Clarence C., & Sweet, Elizabeth. (2008). Race, ethnicity, and racism in medical anthropology, 1977–2002. *Medical Anthropology Quarterly, 22*(1), 27–51. doi:10.1111/j.1548-1387.2008.00002.x
- Gray, Judy H., & Densten, Iain L. (1998). Integrating quantitative and qualitative analysis using latent and manifest variables. *Quality & Quantity, 32*, 419–431.
- Grayman, Nyasha. (2009). “We who are dark . . . :” The Black community according to Black adults in America: An exploratory content analysis. *Journal of Black Psychology, 35*, 433–455.
- Greenbaum, Howard H. (1974). The audit of organizational communication. *Academy of Management Journal, 17*, 739–754.
- Greenberg, Bradley S. (1980). *Life on television: A content analysis of U.S. TV drama*. Norwood, NJ: Ablex.
- Greenberg, Bradley S., Burgoon, Michael, Burgoon, Judee K., & Korzenny, Felipe. (1983). *Mexican Americans and the mass media*. Norwood, NJ: Ablex.
- Greenberg, Bradley S., Eastin, Matt, Hofschire, Linda, Lachlan, Kenneth, & Brownell, Kelly D. (2003). Portrayals of overweight and obese individuals on commercial television. *American Journal of Public Health, 93*(8), 1342–1348.
- Greenberg, Bradley S., Fernandez-Collado, Carlos, Graef, David, Korzenny, Felipe, & Atkin, Charles K. (1980). Trends in the use of alcohol and other substances on television. In Bradley S. Greenberg, *Life on television: Content analyses of U.S. TV drama* (pp. 137–146). Norwood, NJ: Ablex.
- Greenberg, Bradley S., & Neuendorf, Kimberly. (1980). Black family interactions on television. In Bradley S. Greenberg, *Life on television: Content analyses of U.S. TV drama* (pp. 173–181). Norwood, NJ: Ablex.
- Greene, Kathryn, Banerjee, Smita C., Krcmar, Marina, Bagdasarov, Zhanna, & Ruginyte, Dovile. (2011). Sexual content on reality and fictional television shows. *Journal of Health & Mass Communication, 3*, 276–294.
- Greener, Susan, & Crick, Nicki R. (1999). Normative beliefs about prosocial behavior in middle childhood: What does it mean to be nice? *Social Development, 8*, 349–363.
- Gregory, Richard L., with the assistance of Zangwill, O. L. (Eds.). (1987). *The Oxford companion to the mind*. Oxford, U.K.: Oxford University Press.
- Griffin, Robert J., & Dunwoody, Sharon. (1997). Community structure and science framing of news about local environmental risks. *Science Communication, 18*, 362–384.

- Grimm, Josh, & Andsager, Julie L. (2011). Framing immigration: Geo-ethnic context in California newspapers. *Journalism & Mass Communication Quarterly*, 88, 771–788.
- Grimmer, Justin, & Stewart, Brandon M. (2013). Text as data: The promise and pitfalls of automatic content analysis methods for political texts. *Political Analysis*, 21, 267–297. doi:10.1093/pan/mps028
- Grossman, Lev. (2001, February 12). Welcome to the Snooper Bowl. *Time*, 72.
- Grossman, Samantha. (2012, July 27). Want to light up the London Eye? Just tweet that the Olympics are “totes amazeballs.” *Time Magazine*. Retrieved from <http://olympics.time.com/2012/07/27/want-to-light-up-the-london-eye-just-tweet-that-the-olympics-are-totes-amazeballs/?xid=rss-topstories>
- Guerrero, Laura K., & Burgoon, Judee K. (1996). Attachment styles and reactions to nonverbal involvement change in romantic dyads: Patterns of reciprocity and compensation. *Human Communication Research*, 22, 335–370.
- Guetzkow, Harold. (1950). Unitizing and categorizing problems in coding qualitative data. *Journal of Clinical Psychology*, 6, 47–58.
- Gunawardena, Charlotte N., Lowe, Constance A., & Anderson, Terry. (1997). Analysis of a global online debate and the development of an interaction analysis model for examining social construction of knowledge in computer conferencing. *Journal of Educational Computing Research*, 17, 397–431.
- Gunsch, Mark A., Brownlow, Sheila, Haynes, Sarah E., & Mabe, Zachary. (2000). Differential linguistic content of various forms of political advertising. *Journal of Broadcasting & Electronic Media*, 44, 27–42.
- Gunter, Barrie. (2000). *Media research methods: Measuring audiences, reactions and impact*. London: Sage.
- Gurman, Tilly A., & Ellenberger, Nicole. (2015). Reaching the global community during disasters: Findings from a content analysis of the organizational use of Twitter after the 2010 Haiti earthquake. *Journal of Health Communication: International Perspectives*, 20, 687–696.
- Gwet, Kilem. (2002a). Inter-rater reliability: Dependency on trait prevalence and marginal homogeneity. *Series: Statistical Methods for Inter-Rater Reliability Assessment*, No. 2, 1–9. Retrieved from http://www.agreestat.com/research_papers/inter_rater_reliability_dependency.pdf
- Gwet, Kilem. (2002b). Kappa statistic is not satisfactory for assessing the extent of agreement between raters. *Series: Statistical Methods for Inter-Rater Reliability Assessment*, No. 1, 1–6. Retrieved from http://www.agreestat.com/research_papers/kappa_statistic_is_not_satisfactory.pdf
- Gwet, Kilem Li. (2008a). Computing inter-rater reliability and its variance in the presence of high agreement. *British Journal of Mathematical and Statistical Psychology*, 61, 29–48.
- Gwet, Kilem Li. (2008b). Variance estimation of nominal-scale inter-rater reliability with random selection of raters. *Psychometrika*, 73, 407–430.
- Gwet, Kilem Li. (2010). *Handbook of inter-rater reliability* (2nd ed.). Gaithersburg, MD: Advanced Analytics LLC.
- Habel, Melissa A., Hood, Julia, Desai, Sheila, Kachur, Rachel, Bui, Eric R., & Liddon, Nicole. (2011). Google it: Obtaining information about local STD/HIV testing services online. *Sexually Transmitted Diseases*, 38, 334–338. doi:10.1097/OLQ.0b013e3181fe64f2

- Habel, Melissa A., Liddon, Nicole, & Stryker, Jo E. (2009). The HPV vaccine: A content analysis of online news stories. *Journal of Women's Health, 18*, 401–407.
- Habermas, Jürgen. (1981). *The theory of communicative action. Volume 1: Reason and the rationalization of society* (Thomas McCarthy, Trans.). Boston: Beacon Press.
- Habermas, Jürgen. (1987). *The theory of communicative action. Volume 2: Lifeworld and system: A critique of functionalist reason* (Thomas McCarthy, Trans.). Boston: Beacon Press.
- Ha-Brookshire, Jung E., & Lee, Yuri. (2010). Korean apparel manufacturing industry: Exploration from the industry life cycle perspective. *Clothing and Textiles Research Journal, 28*(4), 279–294. doi:10.1177/0887302x10372958
- Ha-Brookshire, Jung E., & Lu, Sheng. (2010). Organizational identities and their economic performance: An analysis of U.S. textile and apparel firms. *Clothing & Textiles, 28*(3), 174–188.
- Hacker, Helen M. (1981). Blabbermouths and clams: Sex differences in self-disclosure in same-sex and cross-sex friendship dyads. *Psychology of Women Quarterly, 5*, 385–401.
- Hacker, Kenneth L., & Swan, William O. (1992). Content analysis of the Bush and Dukakis 1988 presidential election campaign television commercials. *Journal of Social Behavior and Personality, 7*, 367–374.
- Hadden, Jeffrey K., & Swann, Charles E. (1981). *Prime time preachers: The rising power of televangelism*. Reading, MA: Addison-Wesley.
- Haden, Catherine A., & Hoffman, Philip C. (2013). Cracking the code: Using personal narratives in research. *Journal of Cognition and Development, 14*, 361–375.
- Hair, Joseph F., Jr., Black, William C., Babin, Barry J., & Anderson, Rolph E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Häkkinen, Helinä, Puolakka, Pia, & Santtila, Pekka. (2004). Crime scene actions and offender characteristics in arsons. *Legal and Criminological Psychology, 9*, 197–214.
- Hale, Jon F., Fox, Jeffrey C., & Farmer, Rick. (1996). Negative advertisements in U.S. senate campaigns: The influence of campaign context. *Social Science Quarterly, 77*, 329–343.
- Hall, Mark A., & Wright, Ronald F. (2008). Systematic content analysis of judicial opinions. *California Law Review, 96*(1), 63–122. doi:10.15779/Z38R99R
- Hamilton, James D. (1994). *Time series analysis*. Princeton, NJ: Princeton University Press.
- Hamm, Jihun, Kohler, Christian G., Gur, Ruben C., & Verma, Ragini. (2011). Automated Facial Action Coding System for dynamic analysis of facial expressions in neuropsychiatric disorders. *Journal of Neuroscience Methods, 200*, 237–256.
- Hanauer, David I., Frederick, Jennifer, Fotinakes, Brian, & Strobel, Scott A. (2012). Linguistic analysis of project ownership for undergraduate research experiences. *CBE—Life Sciences Education, 11*, 378–385.
- Hancock, Adrienne B., & Rubin, Benjamin A. (2015). Influence of communication partner's gender on language. *Journal of Language and Social Psychology, 34*(1), 46–64. doi:10.1177/0261927X14533197
- Hancock, Jeffrey T., Curry, Lauren E., Goorha, Saurabh, & Woodworth, Michael. (2008). On lying and being lied to: A linguistic analysis of deception in computer-mediated communication. *Discourse Processes, 45*, 1–23.
- Haninger, Kevin, & Thompson, Kimberly M. (2004). Content and ratings of teen-rated video games. *JAMA, 291*(7), 856–865. doi:10.1001/jama.291.7.856

- Hanna, Joseph F. (1969). Explanation, prediction, description, and information theory. *Synthese*, 20, 308–334.
- Hardy, C., Harley, B., & Phillips, N. (2004). Discourse analysis and content analysis: Two solitudes? *Qualitative Methods: Newsletter of the American Political Science Association Organized Section on Qualitative Methods*, 2(1), 19–22.
- Harpalani, Manoj, Hart, Michael, Singh, Sandesh, Johnson, Rob, & Choi, Yejin. (2011). Language of vandalism: Improving Wikipedia vandalism detection via stylometric analysis. *Proceedings of the 49th annual meeting of the Association for Computational Linguistics: Human language technologies* (pp. 83–88). Portland, OR.
- Harries, Gareth, Wilkinson, David, Price, Liz, Fairclough, Ruth, & Thelwall, Mike. (2004). Hyperlinks as a data source for science mapping. *Journal of Information Science*, 30, 436–447.
- Harris, Dale B., & Pinder, Glenn D. (1974). *The Goodenough-Harris Drawing Test as a measure of intellectual maturity of youths*. Rockville, MD: U.S. Department of Health, Education, and Welfare.
- Harris, Jenine K., Moreland-Russell, Sarah, Tabak, Rachel G., Ruhr, Lindsay R., & Maier, Ryan C. (2014). Communication about childhood obesity on Twitter. *American Journal of Public Health*, 104(7), 62–69.
- Harris, Richard J. (2001). *A primer of multivariate statistics* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Harrison, Kristen. (2008). Adolescent body image and eating in the media: Trends and implications for adolescent health. In Patrick E. Jamieson & Daniel Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 165–197). Oxford: Oxford University Press.
- Harrison, Tina, Waite, Kathryn, & Hunter, Gary L. (2006). The Internet, information and empowerment. *European Journal of Marketing*, 40, 972–993.
- Hart, Roderick P. (1985). Systematic analysis of political discourse: The development of Diction. In Keith R. Sanders, Lynda Lee Kaid, & Dan Nimmo (Eds.), *Political communication yearbook 1984* (pp. 97–134). Carbondale: Southern Illinois University Press.
- Hart, Roderick P. (1997). *Diction 4.0: The text-analysis program*. Thousand Oaks, CA: Scolari.
- Hart, Roderick P. (2000a). *Campaign talk: Why elections are good for us*. Princeton, NJ: Princeton University Press.
- Hart, Roderick P. (2000b). *The text-analysis program: Diction 5.0*. Austin, TX: Digitext.
- Hart, Roderick P. (Ed.). (2014a). *Communication and language analysis in the corporate world*. Hershey, PA: IGI Global.
- Hart, Roderick P. (Ed.). (2014b). *Communication and language analysis in the public sphere*. Hershey, PA: IGI Global.
- Hart, Roderick P., & Childers, Jay P. (2005). The evolution of candidate Bush: A rhetorical analysis. *American Behavioral Scientist*, 49(2), 180–197.
- Hart, Roderick P., Childers, Jay P., & Lind, Colene J. (2013). *Political tone: How leaders talk and why*. Chicago, IL: The University of Chicago Press.
- Hart, Roderick P., & Jarvis, Sharon E. (1997). Political debate: Forms, styles and media. *American Behavioral Scientist*, 40, 1095–1122.
- Harvey, Kevin, Churchill, Dick, Crawford, Paul, Brown, Brian, Mullany, Louise, Macfarlane, Aidan, & McPherson, Ann. (2008). Health communication and adolescents: What do their emails tell us? *Family Practice*, 25, 1–8.

- Harwood, Jake. (1999). Viewing age: The age distribution of television characters across the viewer lifespan. Retrieved from: <http://falcon.cc.ukans.edu/~harwood/crr.htm> [7/14/99].
- Haskell, Molly. (1987). *From reverence to rape* (2nd ed.). Chicago, IL: University of Chicago Press.
- Hawkins, Kirk A. (2009). Is Chávez populist? Measuring populist discourse in comparative perspective. *Comparative Political Studies*, 42, 1040–1067. doi:10.1177/0010414009331721
- Hayes, Andrew F., & Krippendorff, Klaus. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures*, 1, 77–89.
- Hayes, Danny, & Guardino, Matt. (2010). Whose views made the news? Media coverage and the march to war in Iraq. *Political Communication*, 27, 59–87. doi:10.1080/105846009035026
- Headland, Thomas N., Pike, Kenneth L., & Harris, Marvin. (Eds.). (1990). *Emics and etics: The insider/outsider debate*. Newbury Park, CA: Sage.
- Heeks, Richard, & Bailur, Savita. (2007). Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice. *Government Information Quarterly*, 24, 243–265.
- Heeter, Carrie Jill. (1986). *Perspectives for the development of research on media systems*. Unpublished Ph.D. dissertation, Michigan State University, East Lansing, MI.
- Heilmann, Jon J., Miller, Jon F., & Nockerts, Ann. (2010). Using language sample databases. *Language, Speech, and Hearing Services in Schools*, 41, 84–95.
- Heilmann, Jon, Miller, Jon F., Nockerts, Ann, & Dunaway, Claudia. (2010). Properties of the narrative scoring scheme using narrative retells in young school-age children. *American Journal of Speech-Language Pathology*, 19, 154–166.
- Heise, David R. (1965). Semantic differential profiles for 1,000 most frequent English words. *Psychological Monographs*, 79(8), 1–31.
- Heisler, Jennifer M., & Crabill, Scott L. (2006). Who are “stinkybug” and “Packerfan4”? Email pseudonyms and participants’ perceptions of demography, productivity, and personality. *Journal of Computer-Mediated Communication*, 12, 114–135.
- Heiss, Sarah N., & Bates, Benjamin R. (2014). Where’s the joy in cooking? Representations of taste, tradition, and science in the *Joy of Cooking*. *Food and Foodways*, 22, 198–216.
- Heitner, Darren. (2014, January 30). Verizon’s Super Bowl scheme is to save \$4 million and light up the sky. *Forbes*. Retrieved from <http://www.forbes.com/sites/darrenheitner/2014/01/30/verizons-super-bowl-scheme-is-to-save-4-million-and-light-up-the-sky/>
- Hermida, Alfred, Lewis, Seth C., & Zamith, Rodrigo. (2014). Sourcing the Arab Spring: A case study of Andy Carvin’s sources on Twitter during the Tunisian and Egyptian revolutions. *Journal of Computer-Mediated Communication*, 19(3), 479–499.
- Hertog, James K., & Fan, David P. (1995). The impact of press coverage on social beliefs: The case of HIV transmission. *Communication Research*, 22, 545–574.
- Hesse-Biber, Sharlene, Dupuis, Paul R., & Kinder, T. Scott. (1997). Anthropology: New developments in video ethnography and visual sociology—Analyzing multimedia data qualitatively. *Social Science Computer Review*, 15, 5–12.

- Hester, Joe Bob, & Dougall, Elizabeth. (2007). The efficiency of constructed week sampling for content analysis of online news. *Journalism & Mass Communication Quarterly*, 84, 811–824.
- Hester, Joe Bob, & Gibson, Rhonda. (2003). The economy and second-level agenda setting: A time-series analysis of economic news and public opinion about the economy. *Journalism & Mass Communication Quarterly*, 80, 73–90.
- Hether, Heather J., & Murphy, Sheila T. (2010). Sex roles in health storylines on prime time television: A content analysis. *Sex Roles*, 62, 810–821.
- Hetsroni, Amir. (2007). Three decades of sexual content on prime-time network programming: A longitudinal meta-analytic review. *Journal of Communication*, 57, 318–348.
- Heyman, Richard E., Lorber, Michael F., Eddy, J. Mark, & West, Tessa V. (2014). Behavioral observation and coding. In Harry T. Reis & Charles M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (2nd ed., pp. 345–372). New York: Cambridge University Press.
- Heyman, Richard E., Weiss, Robert L., & Eddy, J. Mark. (1995). Marital interaction coding system: Revision and empirical evaluation. *Behaviour Research and Therapy*, 33, 737–746.
- Hicks, Jeffrey Alan. (1992). Television theme songs: A content analysis. *Popular Music and Society*, 16(1), 13–20.
- Hijmans, Ellen. (1996). The logic of qualitative media content analysis: A typology. *Communications*, 21, 93–109.
- Hill, Kevin A., & Hughes, John E. (1997). Computer-mediated political communication: The Usenet and political communities. *Political Communication*, 14, 3–27.
- Hill, Kim Quaile, Hanna, Stephen, & Shafqat, Sahar. (1997). The liberal-conservative ideology of U.S. Senators: A new measure. *American Journal of Political Science*, 41, 1395–1413.
- Hill, Susan E. Kogler, Camden, Carl, & Clair, Robyn. (1988). Computer office systems and organizational communication: A case study. *Office Systems Research Journal*, 7(1), 5–12.
- Himelboim, I., McCreery, S., & Smith, M. (2013). Birds of a feather tweet together: Integrating network and content analyses to examine cross-ideology exposure on Twitter. *Journal of Computer-Mediated Communication*, 18(2), 40–60.
- Hirdes, Wendy, Woods, Robert, & Badzinski, Diane M. (2009). A content analysis of Jesus merchandise. *Journal of Media and Religion*, 8, 141–157.
- Hirokawa, Randy Y. (1988). Group communication research: Considerations for the use of interaction analysis. In Charles H. Tardy (Ed.), *A handbook for the study of human communication: Methods and instruments for observing, measuring, and assessing communication processes* (pp. 229–245). Norwood, NJ: Ablex.
- Hodge, Robert, & Kress, Gunther. (1988). *Social semiotics*. Cambridge: Polity.
- Hoffman, Karen S. (2015). Comment form speech as a mirror of mainstream discourse. In Victoria A. Farrar-Myers & Justin S. Vaughn (Eds.), *Controlling the message: New media in American political campaigns* (pp. 221–244). New York: New York University Press.
- Hofstede, Geert. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Hogenraad, Robert, & McKenzie, Dean P. (1999). Replicating text: The cumulation of knowledge in social science. *Quality and Quantity*, 33, 97–116.

- Hogenraad, Robert, McKenzie, Dean P., & Martindale, Colin. (1997). The enemy within: Autocorrelation bias in content analysis of narratives. *Computers and the Humanities*, 30, 433–439.
- Holbrook, Morris B., & Lehmann, Donald R. (1980). Form versus content in predicting Starch scores. *Journal of Advertising Research*, 20(4), 53–62.
- Holder-Webb, Lori, Cohen, Jeffrey, Nath, Leda, & Wood, David. (2008). A survey of governance disclosures among U.S. firms. *Journal of Business Ethics*, 83, 543–563.
- Hollerbach, Karie L. (2009). The impact of market segmentation on African American frequency, centrality, and status in television advertising. *Journal of Broadcasting & Electronic Media*, 53, 599–614.
- Holley, W. J., & Guilford, J. P. (1964). A note on the G index of agreement. *Educational and Psychological Measurement*, 24, 749–753.
- Holman, Rebecca H., & Hecker, Sid. (1983). Advertising impact: Creative elements affecting brand saliency. In James H. Leigh & Claude R. Martin, Jr. (Eds.), *Current issues and research in advertising 1983* (pp. 157–172). Ann Arbor: University of Michigan, Graduate School of Business Administration.
- Holsti, Ole R. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley.
- Honeycutt, Courtenay, & Herring, Susan C. (2009). Beyond microblogging: Conversation and collaboration via Twitter. *Proceedings of the Forty-Second Hawai'i International Conference on System Sciences*. Los Alamitos, CA: IEEE Press.
- Hooghiemstra, Reggy. (2008). East–West differences in attributions for company performance: A content analysis of Japanese and U.S. corporate annual reports. *Journal of Cross-Cultural Psychology*, 39, 618–629.
- Horkheimer, Max. (1982). *Critical theory: Selected essays* (Matthew J. O'Connell & others, Trans.). New York: Continuum.
- Horkheimer, Max, & Adorno, Theodor W. (1972). *Dialectic of enlightenment* (John Cumming, Trans.). New York: Herder & Herder.
- Horner, Jennifer, Jamieson, Patrick E., & Romer, Daniel. (2008). The changing portrayal of alcohol use in television advertising. In Patrick E. Jamieson & Daniel Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 284–312). Oxford: Oxford University Press.
- Horowitz, Steven W. (1998). Reliability of criteria-based content analysis of child witness statements: Response to Tully. *Legal and Criminology Psychology*, 3, 189–191.
- Hosmer, David W., Jr., Lemeshow, Stanley, & Sturdivant, Rodney X. (2013). *Applied logistic regression* (3rd ed.). Hoboken, NJ: John Wiley & Sons.
- Howard, Jennifer. (2012, March). Google begins to scale back its scanning of books from university libraries. *Chronicle of Higher Education*. Retrieved from <http://chronicle.com>
- Howland, Dave, Becker, Mimi Larsen, & Prelli, Lawrence J. (2006). Merging content analysis and the policy sciences: A system to discern policy-specific trends from news media reports. *Policy Science*, 39, 205–231.
- Hsu, Louis M., & Field, Ronald. (2003). Interrater agreement measures: Comments on kappa_n, Cohen's kappa, Scott's π , and Aickin's α . *Understanding Statistics*, 2, 205–219.
- Hu, Guangwei, Pan, Wenwen, Lu, Mingxin, & Wang, Jie. (2009). The widely shared definition of e-government. *The Electronic Library*, 27, 968–985.

- Hubbell, Anne P., & Dearing, James W. (2003). Local newspapers, community partnerships, and health improvement projects: Their roles in a comprehensive community initiative. *Journal of Community Health, 28*, 363–376.
- Huddy, Leonie, Lebo, Matthew, & Johnston, Christopher. (2009, April). *Elite influence, media coverage, and public opinion on the Iraq War*. Paper presented at the annual meeting of the Midwest Political Science Association 67th Annual National Conference, Chicago, IL.
- Hughes, Marie Adele, & Garrett, Dennis E. (1990). Intercoder reliability estimation approaches in marketing: A generalizability theory framework for quantitative data. *Journal of Marketing Research, 27*, 185–195.
- Hum, Noelle J., Chamberlin, Perrin E., Hambrichts, Brittany L., Portwood, Anne C., Schat, Amanda C., & Bevan, Jennifer L. (2011). A picture is worth a thousand words: A content analysis of Facebook profile photographs. *Computers in Human Behavior, 27*, 1828–1833.
- Humbad, Mikhila N., Donnellan, M. Brent, Klump, Kelly L., & Burt, S. Alexandra. (2011). Development of the Brief Romantic Relationship Interaction Coding Scheme (BRRICS). *Journal of Family Psychology, 25*, 759–769. doi:10.1037/a0025216
- Hupka, Ralph B., Zaleski, Zbigniew, Otto, Jurgen, Reidl, Lucy, & Tarabrina, Nadia V. (1997). The colors of anger, envy, fear, and jealousy: A cross-cultural study. *Journal of Cross-Cultural Psychology, 28*(2), 156–171.
- Hussin, Mallory, Frazier, Savannah, & Thompson, J. Kevin. (2011). Fat stigmatization on YouTube: A content analysis. *Body Image, 8*, 90–92.
- Hust, Stacey J. T., Brown, Jane D., & L'Engle, Kelly Ladin. (2008). Boys will be boys and girls better be prepared: An analysis of the rare sexual health messages in young adolescents' media. *Mass Communication & Society, 11*, 3–23. doi:10.1080/15205430701668139
- Huston, Aletha C., & Wright, John C. (1983). Children's processing of television: The informative functions of formal features. In Jennings Bryant & Daniel R. Anderson (Eds.), *Children's understanding of television: Research on attention and comprehension* (pp. 35–68). New York: Academic Press.
- Hymans, Jacques E. C. (2010). East is east, and west is west? Currency iconography as nation-branding in the wider Europe. *Political Geography, 29*, 97–108.
- Ide, Nancy M., & Sperberg-McQueen, C. M. (1995). The TEI: History, goals, and future. *Computers and the Humanities, 29*, 5–15.
- Indurkha, Nitin, & Damerau, Fred J. (Eds.). (2010). *Handbook of natural language processing* (2nd ed.). Boca Raton: CRC Press.
- Interrater reliability. (2001). *Journal of Consumer Psychology, 10*(1&2), 71–73.
- Iyengar, Shanto, & Simon, Adam. (1993). News coverage of the Gulf crisis and public opinion: A study of agenda setting, priming, and framing. *Communication Research, 20*, 365–383.
- Izard, C. E. (1979). *The maximally discriminative facial movement coding system*. Newark: University of Delaware, Instructional Resource Center.
- Jackson, Joab. (2010). Google: 129 million different books have been published. *PC World*. Retrieved from <http://www.pcworld.com/>
- James, E. Lincoln, & VandenBergh, Bruce G. (1990). An information content comparison of magazine ads across a response continuum from direct response to institutional advertising. *Journal of Advertising, 19*(2), 23–29.
- Jamieson, Patrick E., More, Eian, Lee, Susan S., Busse, Peter, & Romer, Daniel. (2008). It matters what young people watch: Health risk behaviors portrayed in top-grossing movies since 1950. In Patrick E. Jamieson & Daniel Romer (Eds.),

- The changing portrayal of adolescents in the media since 1950* (pp. 105–131). Oxford: Oxford University Press.
- Janis, Irving L. (1949). The problem of validating content analysis. In Harold D. Lasswell, Nathan Leites, & Associates (Eds.), *Language of politics: Studies in quantitative semantics* (pp. 55–82). New York: George W. Stewart.
- Jankowski, Glen S., Fawkner, Helen, Slater, Amy, & Tiggemann, Marika. (2014). “Appearance potent”? A content analysis of UK gay and straight men’s magazines. *Body Image, 11*, 474–481.
- Jansen, Bernard J., & Spink, Amanda. (2006). How are we searching the World Wide Web? A comparison of nine search engine transaction logs. *Information Processing & Management, 42*(1), 248–263.
- Janson, Svante, & Vegelius, Jan. (1979). On generalizations of the g index and the phi coefficient to nominal scales. *Multivariate Behavioral Research, 14*, 255–269.
- Janstova, Patricie. (2006). *Empirical testing of auteur theory via content analysis: The case of Jane Campion* (Unpublished master’s thesis). Cleveland State University, Cleveland, OH.
- Jasperson, Amy E., Shah, Dhavan V., Watts, Mark, Faber, Ronald J., & Fan, David P. (1998). Framing and the public agenda: Media effects on the importance of the federal budget deficit. *Political Communication, 15*, 205–224.
- Jeffres, Leo W., with Perloff, Richard M. (1997). *Mass media effects* (2nd ed.). Prospect Heights, IL: Waveland.
- Jenkins, Henry. (2006). *Convergence culture: Where old and new media collide*. New York, NY: New York University Press.
- Jenkins, Richard W. (1999). How much is too much? Media attention and popular support for an insurgent party. *Political Communication, 16*, 429–445.
- Jenkins, Sharon Rae. (Ed.). (2008). *A handbook of clinical scoring systems for thematic apperceptive techniques*. New York: Lawrence Erlbaum.
- Jimenez, Albert Manuel. (2014). *Assessing the inter-rater reliability of a system-wide teacher evaluation observation instrument: Moving beyond the kappa paradox*. Doctoral dissertation, University of Georgia, Athens, GA.
- John, A. Meredith. (1988). *The plantation slaves of Trinidad, 1783–1816: A mathematical and demographic enquiry*. New York: Cambridge University Press.
- Johnson, Gerald F. (1987). A clinical study of Porky Pig cartoons. *Journal of Fluency Disorders, 12*, 235–238.
- Johnson, Jessie Quintero, Sionean, Catlainn, & Scott, Allison M. (2011). Exploring the presentation of news information about the HPV vaccine: A content analysis of a representative sample of U.S. newspaper articles. *Health Communication, 26*, 491–501. doi:10.1080/10410236.2011.556080
- Johnson, Kimberly R., & Holmes, Bjarne M. (2009). Contradictory messages: A content analysis of Hollywood-produced romantic comedy feature films. *Communication Quarterly, 57*, 352–373.
- Johnston, Anne, & White, Anne Barton. (1994). Communication styles and female candidates: A study of the political advertising during the 1986 Senate elections. *Journalism Quarterly, 71*, 321–329.
- Jones, Edward E. (1990). *Interpersonal perception*. New York: W. H. Freeman and Company.
- Jones, Elizabeth, Gallois, Cynthia, Callan, Victor, & Barker, Michelle. (1999). Strategies of accommodation: Development of a coding system for conversational interaction. *Journal of Language and Social Psychology, 18*(2), 123–152.

- Jones, Kenneth. (1997). Are rap videos more violent? Style differences and the prevalence of sex and violence in the age of MTV. *Howard Journal of Communications*, 8, 343–356.
- Jones, Lisa M., Atoro, Kathryn E., Walsh, Wendy A., Cross, Theodore P., Shadoin, Amy L., & Magnuson, Suzanne. (2010). Nonoffending caregiver and youth experiences with child sexual abuse investigations. *Journal of Interpersonal Violence*, 25, 291–314.
- Jones, Steve, Millermaier, Sarah, Goya-Martinez, Mariana, & Schuler, Jessica. (2008). Whose space is MySpace? A content analysis of MySpace profiles. *First Monday*, 13(9), 1.
- Jordan, Amy B., Kunkel, Dale, Manganello, Jennifer, & Fishbein, Martin. (Eds.). (2009). *Media messages and public health: A decisions approach to content analysis*. New York: Routledge.
- Jordan, Amy B., & Manganello, Jennifer. (2009). Sampling and content analysis: An overview of the issues. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 53–66). New York: Routledge.
- Jourdan, Zack, Rainer, R. Kelly, & Marshall, Thomas E. (2008). Business intelligence: An analysis of the literature. *Information Systems Management*, 25, 121–131. doi:10.1080/10580530801941512
- Juozeliuniene, Irena. (2008). Doing research on families with parents abroad: The search for theoretical background and research methods. *Filosofija Sociologija*, 19(4), 72–79. Retrieved from <http://www.minfolit.lt/arch/16501/16704.pdf>
- Kachigan, Sam Kash. (1986). *Statistical analysis: An interdisciplinary introduction to univariate and multivariate methods*. New York: Radius.
- Kacmar, K. Michelle, & Hochwarter, Wayne A. (1996). Rater agreement across multiple data collection media. *Journal of Social Psychology*, 16, 469–475.
- Kaestlea, Christine Elizabeth, & Ivory, Adrienne Holz. (2012). A forgotten sexuality: Content analysis of bisexuality in the medical literature over two decades. *Journal of Bisexuality*, 12(1), 35–48. doi:10.1080/15299716.2012.645701
- Kaid, Lynda Lee, & Bystrom, Dianne G. (Eds.). (1999). *The electronic election: Perspectives on the 1996 campaign communication*. Mahwah, NJ: Lawrence Erlbaum.
- Kaid, Lynda Lee, & Johnston, Anne. (2001). *Videostyle and content of televised political advertising*. Westport, CT: Praeger.
- Kaid, Lynda Lee, Tedesco, John C., & McKinnon, Lori Melton. (1996). Presidential ads as nightly news: A content analysis of 1988 and 1992 televised adwatches. *Journal of Broadcasting & Electronic Media*, 40, 297–308.
- Kalis, Pamela, & Neuendorf, Kimberly A. (1989). Aggressive cue prominence and gender participation in MTV. *Journalism Quarterly*, 66, 148–154, 229.
- Kalliny, Morris, Dagher, Grace, Minor, Michael S., & De Los Santos, Gilberto. (2008). Television advertising in the Arab world: A status report. *Journal of Advertising Research*, 48(2), 215–223.
- Kamhawi, Rasha, & Weaver, David. (2003). Mass communication research trends from 1980 to 1999. *Journalism & Mass Communication Quarterly*, 80, 7–27.
- Kane, Carolyn L. (2008). *I'll see you on MySpace: Self-presentation in a social networking web site* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Kane, Carolyn L., Maguire, Katheryn, Neuendorf, Kimberly, & Skalski, Paul. (2009, November). *Nonverbal displays of self-presentation and sex differences in*

- profile photographs on MySpace.com*. Paper presented to the Human Communication and Technology Division of the National Communication Association, Chicago, IL.
- Kaplan, Abraham. (1964). *The conduct of inquiry: Methodology for behavioral science*. San Francisco: Chandler.
- Karpf, David. (2012). Social science research methods in Internet time. *Information, Communication & Society*, 15, 639–661. doi:10.1080/1369118X.2012.665468
- Kassarjian, Harold H. (1977). Content analysis in consumer research. *Journal of Consumer Research*, 4, 8–18.
- Kaufman, Wendy. (2006). Video games serve up targeted advertising. NPR. Retrieved from <http://www.npr.org/templates/story/story.php?storyId=5510890>
- Kaufmann, Renee, & Buckner, Marjorie M. (2014). To connect or promote?: An exploratory examination of Facebook pages dedicated to moms. *Computers in Human Behavior*, 35, 479–482.
- Kaye, Barbara K., & Sapolsky, Barry S. (2009). Taboo or not taboo? That is the question: Offensive language on prime-time broadcast and cable programming. *Journal of Broadcasting & Electronic Media*, 53, 22–37.
- Kearns, Jodi, & O'Connor, Brian. (2004). Dancing with entropy: Form attributes, children, and representation. *Journal of Documentation*, 60, 144–163.
- Keenan, Kevin L. (1996a). Network television news coverage of public relations: An exploratory census of content. *Public Relations Review*, 22, 215–231.
- Keenan, Kevin L. (1996b). Skin tones and physical features of blacks in magazine advertisements. *Journalism & Mass Communication Quarterly*, 73, 905–912.
- Keith, Susan, Schwalbe, Carol B., & Silcock, B. William. (2010). Comparing war images across media platforms: Methodological challenges for content analysis. *Media, War & Conflict*, 3, 87–98.
- Kelly, Edward F., & Stone, Philip J. (1975). *Computer recognition of English word senses*. Amsterdam: North-Holland.
- Kelly, Ellen M., & Conture, Edward G. (1992). Speaking rates, response time latencies, and interrupting behaviors of young stutterers, nonstutterers, and their mothers. *Journal of Speech and Hearing Research*, 35, 1256–1267.
- Keppel, Geoffrey, & Wickens, Thomas D. (2004). *Design and analysis: A researcher's handbook* (4th ed.). Upper Saddle River, NJ: Pearson PrenticeHall.
- Kian, Edward M., Mondello, Michael, & Vincent, John. (2009). ESPN: The women's sports network? A content analysis of Internet coverage of March Madness. *Journal of Broadcasting & Electronic Media*, 53, 477–495. doi:10.1080/08838150903102519
- Kim, Il-Hee, Anderson, Richard C., Nguyen-Jahiel, Kim, & Archodidou, Anthi. (2007). Discourse patterns during children's collaborative online discussions. *Journal of the Learning Sciences*, 16, 333–370.
- Kim, Jinsuk, Klautke, Hannah Ariane, & Serota, Kim B. (2009, May). *Effects of relational motivation and age on online self-disclosure: A content analysis of MySpace profile pages*. Paper presented at the annual conference of the International Communication Association, Chicago, IL.
- Kim, Kyongseok, Hayes, Jameson L., Avant, J. Adam, & Reid, Leonard N. (2014). Trends in advertising research: A longitudinal analysis of leading advertising, marketing, and communication journals, 1980 to 2010. *Journal of Advertising*, 43, 296–316. doi:10.1080/00913367.2013.857620

- Kindem, Gorham. (1987). *The moving image: Production principles and practices*. Glenview, IL: Scott, Foresman.
- Kinney, Nancy T. (2006). Engaging in “loose talk”: Analyzing salience in discourse from the formulation of welfare policy. *Policy Sciences*, 38, 251–268.
- Kirchgässner, Gebhard, & Wolters, Jürgen. (2008). *Introduction to modern time series analysis*. Berlin: Springer-Verlag.
- Kirilenko, Andrei P., & Stepchenkova, Svetlana O. (2012). Climate change discourse in mass media: Application of computer-assisted content analysis. *Journal of Environmental Studies and Sciences*, 2(2), 178–191. doi:10.1007/s13412-012-0074-z
- Kirkels, Arjan F. (2012). Discursive shifts in energy from biomass: A 30 year European overview. *Renewable and Sustainable Energy Reviews*, 16, 4105–4115.
- Klecka, William R. (1991). *Discriminant analysis*. Newbury Park, CA: Sage.
- Klee, Robert. (1997). *Introduction to the philosophy of science: Cutting nature at its seams*. New York: Oxford University Press.
- Klein, Hugh, & Shiffman, Kenneth S. (2013). Alcohol-related content of animated cartoons: A historical perspective. *Frontiers in Public Health*, 1, Article 2. doi:10.3389/fpubh.2013.00002
- Klos, Lori A., Greenleaf, Christy, Palya, Natalie, Kesslera Molly M., Shoemaker, Colby G., & Suchla, Erika A. (2015). Losing weight on reality TV: A content analysis of the weight loss behaviors and practices portrayed on *The Biggest Loser*. *Journal of Health Communication: International Perspectives*, 20, 639–646. doi:10.1080/10810730.2014.965371
- Kluver, Heike, & Mahoney, Christine. (2015). Measuring interest group framing strategies in public policy debates. *Journal of Public Policy*, 35, 223–244.
- Knapp, Mark L. (1978). *Nonverbal communication in human interaction*. New York: Holt, Rinehart & Winston.
- Knapp, Mark L., Hall, Judith A., & Horgan, Terrence G. (2014). *Nonverbal communication in human interaction* (8th ed.). Boston, MA : Wadsworth Cengage Learning.
- Knobloch, Leanne K. (2008). The content of relational uncertainty within marriage. *Journal of Social and Personal Relationships*, 25, 467–495. doi:10.1177/0265407508090869
- Kobayashi, J., Spitzberg, B., & Andersen, P. (2008). *Communication predictors of suicide: The personalification of suicide in MySpace.com websites*. Paper presented at the annual conference of the National Communication Association.
- Kobayashi, Kaoru, Fisher, Ron, & Gapp, Rod. (2008). Business improvement strategy or useful tool? Analysis of the application of the 5S concept in Japan, the UK and the US. *Total Quality Management*, 19, 245–262. doi:10.1080/14783360701600704
- Köhler, Reinhard, & Rieger, Burghard B. (Eds.). (1993). *Contributions to quantitative linguistics: Proceedings of the First International Conference on Quantitative Linguistics, QUALICO, Trier*. Dordrecht, Germany: Kluwer.
- Kohn, Stanislas. (1973). *The cost of the war to Russia: The vital statistics of European Russia during the World War 1914–1917*. New York: Howard Fertig.
- Kolbe, Richard H., & Burnett, Melissa S. (1991). Content-analysis research: An examination of application with directives for improving research reliability and objectivity. *Journal of Consumer Research*, 18, 243–250.
- Kolt, Jeremy. (1996). *Relationship initiation strategies: Interpersonal communication in personal advertisements* (Unpublished master’s thesis). Cleveland State University, Cleveland, OH.

- Kompatsiaris, Yiannis, Merialdo, Bernard, & Lian, Shiguo. (2012). *TV content analysis: Techniques and applications*. Boca Raton, FL: CRC Press.
- Kopacz, Maria A., & Lawton, Bessie Lee. (2011). Rating the YouTube Indian: Viewer ratings of Native American portrayals on a viral video site. *American Indian Quarterly*, 35, 241–257.
- Koppitz, Elizabeth Munsterberg. (1984). *Psychological evaluation of human figure drawings by middle school pupils*. Orlando, FL: Grune & Stratton.
- Kot, Eva Marie. (1999, January). Psychological sense of community and electronic mail. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 59(7–B), 3699.
- Kottler, Amanda E., & Swartz, Sally. (1993). Conversation analysis: What is it, can psychologists use it? *South African Journal of Psychology*, 23(3), 103–110.
- Kottner, Jan, Audigé, Laurent, Brorson, Stig, Donner, Allan, Gajewski, Byron J., Hróbjartsson, Asbjørn, . . . Streiner, David L. (2011). Guidelines for reporting reliability and agreement studies (GRRAS) were proposed. *Journal of Clinical Epidemiology*, 64, 96–106.
- Kousha, Kayvan, Thelwall, Mike, & Abdoli, Mahshid. (2012). The role of online videos in research communication: A content analysis of YouTube videos cited in academic publications. *Journal of the American Society for Information Science and Technology*, 63, 1710–1727.
- Kraemer, Helena Chmura. (1980). Extension of the kappa coefficient. *Biometrics*, 36, 207–216.
- Krippendorff, Klaus. (2013). *Content analysis: An introduction to its methodology* (3rd ed.). Los Angeles, CA: Sage.
- Krull, Robert. (1983). Children learning to watch television. In Jennings Bryant & Daniel R. Anderson (Eds.), *Children's understanding of television: Research on attention and comprehension* (pp. 103–123). New York: Academic Press.
- Kruskal, Joseph B., & Wish, Myron. (1978). *Multidimensional scaling*. Beverly Hills, CA: Sage.
- Kubala, Francis, Colbath, Sean, Liu, Daben, Srivastava, Amit, & Makhoul, John. (2000). Integrated technologies for indexing spoken language. *Communications of the ACM*, 43(2), 48–56.
- Kucukyilmaz, Tayfun, Cambazoglu, B. Barla, Aykanat, Cevdet, & Can, Fazli. (2008). Chat mining: Predicting user and message attributes in computer-mediated communication. *Information Processing and Management*, 44, 1448–1466.
- Kuhn, Thomas S. (1970). *The structure of scientific revolutions* (2nd ed.). Chicago: University of Chicago Press.
- Kumar, Anup. (2005). *Abu Ghraib follow-up stories: Political climate and construction of a legitimate controversy within the cultural-ideological boundaries of the U.S. press*. Paper presented to the Communication Theory and Methodology Division of the Association for Education in Journalism & Mass Communication, San Antonio, TX.
- Kunkel, Dale. (2009). Linking content analysis and media effects research. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 15–31). New York: Routledge.
- Kunkel, Dale, Cope-Farrar, Kirstie, Biely, Erica, Farinola, Wendy Jo Maynard, & Donnerstein, Edward. (2001). *Sex on TV: A biennial report to the Kaiser Family Foundation*. Retrieved from <http://www.kff.org/content/2001/3087>. [February 17, 2001].

- Kunkel, Dale, Eyal, Keren, Donnerstein, Edward, Farrar, Kirstie M., Biely, Erica, & Rideout, Victoria. (2007). Sexual socialization messages on entertainment television: Comparing content trends 1997–2002. *Media Psychology, 9*, 595–622.
- Kunkel, Dale, Eyal, Keren, Finnerty, Keli, Biely, Erica, & Donnerstein, Edward. (2005). *Sex on TV 4*. Retrieved from <http://www.kff.org/entmedia/upload/Sex-on-TV-4-Full-Report.pdf> [March 10, 2011].
- Kunkel, Dale, Wilson, Barbara, Donnerstein, Edward, Linz, Daniel, Smith, Stacy, Gray, Timothy, Blumenthal, Eva, & Potter, W. James. (1995). Measuring television violence: The importance of context. *Journal of Broadcasting & Electronic Media, 39*, 284–291.
- Kuo, Feng-yang, & Yu, Chia-ping. (2009). An exploratory study of trust dynamics in work-oriented virtual teams. *Journal of Computer-Mediated Communication, 14*, 823–854.
- Kwon, Nahyun. (2007). Public library patrons' use of collaborative chat reference service: The effectiveness of question answering by question type. *Library and Information Science Research, 29*(1), 70–91.
- LaBarge, Emily, Von Dras, Dean, & Wingbermuehle, Cheryl. (1998). An analysis of themes and feelings from a support group for people with Alzheimer's disease. *Psychotherapy, 35*, 537–544.
- Lacy, Stephen R., & Riffe, Daniel. (1996). Sampling error and selecting intercoder reliability samples for nominal content categories. *Journalism & Mass Communication Quarterly, 7*, 963–973.
- Lacy, Stephen R., Riffe, Daniel, & Randle, Quint. (1998). Sample size in multi-year content analysis of monthly consumer magazines. *Journalism & Mass Communication Quarterly, 75*, 408–417.
- Lacy, Stephen R., Robinson, Kay, & Riffe, Daniel. (1995). Sample size in content analysis of weekly newspapers. *Journalism & Mass Communication Quarterly, 72*, 336–345.
- Lagerspetz, Kirsti M. J., Wahlroos, Carita, & Wendelin, Carola. (1978). Facial expressions of pre-school children while watching televised violence. *Scandinavian Journal of Psychology, 19*, 213–222.
- Lance, Larry M. (1998). Gender differences in heterosexual dating: A content analysis of personal ads. *Journal of Men's Studies, 6*(3), 297–305.
- Lanchester, John. (2006, November 4). A bigger bang. *The Guardian*. Retrieved from <http://www.guardian.co.uk/technology/2006/nov/04/news.weekend.magazine1>
- Landis, J. Richard, & Koch, Gary G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*, 159–174.
- Lang, Annie. (2000). The limited capacity model of mediated message processing. *Journal of Communication, 50*, 46–70.
- Lang, Annie, Bradley, Samuel D., Park, Byungho, Shin, Mija, & Chung, Yongkuk. (2006). Parsing the resource pie: Using STRTs to measure attention to mediated messages. *Media Psychology, 8*, 369–394.
- Langdon, Elizabeth. (2012). *Sexual content of popular music, 1970–2009* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Lange, David L., Baker, Robert K., & Ball, Sandra J. (1969). *Mass media and violence: A report to the National Commission on the Causes and Prevention of Violence*. Washington, DC: Government Printing Office.
- Langs, Robert, Badalamenti, Anthony, & Bryant, Robin. (1991). A measure of linear influence between patient and therapist. *Psychological Reports, 69*, 355–368.

- La Pean, Alison, & Farrell, Michael H. (2005). Initially misleading communication of carrier results after newborn genetic screening. *Pediatrics*, *116*, 1499–1505. doi:10.1542/peds.2005-0449
- Larey, Timothy S., & Paulus, Paul B. (1999). Group preference and convergent tendencies in small groups: A content analysis of group brainstorming performance. *Creativity Research Journal*, *12*(3), 175–184.
- Laroche, Michel, Nepomuceno, Marcelo Vinhal, Huang, Liang, & Richard, Marie-Odile. (2011). What's so funny? The use of humor in magazine advertising in the United States, China, and France. *Journal of Advertising Research*, *51*, 404–416.
- Larson, Mary Strom. (2002). Race and interracial relationships in children's television commercials. *The Howard Journal of Communications*, *13*, 223–235.
- Lasswell, Harold D., Leites, Nathan, & Associates. (1949). *Language of politics: Studies in quantitative semantics*. New York: George W. Stewart.
- Lauzen, Martha M., & Dozier, David M. (2005). Maintaining the double standard: Portrayals of age and gender in popular films. *Sex Roles*, *52*, 437–446. doi:10.1007/s11199-005-3710-1
- Lauzen, Martha, Dozier, David M., & Hicks, Manda V. (2001). Prime-time players and powerful prose: The role of women in the 1997–1998 television season. *Mass Communication & Society*, *4*, 39–59.
- Laver, Michael, Benoit, Kenneth, & Garry, John. (2003). Extracting policy positions from political texts using words as data. *American Political Science Review*, *97*, 311–331.
- LeBel, Etienne P., & Paunonen, Sampo V. (2011). Sexy but often unreliable: The impact of unreliability on the replicability of experimental findings with implicit measures. *Personality and Social Psychological Bulletin*, *37*, 570–583. doi:10.1177/0146167211400619
- Lechner, Anat, Simonoff, Jeffrey S., & Harrington, Leslie. (2012). Color-emotion associations in the pharmaceutical industry: Understanding universal and local themes. *Color Research and Application*, *37*(1), 59–71. doi:10.1002/col.20643
- Ledford, Christy J. W., & Anderson, LaKesha N. (2013). Online social networking in discussions of risk: Applying the CAUSE model in a content analysis of Facebook. *Health, Risk & Society*, *15*(3), 251–264.
- Lee, Chi-Ming (Angela), & Taylor, Monica J. (2013). Moral education trends over 40 years: A content analysis of the *Journal of Moral Education* (1971–2011). *Journal of Moral Education*, *42*, 399–429.
- Lee, Chul-Joo, Long, Marilee, Slater, Michael D., & Song, Wen. (2014). Comparing local TV news with national TV news in cancer coverage: An exploratory content analysis. *Journal of Health Communication: International Perspectives*, *19*, 1330–1342.
- Lee, Fiona, & Peterson, Christopher. (1997). Content analysis of archival data. *Journal of Consulting and Clinical Psychology*, *65*, 959–969.
- Lee, Tien-tsung, & Hwang, Hsiao-Fang. (1997, May). *The feminist movement and female gender roles in movie advertisements: 1963 to 1993*. Paper presented to the Visual Communication Interest Group at the annual meeting of the International Communication Association, Montreal, Canada.
- Lee, Wei-Na, & Callcott, Margaret F. (1994). Billboard advertising—A comparison of vice products across ethnic groups. *Journal of Business Research*, *30*, 85–94.
- Leetaru, Kalev Hannes. (2012). *Data mining methods for the content analyst: An introduction to the computational analysis of content*. New York: Routledge.

- Legg, Pamela P. Mitchell. (1996). Contemporary films and religious exploration: An opportunity for religious education. Part I: Foundational questions. *Religious Education, 91*, 397–406.
- Lehdonvirta, Mika, Nagashima, Yosuke, Lehdonvirta, Vili, & Baba, Akira. (2012). The stoic male: How avatar gender affects help-seeking behavior in an online game. *Games and Culture, 7*, 29–47.
- Lemish, Dafna, & Tidhar, Chava E. (1999). Still marginal: Women in Israel's 1996 television election campaign. *Sex Roles, 41*, 389–412.
- Leon, Kim, & Angst, Erin. (2005). Portrayals of stepfamilies in film: Using media images in remarriage education. *Family Relations, 54*, 3–23.
- Lerch, Alexander. (2012). *An introduction to audio content analysis: Applications in signal processing and music informatics*. Hoboken, NJ: John Wiley & Sons.
- Levesque, Maurice J., & Lowe, Charles A. (1999). Face-ism as a determinant of interpersonal perceptions: The influence of context on facial prominence effects. *Sex Roles, 41*, 241–259.
- Lewis, Seth C., Zamith, Rodrigo, & Hermida, Alfred. (2013). Content analysis in an era of big data: A hybrid approach to computational and manual methods. *Journal of Broadcasting & Electronic Media, 57*, 34–52.
- Li, Dan, & Walejko, Gina. (2008). Splogs and abandoned blogs: The perils of sampling bloggers and their blogs. *Information, Communication, and Society, 11*(2), 279–296.
- Li, Jessica, & Rao, H. Raghav. (2010). Twitter as a rapid response news service: An exploration in the context of the 2008 China earthquake. *The Electronic Journal on Information Systems in Developing Countries, 42*(4), 1–22.
- Lieberman, Evan A., Neuendorf, Kimberly A., Denny, James, Skalski, Paul D., & Wang, Jia. (2009). The language of laughter: A quantitative/qualitative fusion examining television narrative and humor. *Journal of Broadcasting & Electronic Media, 53*, 497–514.
- Lieberman, Morton A. (2008). Effects of disease and leader type on moderators in online support groups. *Computers in Human Behavior, 24*, 2446–2455.
- Lieberman, Morton A., & Goldstein, Benjamin A. (2006). Not all negative emotions are equal: The role of emotional expression in online support groups for women with breast cancer. *Psycho-Oncology, 15*, 160–168.
- Liebler, Carol M., Jiang, Wei, & Chen, Li. (2015). Beauty, binaries, and the big screen in China: Character gender in feature films. *Asian Journal of Communication*. Retrieved from <http://dx.doi.org/10.1080/01292986.2015.1019525>
- Lim, Jeongsub. (2011). Intermedia agenda setting and news discourse: A strategic responses model for a competitor's breaking stories. *Journalism Practice, 5*, 227–244. doi:10.1080/17512786.2010.509184
- Lin, Carolyn A. (1997). Beefcake versus cheesecake in the 1990s: Sexist portrayals of both genders in television commercials. *Howard Journal of Communications, 8*, 237–249.
- Lin, Fu-Ren, Hsieh, Lu-Shih, & Chuang, Fu-Tai. (2009). Discovering genres of online discussion threads via text mining. *Computers & Education, 52*, 481–495.
- Lin, Lawrence I-Kuei. (1989). A concordance correlation coefficient to evaluate reproducibility. *Biometrics, 45*, 255–268.
- Lin, Lawrence, Hedayat, A. S., & Wu, Wenting. (2007). A unified approach for assessing agreement for continuous and categorical data. *Journal of Biopharmaceutical Statistics, 17*, 629–652.

- Lin, Yang. (1996). Empirical studies of negative political advertising: A quantitative review using a method of combined citation and content analysis. *Scientometrics*, 37, 385–399.
- Lin, Yuri, Michel, Jean-Baptiste, Aiden, Erez Lieberman, Orwant, Jon, Brockman, Will, & Petrov, Slav. (2012, July). Syntactic annotations for the Google Books Ngram corpus. *Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics* (pp. 169–174). Jeju, Republic of Korea.
- Lin, Yu-Ru, Sundaram, Hari, De Choudhury, Munmun, & Kelliher, Aisling. (2009). *Temporal patterns in social media streams: Theme discovery and evolution using joint analysis of content and context*. Paper presented to the IEEE International Conference on Multimedia and Expo, ICME 2009, pp. 1456–1459.
- Lindenmann, Walter K. (1983, July). Content analysis: A resurgent communication research technique that represents a wave of the future: The move toward a second dimension of interpretation and analysis. *Public Relations Journal*, 24–27.
- Lindlof, Thomas R., & Taylor, Brian C. (2011). *Qualitative communication research methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Lindmark, Pete. (2011). *A content analysis of advertising in popular video games* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Lindner, Katharina. (2004). Images of women in general interest and fashion magazine advertisements from 1955 to 2002. *Sex Roles*, 51, 409–421.
- Litkowski, Kenneth C. (1992). *A primer on computational lexicology*. Retrieved from <http://www.clres.com>.
- Litkowski, Kenneth C. (1999). *Towards a meaning-full comparison of lexical resources* (Proceeding of the Association for Computational Linguistics Special Interest Group on the Lexicon). College Park, MD: Association for Computational Linguistics.
- Liu, Bing. (2010). Sentiment analysis and subjectivity. In Nitin Indurkha & Fred J. Damerau (Eds.), *Handbook of natural language processing* (2nd ed., pp. 627–666). Boca Raton: CRC Press.
- Liu, Bing. (2012). *Sentiment analysis and opinion mining*. Morgan & Claypool.
- Liu, Xinsheng, Vedlitz, Arnold, Stoutenborough, James W., & Robinson, Scott. (2015). Scientists' views and positions on global warming and climate change: A content analysis of congressional testimonies. *Climatic Change*, 131, 487–503. doi:10.1007/s10584-015-1390-6
- Livingston, Steven, & Bennett, W. Lance. (2003). Gatekeeping, indexing, and live-event news: Is technology altering the construction of news? *Political Communication*, 20, 363–380.
- Lockyer, Tim. (2005). The perceived importance of price as one hotel selection dimension. *Tourism Management*, 26, 529–537.
- Lombard, Matthew, Campanella, Cheryl, Linder, Jodi, & Snyder, Jennifer, with Ditton, Theresa Bolmarcich, Kaynak, Selcan, Pemrick, Janine, & Steward, Gina. (1996, May). *The state of the medium: A content analysis of television form*. Paper presented to the Information Systems Division at the annual meeting of the International Communication Association, Chicago, IL.
- Lombard, Matthew, Snyder-Duch, Jennifer, & Bracken, Cheryl Campanella. (2002). Content analysis in mass communication: Assessment and reporting of inter-coder reliability. *Human Communication Research*, 28, 587–604.
- Lombard, Matthew, Snyder, Jennifer, Bracken, Cheryl Campanella, Kaynak, Selcan, Pemrick, Janine, Linder, Jodi M., & Ditton, Theresa Bolmarcich. (1997). *The*

- cluttering of television*. Paper presented to the Mass Communication Division at the annual conference of the International Communication Association, Montreal, Canada.
- Long, Marilee, Steinke, Jocelyn, Applegate, Brooks, Lapinski, Maria Knight, Johnson, Marne J., & Ghosh, Sayani. (2010). Portrayals of male and female scientists in television programs popular among middle school-age children. *Science Communication, 32*, 356–382.
- Lopez-Escobar, Esteban, Llamas, Juan Pablo, McCombs, Maxwell, & Lennon, Federico Rey. (1998). Two levels of agenda setting among advertising and news in the 1995 Spanish elections. *Political Communication, 15*, 225–238.
- Low, Jason, & Sherrard, Peter. (1999). Portrayal of women in sexuality and marriage and family textbooks: A content analysis of photographs from the 1970s to the 1990s. *Sex Roles, 40*, 309–318.
- Lowe, David, & Matthews, Robert. (1995). Shakespeare vs. Fletcher: A stylometric analysis by radial basis functions. *Computers and the Humanities, 29*, 449–461.
- Lucero, Audrey. (2015). Cross-linguistic lexical, grammatical, and discourse performance on oral narrative retells among young Spanish speakers. *Child Development, 86*, 1419–1433. doi:10.1111/cdev.12387. ISSN: 0009-3920
- Luke, Douglas A., Caburnay, Charlene A., & Cohen, Elisia L. (2011). How much is enough? New recommendations for using constructed week sampling in newspaper content analysis of health stories. *Communication Methods and Measures, 5*(1), 76–91. doi:10.1080/19312458.2010.547823
- Lunk, Bettina. (2008). *MySpace or OurSpace: A cross-cultural empirical analysis of MySpace comment* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Lyman, Stanford M. (1997). Cinematic ideologies and societal dystopias in the United States, Japan, Germany and the Soviet Union: 1900–1996. *International Journal of Politics, Culture and Society, 10*, 497–542.
- Ma, Lin. (2013). Electronic word-of-mouth on microblogs: A cross-cultural content analysis of Twitter and Weibo. *Intercultural Communication Studies, 22*(3), 18–42.
- MacDonald, J. Fred. (1992). *Blacks and White TV: African Americans in television since 1948* (2nd ed.). Chicago: Nelson-Hall.
- Macnamara, Jim. (2005). Media content analysis: Its uses; benefits and best practice methodology. *Asia Pacific Public Relations Journal, 6*(1), 1–34.
- MacWhinney, Brian. (1996). The CHILDES system. *American Journal of Speech-Language Pathology, 5*, 5–14.
- MacWhinney, Brian. (2000). *The CHILDES project: Tools for analyzing talk* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Magai, Carol, Consedine, Nathan S., Krivoshekova, Yulia S., Kudadjie-Gyamfi, Elizabeth, & McPherson, Renee. (2006). Emotion experience and expression across the adult life span: Insights from a multimodal assessment study. *Psychology and Aging, 21*, 303–317.
- Mager, John, & Helgeson, James G. (2011). Fifty years of advertising images: Some changing perspectives on role portrayals along with enduring consistencies. *Sex Roles, 64*, 238–252.
- Magi, Trina J. (2010). A content analysis of library vendor privacy policies: Do they meet our standards? *College & Research Libraries, 71*, 254–272.

- Mailloux, Stephen L., Johnson, Mark E., Fisher, Dennis G., & Pettibone, Timothy J. (1995). How reliable is computerized assessment of readability? *Computers in Nursing, 13*, 221–225.
- Manganello, Jennifer, & Blake, Nancy. (2010). A study of quantitative content analysis of health messages in U.S. media from 1985 to 2005. *Health Communication, 25*, 387–396.
- Manganello, Jennifer, & Fishbein, Martin. (2009). Using theory to inform content analysis. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 3–14). New York: Routledge.
- Manganello, Jennifer A., Henderson, Vani R., Jordan, Amy, Trentacoste, Nicole, Martin, Suzanne, Hennessy, Michael, & Fishbein, Martin. (2010). Adolescent judgment of sexual content on television: Implications for future content analysis research. *Journal of Sex Research, 47*, 364–373.
- Manning, Philip, & Ray, George. (2000). *Setting the agenda in clinical interviews: An analysis of accommodation strategies*. Unpublished manuscript. Cleveland, OH: Cleveland State University.
- Marche, Tammy A., & Peterson, Carole. (1993). The development and sex-related use of interruption behavior. *Human Communication Research, 19*, 388–408.
- Mark, Robert A. (1971). Coding communication at the relational level. *Journal of Communication, 21*(3), 221–232.
- Markel, Norman. (1998). *Semiotic psychology: Speech as an index of emotions and attitudes*. New York: Peter Lang.
- Markiewicz, Dorothy. (1974). Effects of humor on persuasion. *Sociometry, 37*, 407–422.
- Marks, Lawrence E. (1978). *The unity of the senses: Interrelations among the modalities*. New York: Academic Press.
- Marks, Leonie A., Kalaitzandonakes, Nicholas, Wilkins, Lee, & Zakharova, Ludmila. (2007). Mass media framing of biotechnology news. *Public Understanding of Science, 16*, 183–203.
- Martin, Rod. (2007). *The psychology of humor: An integrative approach*. Amsterdam: Elsevier.
- Martindale, Colin, & McKenzie, Dean. (1995). On the utility of content analysis in author attribution: The Federalist. *Computers and the Humanities, 29*, 259–270.
- Martindale, Colin, Moore, Kathleen, & Borkum, Jonathan. (1990). Aesthetic preference: Anomalous findings for Berlyne's psychobiological theory. *American Journal of Psychology, 103*(1), 53–80.
- Martins, Nicole, Williams, Dimitri, & Harrison, Kristen. (2008). *A content analysis of female body imagery in video games*. Paper presented at the 2008 Annual Convention of the National Communication Association, San Diego, CA.
- Martins, Nicole, Williams, Dimitri C., Harrison, Kristen, & Ratan, Rabindra A. (2009). A content analysis of female body imagery in video games. *Sex Roles, 61*, 824–836.
- Martins, Nicole, Williams, Dimitri C., Ratan, Rabindra A., & Harrison, Kristen. (2011). Virtual muscularity: A content analysis of male video game characters. *Body Image, 8*, 43–51.
- Marttunen, Miika. (1997). Electronic mail as a pedagogical delivery system: An analysis of the learning of argumentation. *Research in Higher Education, 38*, 345–363.

- Maruyama, Geoffrey M. (1998). *Basics of structural equation modeling*. Thousand Oaks, CA: Sage.
- Mason, Michael J. (2010). Attributing activity space as risky and safe: The social dimension to the meaning of place for urban adolescents. *Health & Place*, 16, 926–933.
- Massey, Brian L., & Levy, Mark R. (1999). Interactivity, online journalism, and English-language Web newspapers in Asia. *Journalism & Mass Communication Quarterly*, 76, 138–151.
- Mastro, Dana E., & Behm-Morawitz, Elizabeth. (2005). Latino representation on primetime television. *Journalism & Mass Communication Quarterly*, 82, 110–130.
- Mastro, Dana E., Eastin, Matthew S., & Tamborini, Ron. (2002). Internet search behaviors and mood alterations: A selective exposure approach. *Media Psychology*, 4, 157–172.
- Mastro, Dana E., & Ortiz, Michelle. (2008). A content analysis of social groups in prime-time Spanish-language television. *Journal of Broadcasting & Electronic Media*, 52, 101–118.
- Mastro, Dana E., & Stern, Susannah R. (2003). Representations of race in television commercials: A content analysis of prime-time advertising. *Journal of Broadcasting & Electronic Media*, 47, 638–64.
- Masur, Kate. (2001, September). *Tasini v. New York Times*: The implications for historians. [American Historical Association] *Perspectives*. Retrieved from <http://www.historians.org/perspectives/issues/2001/0109/0109new2.cfm>
- Matabane, Paula, & Merritt, Bishetta. (1996). African Americans on television: Twenty-five years after Kerner. *Howard Journal of Communications*, 7, 329–337.
- Maxwell, Terrence A. (2004). Mapping information policy frames: The politics of the Digital Millennium Copyright Act. *Journal of the American Society for Information Science and Technology*, 55, 3–12.
- Maxwell, Terrence A. (2005). Constructing consensus: Homeland security as a symbol of government politics and administration. *Government Information Quarterly*, 22, 152–169.
- Mayring, Philipp. (2000). Qualitative content analysis. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 1(2), Art. 20.
- Mazur, Elizabeth. (2010). Collecting data from social networking web sites and blogs. In Samuel D. Golding & John A. Johnson (Eds.), *Advanced methods for conducting online behavioral research* (pp. 77–90). Washington, DC: American Psychological Association.
- McAdams, Dan P., & Zeldow, Peter B. (1993). Construct validity and content analysis. *Journal of Personality Assessment*, 61, 243–245.
- McCarthy, Philip M., & Boonthum-Denecke, Chutima. (2012). *Applied natural language processing: Identification, investigation, and resolution*. Hershey, PA: IGI Global.
- McCarty, James F. (2001, January 24). Modell itching to skip town again. *The Plain Dealer*, pp. 1–A, 9–A.
- McCluskey, Michael, Stein, Susan E., Boyle, Michael P., & McLeod, Douglas M. (2009). Community structure and social protest: Influences on newspaper coverage. *Mass Communication & Society*, 12, 353–371.
- McCombs, Maxwell. (2005). A look at agenda-setting: Past, present and future. *Journalism Studies*, 6, 543–557.

- McCombs, Maxwell, Llamas, Juan Pablo, Lopez-Escobar, Esteban, & Rey, Federico. (1997). Candidate images in Spanish elections: Second-level agenda-setting effects. *Journalism & Mass Communication Quarterly*, 74, 703–717.
- McCorkindale, Tina. (2010). Can you see the writing on my wall? A content analysis of the Fortune 500's Facebook social networking sites. *Public Relations Journal*, 4(3).
- McCormick, Naomi B., & McCormick, John W. (1992). Computer friends and foes: Content of undergraduates' electronic mail. *Computers in Human Behavior*, 8, 379–405.
- McCown, Bill, Blake, Ilia Khambatta, & Keiser, Ross. (2012). Content analyses of the beliefs of academic procrastinators. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 30, 213–222.
- McCroskey, James C. (2005). *An introduction to rhetorical communication: A Western cultural perspective* (9th ed.). Boston, MA: Allyn and Bacon.
- McCullough, Lynette S. (1993). A cross-cultural test of the two-part typology of humor. *Perceptual and Motor Skills*, 76, 1275–1281.
- McIsaac, Marina Stock, Mosley, Mary Lou, & Story, Naomi. (1984). Identification of visual dimensions in photographs using multidimensional scaling techniques. *Educational Communication and Technology Journal*, 32, 169–179.
- McKay, James R. (1992). Affiliative trust–mistrust. In Charles P. Smith (Ed.), *Motivation and personality: Handbook of thematic content analysis* (pp. 254–277). Cambridge: Cambridge University Press.
- McKenny, Aaron F., Short, Jeremy C., & Payne, G. Tyge. (2013). Using computer-aided text analysis to elevate constructs: An illustration using psychological capital. *Organizational Research Methods*, 16, 152–184.
- McLaughlin, G. Harry. (1969). SMOG grading—A new readability formula. *Journal of Reading*, 12, 639–646.
- McLuhan, Marshall. (1989). The role of new media in social change. In George Sanderson & Frank MacDonald (Eds.), *Marshall McLuhan: The man and his message* (pp. 34–40). Golden, CO: Fulcrum.
- McManus, Roseanne W. (2014). Fighting words: The effectiveness of statements of resolve in international conflict. *Journal of Peace Research*, 51, 726–740.
- McMillan, Sally J. (2000). The microscope and the moving target: The challenge of applying content analysis to the World Wide Web. *Journalism & Mass Communication Quarterly*, 77, 80–98.
- McMillan, Sally J. (2002). Exploring models of interactivity from multiple research traditions. In Leah A. Lievrouw & Sonia Livingstone (Eds.), *Handbook of new media: Social shaping and social consequences* (pp. 205–229). London: Sage.
- McMillan, Sally J., & Hwang, Jang-Sun. (2002). Measures of perceived interactivity: An exploration of communication, user control, and time in shaping perceptions of interactivity. *Journal of Advertising*, 31(3), 41–54.
- McQuarrie, Edward F., & Phillips, Barbara J. (2008). It's not your father's magazine ad: Magnitude and direction of recent changes in advertising style. *Journal of Advertising*, 37(3), 95–106.
- Mehl, Matthias R. (2006). Quantitative text analysis. In Michael Eid & Ed Diener (Eds.), *Handbook of multimethod measurement in psychology* (pp. 141–156). Washington, DC: American Psychological Association. doi:10.1037/11383-011

- Mehl, Matthias R., & Gill, Alastair, J. (2010). Automatic text analysis. In Samuel D. Gosling & John A. Johnson (Eds.), *Advanced methods for conducting online behavioral research* (pp. 109–127). Washington, DC: American Psychological Association.
- Melara, Robert D., Marks, Lawrence E., & Potts, Bonnie C. (1993). Early-holistic processing or dimensional similarity? *Journal of Experimental Psychology: Human Perception and Performance*, *19*, 1114–1120.
- Melican, Debra Burns. (2009). *Race in the floodwaters: Constructing and deconstructing television news coverage of Hurricane Katrina* (Unpublished doctoral dissertation). University of Michigan, Ann Arbor, MI.
- Melitski, James, & Manoharan, Aroon. (2014). Performance measurement, accountability, and transparency of budgets and financial reports. *Public Administration Quarterly*, *38*, 38–70.
- Men, Linjuan Rita, & Tsai, Wan-Hsiu Sunny. (2012). How companies cultivate relationships with publics on social network sites: Evidence from China and the United States. *Public Relations Review*, *38*, 723–730.
- Messing, Lynn S., & Campbell, Ruth. (Eds.). (1999). *Gesture, speech, and sign*. Oxford, U.K.: Oxford University Press.
- Messner, Marcus, DiStaso, Marcia W., Jin, Yan, Meganck, Shana, Sherman, Scott, & Norton, Sally. (2014). Influencing public opinion from corn syrup to obesity: A longitudinal analysis of the references for nutritional entries on Wikipedia. *First Monday*, *19*(11). doi:<http://dx.doi.org/10.5210/fm.v19i11.4823>
- Messner, Marcus, & South, Jeff. (2011). Legitimizing Wikipedia: How US national newspapers frame and use the online encyclopedia in their coverage. *Journalism Practice*, *5*, 145–160. doi:10.1080/17512786.2010.506060
- Metz, Christian. (1974). *Film language: A semiotics of the cinema*. Chicago: University of Chicago Press.
- Metz, Rainer, Van Cauwenbergh, Eddy, & van der Voort, Roel. (Eds.). (1990). *Historical information systems*. Leuven, Belgium: Leuven University Press.
- Michelson, Jean. (1996). *Visual imagery in medical journal advertising* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Milic, Louis T. (1995). The century of prose corpus: A half-million word historical data base. *Computers and the Humanities*, *29*, 327–337.
- Miller, Darryl W., Leyell, Teresita S., & Mazachek, Juliann. (2004). Stereotypes of the elderly in U.S. television commercials from the 1950s to the 1990s. *International Journal of Aging & Human Development*, *58*, 315–340.
- Miller, Gerald R. (1987). Persuasion. In Charles R. Berger & Steven H. Chaffee (Eds.), *Handbook of communication science* (pp. 446–483). Newbury Park, CA: Sage.
- Miller, Kevin J., Fullmer, Steven L., & Walls, Richard T. (1996). A dozen years of mainstreaming literature: A content analysis. *Exceptionality*, *6*(2), 99–109.
- Miller, M. Mark, Andsager, Julie L., & Riechert, Bonnie P. (1998). Framing the candidates in presidential primaries: Issues and images in press releases and news coverage. *Journalism & Mass Communication Quarterly*, *75*, 312–324.
- Miller, M. Mark, Boone, Jeff, & Fowler, David. (1992, November). *The emergence of greenhouse effect on the issue agenda: A news stream analysis*. Paper

- presented at the annual meeting of the Midwest Association for Public Opinion Research, Chicago, IL.
- Miller, Mark, & Riechert, Bonnie Parnell. (2001). Frame mapping: A quantitative method for investigating issues in the public sphere. In Mark D. West (Ed.), *Theory, method, and practice in computer content analysis* (pp. 61–75). Westport, CT: Albex.
- Miller, Peggy J., Wiley, Angela R., Fung, Heidi, & Liang, Chung-Hui. (1997). Personal storytelling as a medium of socialization in Chinese and American families. *Child Development, 68*, 557–568.
- Milojevic, Stasa, Sugimoto, Cassidy R., Yan, Erjia, & Ding, Ying. (2011). The cognitive structure of library and information science: Analysis of article title words. *Journal of the American Society for Information Science and Technology, 62*, 1933–1953.
- Minton, Casey A. Barrio, Morris, Carrie A. Wachter, & Yaites, LaToya D. (2014). Pedagogy in counselor education: A 10-year content analysis of journals. *Counselor Education & Supervision, 53*, 162–177. doi:10.1002/j.1556-6978.2014.00055.x
- Mohler, Peter Ph., & Zuell, Cornelia. (2001). Applied text theory: Quantitative analysis of answers to open-ended questions. In Mark D. West (Ed.), *Applications of computer content analysis* (pp. 1–16). Westport, CT: Ablex.
- Moles, Abraham A. (1968). *Information theory and esthetic perception* (Joel F. Cohen, Trans.). Urbana: University of Illinois Press.
- Monroe, Burt L., & Schrodt, Philip A. (2008). Introduction to the special issue: The statistical analysis of political text. *Political Analysis, 16*, 351–355.
- Monroe, Joel M., Diener, Marc J., Fowler, J. Christopher, Sexton, James E., & Hilsenroth, Mark J. (2013). Criterion validity of the Rorschach Mutuality of Autonomy (MOA) scale: A meta-analytic review. *Psychoanalytic Psychology, 30*, 535–566.
- Morgan, Michael, & Shanahan, James. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media, 54*, 337–355.
- Morgan, Michael, Shanahan, James, & Signorielli, Nancy. (2009). Growing up with television: Cultivation processes. In Jennings Bryant & Mary Beth Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 34–49). New York: Routledge.
- Morgenstern, Matthis, Schoeppe, Franziska, Campbell, Julie, Braam, Marloes W. G., Stoolmiller, Michael, & Sargent, James D. (2015). Content themes of alcohol advertising in U.S. television—Latent class analysis. *Alcoholism: Clinical and Experimental Research, 39*, 1766–1774. doi:10.1111/acer.12811
- Morris, Jonathan S. (2009). *The Daily Show with Jon Stewart* and audience attitude change during the 2004 party conventions. *Political Behavior, 31*, 79–102.
- Mowrer, Donald E. (1996). A content analysis of student/instructor communication via computer conferencing. *Higher Education, 32*, 217–241.
- Mulac, Anthony, Bradac, James J., & Gibbons, Pamela. (2001). Empirical support for the gender-as-culture hypothesis: An intercultural analysis of male/female language differences. *Human Communication Research, 27*, 121–152.
- Mumford, Densua, & Selck, Torsten J. (2010). New labour's ethical dimension: Statistical trends in Tony Blair's foreign policy speeches. *BJPIR: The British Journal of Politics and International Relations, 12*, 295–312.
- Muncy, James A., Iyer, Rajesh, & Eastman, Jacqueline K. (2014). Medical advertising on demand: A content analysis of YouTube direct-to-consumer pharmaceutical advertisements. *Journal of Medical Marketing, 14*, 145–153.

- Murray, Henry A., and the staff of the Harvard Psychological Clinic. (1943). *Thematic Apperception Test manual*. Cambridge, MA: Harvard University Press.
- Murray, Noel M., & Murray, Sandra B. (1996). Music and lyrics in commercials: A cross-cultural comparison between commercials run in the Dominican Republic and in the United States. *Journal of Advertising*, 25(2), 51–63.
- Myers, Kathryn A., Zibrowski, Elaine M., & Lingard, Lorelei. (2011). A mixed-methods analysis of residents' written comments regarding their clinical supervisors. *Journal of the Association of American Medical Colleges*, 85(10), S21–S24.
- Naccarato, John. (1990). *Predictors of readership and recall: A content analysis of industrial ads* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Naccarato, John L., & Neuendorf, Kimberly A. (1998). Content analysis as a predictive methodology: Recall, readership, and evaluations of business-to-business print advertising. *Journal of Advertising Research*, 38(3), 19–33.
- Nardi, Bonnie A., Schiano, Diane J., & Gumbrecht, Michelle. (2004). Blogging as social activity, or, would you let 900 million people read your diary? *Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work*, Chicago, IL.
- Narmour, Eugene. (1996). Analyzing form and measuring perceptual content in Mozart's sonata K.282: A new theory of parametric analogues. *Music Perception*, 13, 265–318.
- National Television Violence Study (Volume 1)*. (1997). Thousand Oaks, CA: Sage.
- Nelson, Kerrie P., & Edwards, Don. (2015). Measures of agreement between many raters for ordinal classifications. *Statistics in Medicine*, 34, 3116–3132. doi:10.1002/sim.6546
- Netzley, Sara Baker. (2010). Visibility that demystifies: Gays, gender, and sex on television. *Journal of Homosexuality*, 57, 968–986.
- Neuendorf, Kimberly. (1985). Alcohol advertising and media portrayals. *Journal of the Institute for Socioeconomic Studies*, X(2), 67–78.
- Neuendorf, Kimberly. (1990a). Alcohol advertising: Regulation can help. In Ruth C. Engs (Ed.), *Controversies in the addictions field: Volume I* (pp. 119–129). Dubuque, IA: Kendall-Hunt.
- Neuendorf, Kimberly. (1990b). Health images in the mass media. In Eileen Berlin Ray & Lewis Donohew (Eds.), *Communication and health: Systems and applications* (pp. 111–135). Hillsdale, NJ: Lawrence Erlbaum.
- Neuendorf, Kimberly A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.
- Neuendorf, K. A. (2004). Content analysis: A contrast and complement to discourse analysis. *Qualitative Methods: Newsletter of the American Political Science Association Organized Section on Qualitative Methods*, 2(1), 33–36.
- Neuendorf, Kimberly A. (2009). Reliability for content analysis. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 67–87). New York: Routledge.
- Neuendorf, Kimberly A. (2011). Content analysis—A methodological primer for gender research. *Sex Roles*, 64, 276–289.

- Neuendorf, Kimberly, & Abelman, Robert. (1986). Televangelism: A look at communicator style. *Journal of Religious Studies*, 13(1), 41–59.
- Neuendorf, Kimberly A., & Abelman, Robert. (1987). An interaction analysis of religious television programming. *Review of Religious Research*, 29, 175–198.
- Neuendorf, Kimberly A., Brentar, James E., & Porco, James. (1990). Media technology hardware and human sensory channels: Cognitive structures in multidimensional space. *Communication Research Reports*, 7, 100–106.
- Neuendorf, Kimberly A., Gore, Thomas D., Dalessandro, Amy, Janstova, Patricie, & Snyder-Suhy, Sharon. (2010). Shaken and stirred: A content analysis of women's portrayals in James Bond films. *Sex Roles*, 62, 747–761.
- Neuendorf, Kimberly A., & Kumar, Anup. (2016, in press). Content analysis. In G. Mazzoleni (Ed.), *The international encyclopedia of political communication*. Hoboken, NJ: John Wiley & Sons.
- Neuendorf, Kimberly A., Rudd, Jill E., Palisin, Paul, & Pask, Elizabeth B. (2015). Humorous communication, verbal aggressiveness, and father-son relational satisfaction. *Humor: International Journal of Humor Research*, 28, 397–425. doi:10.1515/humor-2015-0066
- Neuendorf, Kimberly A., & Skalski, Paul. (2000, June). *Senses of humor: The development of a multi-factor scale in relationship to moving image utility*. Paper presented to the Mass Communication Division at the annual meeting of the International Communication Association, Acapulco, Mexico.
- Neuendorf, Kimberly A., & Skalski, Paul D. (2009). Quantitative content analysis and the measurement of collective identity. In Rawi Abdelal, Yoshiko M. Herrera, Alastair Iain Johnston, & Rose McDermott (Eds.), *Measuring identity: A guide for social scientists* (pp. 203–236). Cambridge, MA: Cambridge University Press.
- Neuendorf, Kimberly A., & Skalski, Paul D. (2010, May). *Extending the utility of content analysis via the scientific method*. Paper presented to the Social Science and Social Computing Workshop, University of Hawaii, Honolulu, HI.
- Neuendorf, Kimberly A., Skalski, Paul D., Jeffres, Leo W., & Atkin, David. (2014). Senses of humor, media use, and opinions about the treatment of marginalized groups. *International Journal of Intercultural Relations*, 42, 65–76.
- Neuendorf, Kimberly A., et al. (2016, in progress). *Comedy content on YouTube*. Research project, Cleveland State University.
- Neviarouskaya, Alena, Prendinger, Helmut, & Ishizuka, Mitsuru. (2007). Analysis of affect expressed through the evolving language of online communication. *Proceedings of the International Conference on Intelligent User Interfaces*, pp. 278–281.
- Neviarouskaya, Alena, Prendinger, Helmut, & Ishizuka, Mitsuru. (2009). Compositionality principle in recognition of fine-grained emotions from text. *Proceedings of the Third International ICWSM Conference* (pp. 278–281). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.151.4587>
- Newcomb, Horace. (Ed.). (1987). *Television: The critical view* (4th ed.). New York: Oxford University Press.
- Newhagen, John E., Cordes, John W., & Levy, Mark R. (1995). Nightly@nbc.com: Audience scope and perception of interactivity in viewer mail on the Internet. *Journal of Communication*, 45(3), 164–175.
- Newman, James. (2004). *Videogames*. London: Routledge.
- Newton, A. T., Kramer, A. D. I., & McIntosh, D. N. (2009). Autism online: A comparison of word usage in bloggers with and without autism spectrum disorders.

- CHI2009: *Proceedings of the 27th Annual CHI Conference on Human Factors in Computing Systems*, Vols. 1–4, 463–466.
- Newton, Barbara J., Buck, Elizabeth B., & Woelfel, Joseph A. (1986). Metric multi-dimensional scaling of viewers' perceptions of TV in five countries. *Human Organization*, 45(2), 162–170.
- Newton, Darren, Engquist, Gretchen, & Bois, Joyce. (1977). The objective basis of behavior units. *Personality and Social Psychology*, 35, 847–862.
- Nielsen. (2011). Retrieved from http://blog.nielsen.com/nielsenwire/online_mobile/what-consumers-watch-nielsens-q1-2010-three-screen-report/
- Nisbet, Robert, Elder, John, & Miner, Gary. (2009). *Handbook of statistical analysis and data mining applications*. Amsterdam: Elsevier.
- Nofsinger, Robert E. (1988/1989). "Let's talk about the record": Contending over topic redirection in the Rather/Bush interview. *Research on Language and Social Interaction*, 22, 273–292.
- Norris, Rebecca L., Bailey, Rachel L., Bolls, Paul D., & Wise, Kevin R. (2012). Effects of emotional tone and visual complexity on processing health information in prescription drug advertising. *Health Communication*, 27, 42–48.
- Norton, Robert. (1983). *Communicator style: Theory, applications, and measures*. Beverly Hills, CA: Sage.
- Nunnally, Jum C. (1982). Reliability of measurement. In Harold E. Mitzel (Ed.), *Encyclopedia of Educational Research* (5th ed., pp. 1589–1601). New York, NY: Free Press.
- Oerter, Rolf, Oerter, Rosemarie, Agostiani, Hendriati, Kim, Hye-On, & Wibowo, Sutji. (1996). The concept of human nature in East Asia: Etic and emic characteristics. *Culture and Psychology*, 2, 9–51.
- Oger, Stanislas, Rouvier, Mickael, & Linares, Georges. (2010). *Transcription-based video genre classification*. Paper presented at the International Conference on Audio Speech and Signal Processing, ICASS. Retrieved from http://www.mickael-rouvier.fr/files/ICASSP10_classif.pdf
- Ogletree, Shirley Matile, Merritt, Sara, & Roberts, John. (1994). Female/male portrayals on U.S. postage stamps of the twentieth century. *Communication Research Reports*, 11, 77–85.
- Oh, Onook, Agrawal, Manish, & Rao, H. Raghav. (2011). Information control and terrorism: Tracking the Mumbai terrorist attack through Twitter. *Information Systems Frontiers*, 13, 33–43.
- O'Hair, Dan. (1989). Dimensions of relational communication and control during physician–patient interactions. *Health Communication*, 1, 97–115.
- Oliver, Mary Beth. (1994). Portrayals of crime, race, and aggression in "reality-based" police shows: A content analysis. *Journal of Broadcasting & Electronic Media*, 38, 179–192.
- Oliver, Mary Beth, & Kalyanaraman, Sriram. (2002). Appropriate for all viewing audiences? An examination of violent and sexual portrayals in movie previews featured on video rentals. *Journal of Broadcasting & Electronic Media*, 46, 283–299. doi:10.1207/s15506878jobem4602_7
- Olsen, Mark. (1993). Signs, symbols and discourses: A new direction for computer-aided literature studies. *Computers and the Humanities*, 27, 309–314.
- Opoku, Robert A., Pitt, Leyland F., & Abratt, Russell. (2007). Positioning in cyberspace: Evaluating bestselling authors' online communicated brand personalities using computer-aided content analysis. *South African Journal of Business Management*, 38(4), 21–32.

- O'Reilly, Tim. (2005). *What is Web 2.0? Design patterns and business models for the next generation of software*. Retrieved from <http://oreilly.com/web2/archive/what-is-web-20.html>
- Orne, Martin T. (1975). On the social psychology experiment: With particular reference to demand characteristics and their implications. In George H. Lewis (Ed.), *Fist-fights in the kitchen* (pp. 183–195). Pacific Palisades, CA: Goodyear.
- Ortigosa, Alvaro, Martín, José M., & Carro, Rosa M. (2014). Sentiment analysis in Facebook and its application to e-learning. *Computers in Human Behavior*, *31*, 527–541.
- Osgood, Charles E., Suci, George J., & Tannenbaum, Percy H. (1957). *The measurement of meaning*. Urbana: University of Illinois Press.
- Owen, Patricia R. (2012). Portrayals of schizophrenia by entertainment media: A content analysis of contemporary movies. *Psychiatric Services*, *63*, 655–659.
- Özgeldi, Meriç, & Esen, Yasemin. (2010). Analysis of mathematical tasks in Turkish elementary school mathematics textbooks. *Procedia—Social and Behavioral Sciences*, *2*, 2277–2281.
- Padilla-Walker, Laura M., Coyne, Sarah M., Fraser, Ashley M., & Stockdale, Laura A. (2013). Is Disney the nicest place on earth? A content analysis of prosocial behavior in animated Disney films. *Journal of Communication*, *63*, 393–412. doi:10.1111/jcom.12022
- Paek, Hye-Jin, Hove, Thomas, & Jeon, Jehoon. (2013). Social media for message testing: A multilevel approach to linking favorable viewer responses with message, producer, and viewer influence on YouTube. *Health Communication*, *28*, 226–236.
- Paige, Samantha, Stollefson, Michael, Chaney, Beth, & Alber, Julia. (2015). Pinterest as a resource for health information on Chronic Obstructive Pulmonary Disease (COPD): A social media content analysis. *American Journal of Health Education*, *46*(4), 241–251.
- Pang, Bo, & Lee, Lillian. (2008). Opinion mining and sentiment analysis. *Foundations and Trends in Information Retrieval*, *2*(1–2), 1–135.
- Papacharissi, Zizi. (2007). Audiences as media producers: Content analysis of 260 blogs. In Mark Tremayne (Ed.), *Blogging, citizenship, and the future of media* (pp. 21–38). New York: Routledge.
- Pardun, Carol J., L'Engle, Kelly Ladin, & Brown, Jane D. (2005). Linking exposure to outcomes: Early adolescents' consumption of sexual content in six media. *Mass Communication & Society*, *8*, 75–91.
- Park, Jung-ran, Lu, Caimei, & Marion, Linda. (2009). Cataloging professionals in the digital environment: A content analysis of job descriptions. *Journal of the American Society for Information Science and Technology*, *60*, 844–857.
- Pasadeos, Y., Huhman, B., Standley, T., & Wilson, G. (1995, May). *Applications of content analysis in news research: A critical examination*. Paper presented to the Communication Theory and Methodology Division of the Association for Education in Journalism and Mass Communication, Washington, DC.
- Pasadeos, Yorgo, & Renfro, Paula. (1988). Rupert Murdoch's style: The *New York Post*. *Newspaper Research Journal*, *9*(4), 25–34.
- Patchin, Justin W., & Hinduja, Sameer. (2010). Trends in online social networking: Adolescent use of MySpace over time. *New Media & Society*, *12*, 197–216.

- Patron-Perez, Alonso, Marszalek, Marcin, Zisserman, Andrew, & Reid, Ian. (2010, September). High five: Recognising human interactions in TV shows. *Proceedings of the British Machine Vision Conference*. Retrieved from <http://www.robots.ox.ac.uk/~vgg/publications/2010/PatronPerez10/patronperez10.pdf>
- Patterson, Gerald R. (1982). *A social learning approach: Vol. 3. Coercive family processes*. Eugene, OR: Castalia.
- Pavlik, John V. (1998). *New media technology: Cultural and commercial perspectives*. Boston, MA: Allyn and Bacon.
- Peirce, Charles Sanders. (1931–1958). *Collected papers of Charles Sanders Peirce* (Ed. Charles Hartshorne & Paul Weiss). Cambridge, MA: Harvard University Press.
- Pennebaker, James W. (2011). *The secret life of pronouns: What our words say about us*. New York: Bloomsbury Press.
- Pennebaker, James W., & Chung, Cindy K. (2009). Computerized text analysis of Al-Qaeda transcripts. In Klaus Krippendorff & Mary Angela Bock (Eds.), *The content analysis reader* (pp. 453–465). Thousand Oaks, CA: Sage.
- Pennebaker, James W., & Francis, Martha E. (1999). *Linguistic inquiry and word count (LIWC)*. Mahwah, NJ: Lawrence Erlbaum.
- Pennebaker, James W., Francis, Martha E., & Booth, R. J. (2001). *Linguistic inquiry and word count: LIWC2001*. Mahwah, NJ: Lawrence Erlbaum.
- Pennings, Paul, & Arnold, Christine. (2008). Is constitutional politics like politics “at home”? The case of the EU Constitution. *Political Studies*, *56*, 789–806. doi:10.1111/j.1467-9248.2007.00697.x
- Perreault, William D., Jr., & Leigh, Laurence E. (1989, May). Reliability of nominal data based on qualitative judgments. *Journal of Marketing Research*, *26*, 135–148.
- Perrin, Andrew J. (2005). National threat and political culture: Authoritarianism, antiauthoritarianism, and the September 11 attacks. *Political Psychology*, *26*, 167–194.
- Perrin, Andrew J., & Vaisey, Stephen. (2008). Parallel public spheres: Distance and discourse in letters to the editor. *American Journal of Sociology*, *114*, 781–810.
- Pershad, Dwarka, & Verma, S. K. (1995). Diagnostic significance of content analysis of SIS-II. *Journal of Projective Psychology and Mental Health*, *2*(2), 139–144.
- Peterkin, Kimberly Y. (2014). *Online travel agencies as a source of hotel information: A content analysis* (Unpublished master's thesis). University of Ljubljana, Slovenia.
- Peterson, Christopher, Bettes, Barbara A., & Seligman, Martin E. P. (1985). Depressive symptoms and unprompted causal attributions: Content analysis. *Behavior Research and Therapy*, *23*, 379–382.
- Peterson, Christopher, Luborsky, Lester, & Seligman, Martin E. P. (1983). Attributions and depressive mood shifts: A case study using the symptom-context method. *Journal of Abnormal Psychology*, *92*, 96–103.
- Peterson, Christopher, Seligman, Martin E. P., & Vaillant, George E. (1988). Pessimistic explanatory style is a risk factor for physical illness: A thirty-five-year longitudinal study. *Journal of Personality and Social Psychology*, *55*, 23–27.
- Pettijohn, Terry F., II, & Jungeberg, Brian J. (2004). *Playboy playmate curves: Changes in facial and body feature preferences across social and economic conditions*. *Personality and Social Psychology Bulletin*, *30*, 1186–1197.
- Pettijohn, Terry F., II, & Sacco, Donald F., Jr. (2009). The language of lyrics: An analysis of popular *Billboard* songs across conditions of social and economic threat. *Journal of Language and Social Psychology*, *28*, 297–311.

- Pettijohn, Terry F., II., & Tesser, Abraham. (1999). Popularity in environmental context: Facial feature assessment of American movie actresses. *Media Psychology, 1*, 229–247.
- Pfau, Michael, Moy, Patricia, Holbert, R. Lance, Szabo, Erin A., Lin, Wei-Kuo, & Zhang, Weiwu. (1998). The influence of political talk radio on confidence in democratic institutions. *Journalism & Mass Communication Quarterly, 75*, 730–745.
- Pfeffer, K., & Orum, J. (2009). Risk and injury portrayal in boys' and girls' favourite television programmes. *Injury Prevention, 15*, 312–316. doi:10.1136/ip.2008.019539
- Phelan, Sean, & Shearer, Fiona. (2009). The “radical”, the “activist” and the hegemonic newspaper articulation of the Aotearoa New Zealand foreshore and seabed conflict. *Journalism Studies, 10*, 220–237.
- Phillips, David P. (1974). The influence of suggestion on suicide: Substantive and theoretical implications of the Werther effect. *American Sociological Review, 39*, 340–354.
- Phillips, David P. (1982). The impact of fictional television stories on U.S. adult fatalities: New evidence on the effect of the mass media on violence. *American Journal of Sociology, 87*, 1340–1359.
- Phillips, David P. (1983). The impact of mass media violence on U.S. homicides. *American Sociological Review, 48*, 560–568.
- Phillips, David P., Barker, Gwendolyn E., & Brewer, Kimberly M. (2010). Christmas and New Year as risk factors for death. *Social Science & Medicine, 71*, 1463–1471.
- Phillips, David P., Barker, Gwendolyn E. C., & Eguchi, Megan M. (2008). A steep increase in domestic fatal medication errors with use of alcohol and/or street drugs. *Archives of Internal Medicine, 168*, 1561–1566.
- Phillips, David P., & Bredder, Charlene C. (2002). Morbidity and mortality from medical errors: An increasingly serious public health problem. *Annual Review of Public Health, 23*, 135–150.
- Phillips, David P., & Hensley, John E. (1984). When violence is rewarded or punished: The impact of mass media stories on homicide. *Journal of Communication, 34*(3), 101–116.
- Phillips, David P., Jarvinen, Jason R., & Phillips, Rosalie R. (2005). A spike in fatal medication errors at the beginning of each month. *Pharmacotherapy, 25*, 1–9.
- Phillips, David P., & Paight, Daniel J. (1987). The impact of televised movies about suicide: A replicative study. *New England Journal of Medicine, 317*, 809–811.
- Phillips, David P., Van Voorhees, Camilla A., & Ruth, Todd E. (1992). The birthday: Lifeline or deadline? *Psychosomatic Medicine, 54*, 532–542.
- Pian, Wenjing, Khoo, Christopher S. G., & Chang, Yun-Ke. (2014). Relevance judgment when browsing a health discussion forum: Content analysis of eye fixations. *LIBRES: Library & Information Science Research Electronic Journal, 24*(2), 132–147.
- Pieper, Katherine M., Chan, Elaine, & Smith, Stacy L. (2009). Violent video games: Challenges to assessing content patterns. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 211–230). New York: Routledge.
- Pileggi, Mary S., Grabe, Maria Elizabeth, Holderman, Lisa B., & de Montigny, Michelle. (2000). Business as usual: The American dream in Hollywood business films. *Mass Communication & Society, 3*, 207–228.

- Pinto, R. M., & McKay, M. M. (2006). A mixed-method analysis of African-American women's attendance at an HIV prevention intervention. *Journal of Community Psychology, 34*, 601–616.
- Plous, S., & Neptune, Dominique. (1997). Racial and gender biases in magazine advertising: A content-analytic study. *Psychology of Women Quarterly, 21*, 627–644.
- Poindexter, Paula M., & Stroman, Carolyn A. (1981). Blacks and television: A review of the research literature. *Journal of Broadcasting, 25*, 103–122.
- Pokrywczynski, James V. (1988). Sex in ads targeted to black and white readers. *Journalism Quarterly, 65*, 756–760.
- Pollach, Irene. (2012). Taming textual data: The contribution of corpus linguistics to computer-aided text analysis. *Organizational Research Methods, 15*, 263–287.
- Poole, Marshall Scott, & Folger, Joseph P. (1981). A method for establishing the representational validity of interaction coding systems: Do we see what they see? *Human Communication Research, 8*, 26–42.
- Poole, Marshall Scott, Van de Ven, Andrew H., Dooley, Kevin, & Holmes, Michael E. (2000). *Organizational change and innovation processes: Theory and methods for research*. Oxford, U.K.: Oxford University Press.
- Popping, Roel. (1988). On agreement indices for nominal data. In Willem E. Saris & Irmtraud N. Gallhofer (Eds.), *Sociometric research: Volume 1, data collection and scaling* (pp. 90–105). New York: St. Martin's.
- Popping, Roel. (1997). Computer programs for the analysis of texts and transcripts. In Carl W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 209–221). Mahwah, NJ: Lawrence Erlbaum.
- Popping, Roel. (2000). *Computer-assisted text analysis*. London: Sage.
- Popping, Roel. (2010). Some views on agreement to be used in content analysis studies. *Quality and Quantity, 44*, 1067–1078. doi:10.1007/s11135-009-9258-3
- Porpora, Douglas V., Nikolaev, Alexander, & Hagemann, Julia. (2010). Abuse, torture, frames, and the *Washington Post*. *Journal of Communication, 60*, 254–270.
- Potter, James, Linz, Dan, Wilson, Barbara J., Kunkel, Dale, Donnerstein, Ed, Smith, Stacy L., Blumenthal, Eva, & Gray, Tim. (1998). Content analysis of entertainment television: New methodological developments. In James T. Hamilton (Ed.), *Television violence and public policy* (pp. 55–103). Ann Arbor: The University of Michigan Press.
- Potter, Robert F., & Choi, Jinmyung. (2006). The effects of auditory structural complexity on attitudes, attention, arousal, and memory. *Media Psychology, 8*, 395–419. doi:10.1207/s1532785xmep0804_4
- Potter, Rosanne G. (1991). Statistical analysis of literature: A retrospective on computers and the humanities, 1966–1990. *Computers and the Humanities, 25*, 401–429.
- Potter, W. James. (2008). Adolescents and television violence. In Patrick E. Jamieson & Daniel Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 221–249). Oxford: Oxford University Press.
- Potter, W. James. (2011). *Media literacy* (5th ed.). Los Angeles, CA: Sage.
- Potter, W. James, & Levine-Donnerstein, Deborah. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research, 27*, 258–284.
- Potter, W. James, & Ware, William. (1987). An analysis of the contexts of antisocial acts on prime-time television. *Communication Research, 14*, 664–686.

- Potter, W. James, & Warren, Ron. (1998). Humor as camouflage of televised violence. *Journal of Communication*, 48(2), 40–57.
- Powell, Kimberly A. (2011). Framing Islam: An analysis of U.S. media coverage of terrorism since 9/11. *Communication Studies*, 62, 90–112.
- Powers, Stephen, Rothman, David J., & Rothman, Stanley. (1996). *Hollywood's America: Social and political themes in motion pictures*. Boulder, CO: Westview.
- Pratt, Laurie, Wiseman, Richard L., Cody, Michael J., & Wendt, Pamela F. (1999). Interrogative strategies and information exchange in computer-mediated communication. *Communication Quarterly*, 47, 46–66.
- Prieler, Michael, Kohlbacher, Florian, Hagiwara, Shigeru, & Arima, Akie. (2015). The representation of older people in television advertisements and social change: The case of Japan. *Ageing and Society*, 35, 865–887.
- Primack, Brian A., Gold, Melanie A., Schwarz, Eleanor B., & Dalton, Madeline A. (2008). Degrading and non-degrading sex in popular music: A content analysis. *Public Health Reports*, 123, 593–600.
- Prince, Stephen Robert. (1987). Power, pain, and pleasure in pornography: A content analysis of pornographic feature films, 1972–1985. *Dissertations (ASC)*. Paper 4.
- Procter, Rob, Vis, Farida, & Voss, Alex. (2013). Reading the riots on Twitter: Methodological innovation for the analysis of big data. *International Journal of Social Research Methodology*, 16, 197–214.
- Project description. (n.d.). *Manifesto Project*. Retrieved from <https://manifesto-project.wzb.eu/>
- Prominski, Olga. (2006). *A comparison of indigenous and foreign magazine advertising in Russia* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Propp, Vladimir. (1968). *Morphology of the folk tale* (Laurence Scott, Trans.). Austin: University of Texas Press.
- Pudrovskaya, Tetyana, & Ferree, Myra Marx. (2004). Global activism in “virtual space”: The European women's lobby in the network of transnational women's NGOs on the web. *Social Politics: International Studies in Gender, State and Society*, 11(1), 117–143.
- Puhl, Rebecca, Peterson, Jamie Lee, DePierre, Jenny A., & Juedicke, Joerg. (2013). Headless, hungry, and unhealthy: A video content analysis of obese persons portrayed in online news. *Journal of Health Communication*, 18, 686–702. doi:10.1080/10810730.2012.743631
- Qin, Jie. (2015). Hero on Twitter, traitor on news: How social media and legacy news frame Snowden. *International Journal of Press/Politics*, 20, 166–184. doi:10.1177/1940161214566709
- Raban, Daphne Ruth. (2009). Self-presentation and the value of information in Q&A websites. *Journal of the American Society for Information Science and Technology*, 60, 2465–2473.
- Racine, Eric, Bar-Ilan, Ofek, & Illes, Judy. (2006). Brain imaging: A decade of coverage in the print media. *Science Communication*, 28(1), 122–143.
- Rada, James A., & Wulfemeyer, K. Tim. (2005). Color coded: Racial descriptors in television coverage of intercollegiate sports. *Journal of Broadcasting & Electronic Media*, 49, 65–85.

- Rafaeli, Sheizaf, & Sudweeks, Fay. (1997). Networked interactivity. *Journal of Computer Mediated Communication*, 2(4).
- Ragas, Matthew W. (2014). Intermedia agenda setting in business news coverage. In Roderick P. Hart (Ed.), *Communication and language analysis in the public sphere* (pp. 335–357). Hershey, PA: IGI Global.
- Rains, Stephen A., & Bosch, Leslie A. (2009). Privacy and health in the information age: A content analysis of health web site privacy policy statements. *Health Communication*, 24, 435–446.
- Rajecki, D. W., McTavish, Donald G., Rasmussen, Jeffrey Lee, Schreuders, Madelon, Byers, Diane C., & Jessup, K. Sean. (1994). Violence, conflict, trickery, and other story themes in TV ads for food for children. *Journal of Applied Social Psychology*, 24, 1685–1700.
- Ramanadhan, Shoba, Mendez, Samuel R., Rao, Megan, & Viswanath, Kasisomayajula. (2013). Social media use by community-based organizations conducting health promotion: A content analysis. *BMC Public Health*, 13, 1129+.
- Ramasubramanian, Srividya, & Martin, Suzanne M. (2009). Teens and the new media environment: Challenges and opportunities. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 99–115). New York: Routledge.
- Reisinger, Don. (2012, November). Netflix gobbles a third of peak Internet traffic in North America. *CNET*. Retrieved from <http://news.cnet.com>.
- Renshon, Jonathan. (2009). When public statements reveal private beliefs: Assessing operational codes at a distance. *Political Psychology*, 30, 649–661.
- Resnik, Alan, & Stern, Bruce L. (1977). An analysis of information content in television advertising. *Journal of Marketing*, 41, 50–53.
- Rice, Ronald E., & Danowski, James. (1991). Comparing comments and semantic networks about voice mail. *ASIS '91: Proceedings of the 54th ASIS annual meeting*, 28, 134–138.
- Riessman, Catherine Kohler. (2008). *Narrative methods for the human sciences*. Thousand Oaks, CA: Sage.
- Riffe, Daniel, Aust, Charles F., & Lacy, Stephen R. (1993). The effectiveness of random, consecutive day and constructed week samplings in newspaper content analysis. *Journalism Quarterly*, 70, 133–139.
- Riffe, Daniel, & Freitag, Alan. (1997). A content analysis of content analyses: Twenty-five years of *Journalism Quarterly*. *Journalism & Mass Communication Quarterly*, 74, 873–882.
- Riffe, Daniel, Lacy, Stephen, & Drager, Michael W. (1996). Sample size in content analysis of weekly news magazines. *Journalism & Mass Communication Quarterly*, 73, 635–644.
- Riffe, Daniel, Lacy, Stephen, & Fico, Frederick. (2014). *Analyzing media messages: Using quantitative content analysis in research* (3rd ed.). New York: Routledge.
- Riffe, Daniel, Lacy, Stephen, Nagovan, Jason, & Burkum, Larry. (1996). The effectiveness of simple and stratified random sampling in broadcast news content analysis. *Journalism & Mass Communication Quarterly*, 73, 159–168.
- Riffe, Daniel, Place, Patricia C., & Mayo, Charles M. (1993). Game time, soap time and prime time of ads: Treatment of women in Sunday football and rest-of-week advertising. *Journalism Quarterly*, 70, 437–446.

- Robair, Gino. (2015, August). Who's keeping score? *Mix*, p. 53.
- Robb, David. (2000, February 29). Blacks get lots of prime-time roles, but half are in sitcoms, study finds. *Cleveland Plain Dealer*, p. 6E.
- Roberts, Carl W. (1997a). Semantic text analysis: On the structure of linguistic ambiguity in ordinary discourse. In Carl W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 55–78). Mahwah, NJ: Lawrence Erlbaum.
- Roberts, Carl W. (Ed.). (1997b). *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts*. Mahwah, NJ: Lawrence Erlbaum.
- Roberts, Donald F., & Christenson, Peter G. (2000, February). "Here's looking at you, kid": *Alcohol, drugs and tobacco in entertainment media*. A literature review prepared for the National Center on Addiction and Substance Abuse at Columbia University. Retrieved from <http://www.kff.org/topics.cgi?topic=tv>. [March 15, 2000].
- Roberts, Marilyn, & McCombs, Maxwell. (1994). Agenda-setting and political advertising—Origins of the news agenda. *Political Communication*, 11, 249–262.
- Roberts, Michele, & Pettigrew, Simone. (2007). A thematic content analysis of children's food advertising. *International Journal of Advertising*, 26, 357–367.
- Robertson, Kirsten, & Murachver, Tamar. (2006). Intimate partner violence: Linguistic features and accommodation behavior of perpetrators and victims. *Journal of Language and Social Psychology*, 25, 406–422.
- Robinson, Byron F., & Bakeman, Roger. (1998). ComKappa: A Windows '95 program for calculating kappa and related statistics. *Behavior Research Methods, Instruments, & Computers*, 30, 731–734.
- Robinson, John P., Shaver, Phillip R., & Wrightsman, Lawrence S. (Eds.). (1991). *Measures of personality and social psychological attitudes*. San Diego, CA: Academic Press.
- Robinson, John P., Shaver, Phillip R., & Wrightsman, Lawrence S. (Eds.). (1999). *Measures of political attitudes*. San Diego, CA: Academic Press.
- Robinson, Piers, Goddard, Peter, Parry, Katy, & Murray, Craig. (2009). Testing models of media performance in wartime: U.K. TV news and the 2003 invasion of Iraq. *Journal of Communication*, 59, 534–563.
- Rodriguez, Keri L., Bayliss, Nichole, Alexander, Stewart C., Jeffreys, Amy S., Olsen, Maren K., Pollak, Kathryn I., Kennfier, Sarah L., Tulskey, James A., & Arnold, Robert M. (2010). How oncologists and their patients with advanced cancer communicate about health-related quality of life. *Psycho-Oncology*, 19, 490–499.
- Rogan, Randall G., & Hammer, Mitchell R. (1995). Assessing message affect in crisis negotiations: An exploratory study. *Human Communication Research*, 21, 553–574.
- Rogers, L. Edna, & Farace, Richard V. (1975). Analysis of relational communication in dyads: New measurement procedures. *Human Communication Research*, 1, 222–239.
- Rogers, L. Edna, & Millar, Frank. (1982). The question of validity: A pragmatic response. In Michael Burgoon (Ed.), *Communication yearbook 5* (pp. 249–257). New Brunswick, NJ: Transaction.
- Rogers-Millar, L. Edna, & Millar, Frank E. (1978). Domineeringness and dominance: A transactional view. *Human Communication Research*, 5, 238–246.

- Romney, Lee. (1997, January 8). UCI given \$1.5 million by Psychiatry Dept. founder. *Los Angeles Times*. Retrieved from http://articles.latimes.com/1997-01-08/local/me-16606_1_university-officials
- Rorissa, Abebe. (2007). Relationships between perceived features and similarity of images: A test of Tversky's contrast model. *Journal of the American Society for Information Science and Technology*, 58, 1401–1418.
- Rorissa, Abebe, & Demissie, Dawit. (2010). An analysis of African e-Government service websites. *Government Information Quarterly*, 27, 161–169. doi:10.1016/j.giq.2009.12.003
- Rose, Gregory M., Merchant, Altaf, & Bakir, Aysen. (2012). Fantasy in food advertising targeted at children. *Journal of Advertising*, 41(3), 75–90.
- Rosenbaum, Howard, & Snyder, Herbert. (1991). An investigation of emerging norms in computer mediated communication: An empirical study of computer conferencing. *ASIS91: Proceedings of the 54th ASIS annual meeting*, 28, 15–23.
- Rosenberg, Stanley D., & Tucker, Gary J. (1979). Verbal behavior and schizophrenia: The semantic dimension. *Archives of General Psychiatry*, 36, 1331–1337.
- Rosenfeld, Azriel, Doermann, David, & DeMenthon, Daniel. (Eds.). (2003). *Video mining*. Boston, MA: Kluwer Academic Publishers.
- Rosenthal, Robert. (1987). *Judgment studies: Design, analysis, and meta-analysis*. Cambridge, NJ: Cambridge University Press.
- Roter, Debra L., Hall, Judith A., & Aoki, Yutaka. (2002). Physician gender effects in medical communication: A meta-analytic review. *JAMA*, 288, 756–764.
- Roter, Debra, Lipkin, Mack, Jr., & Dorsgaard, Audrey. (1991). Sex differences in patients' and physicians' communication during primary care medical visits. *Medical Care*, 29, 1083–1093.
- Rothbaum, Fred, & Tsang, Bill Yuk-Piu. (1998). Love songs in the United States and China: On the nature of romantic love. *Journal of Cross-Cultural Psychology*, 29, 306–319.
- Rothbaum, Fred, & Xu, Xiaofang. (1995). The theme of giving back to parents in Chinese and American songs. *Journal of Cross-Cultural Psychology*, 26, 698–713
- Rourke, Liam, Anderson, Terry, Garrison, D. R., & Archer, Walter. (2001). Methodological issues in the content analysis of computer conference transcripts. *International Journal of Artificial Intelligence in Education*, 12, 8–22.
- Rubin, Donald L., & Greene, Kathryn. (1992). Gender-typical style in written language. *Research in the Teaching of English*, 26(1), 7–40.
- Rubin, Rebecca B., Palmgreen, Philip, & Sypher, Howard E. (Eds.). (1994). *Communication research measures: A sourcebook*. New York: Guilford.
- Rubin, Rebecca B., Rubin, Alan M., Graham, Elizabeth E., Perse, Elizabeth M., & Seibold, David R. (2009). *Communication research measures II: A sourcebook*. New York: Routledge.
- Rudy, Rena M., Popova, Lucy, & Linz, Daniel G. (2010). The context of current content analysis of gender roles: An introduction to a special issue. *Sex Roles*, 62, 705–720.
- Rudy, Rena M., Popova, Lucy, & Linz, Daniel G. (2011). Contributions to the content analysis of gender roles: An introduction to a special issue. *Sex Roles*, 64, 151–159.
- Rybalko, Svetlana, & Seltzer, Trent. (2010). Corporate communications in 140 characters or less: Are Fortune 500 companies using Twitter to foster dialogic communication? *Public Relations Review*, 36, 336–341.

- Saeed, Amir. (2007). Media, racism and Islamophobia: The representation of Islam and Muslims in the media. *Sociology Compass*, 1, 443–462.
- Saegert, Susan C., & Jellison, Jerald M. (1970). Effects of initial level of response competition and frequency of exposure on liking and exploratory behavior. *Journal of Personality and Social Psychology*, 16, 553–558.
- Salazar, Laura F., Fleischauer, Pamela J., Bernhardt, Jay M., & DiClemente, Ralph J. (2009). Sexually explicit content viewed by teens on the internet. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 116–136). New York: Routledge.
- Salisbury, Joseph G. T. (2001). Using neural networks to assess corporate image. In Mark D. West (Ed.), *Applications of computer content analysis* (pp. 65–85). Westport, CT: Ablex.
- Salomon, Gavriel. (1987). *Interaction of media, cognition, and learning*. San Francisco: Jossey-Bass.
- Salt, Barry. (2005). A note on “Hollywood camera movements and the films of Howard Hawks: A functional semiotic approach” by Brian O’Leary. *New Review of Film and Television Studies*, 3, 101–103.
- Salt, Barry. (2009). The shape of 1999: The stylistics of American movies at the end of the century. In Warren Buckland (Ed.), *Film theory and contemporary Hollywood movies* (pp. 124–149). New York: Routledge.
- Salt, Barry. (2011). Reaction time: How to edit movies. *New Review of Film and Television Studies*, 9, 341–357. doi:10.1080/17400309.2011.585865
- Salwen, Michael B. (1986). Effect of accumulation of coverage on issue salience in agenda setting. *Journalism Quarterly*, 65, 100–106.
- Sanfilippo, Antonio, Bell, Eric, & Corley, Courtney. (2014). *Current trends in the detection of sociocultural signatures: Data-driven models*. The MITRE Corporation. Retrieved from <http://www.mitre.org/sites/default/files/publications/sensemaking-ch06.pdf>
- Satterfield, Jason M. (1998). Cognitive-affective states predict military and political aggression and risk taking: A content analysis of Churchill, Hitler, Roosevelt, and Stalin. *Journal of Conflict Resolution*, 42, 667–690.
- Sattikar, Mr. A. A., & Kulkarni, Dr. R. V. (2012). Natural language processing for content analysis in social networking. *International Journal of Engineering Inventions*, 1(4), 6–9.
- Saussure, Ferdinand de. (1916). (1974). *Course in general linguistics* (Wade Baskin, Trans.). London: Fontana/Collins.
- Scanfled, Daniel, Scanfled, Vanessa, & Larson, Elaine L. (2010). Dissemination of health information through social networks: Twitter and antibiotics. *American Journal of Infection Control*, 38, 182–188.
- Scharrer, Erica, Bergstrom, Andrea, Paradise, Angela, & Ren, Qianqing. (2006). Laughing to keep from crying: Humor and aggression in television commercial content. *Journal of Broadcasting & Electronic Media*, 50, 615–634.
- Scharrer, Erica, Kim, D. Daniel, Lin, Ke-Ming, & Liu, Zixu. (2006). Working hard or hardly working? Gender, humor, and the performance of domestic chores in television commercials. *Mass Communication & Society*, 9, 215–238.
- Schedler, Andreas, & Mudde, Cas. (2010). Data usage in quantitative comparative politics. *Political Research Quarterly*, 63, 417–433.
- Schenck-Hamlin, William J., Procter, David E., & Rumsey, Deborah J. (2000). The influence of negative advertising frames on political cynicism and politician accountability. *Human Communication Research*, 26, 53–74.

- Scheufele, Dietram A., & Tewksbury, David. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, 57, 9–20.
- Schmierbach, Mike. (2009). Content analysis of video games: Challenges and potential solutions. *Communication Methods and Measures*, 3, 147–172.
- Schneider, Benjamin, Wheeler, Jill K., & Cox, Jonathan F. (1992). A passion for service: Using content analysis to explicate service climate themes. *Journal of Applied Psychology*, 77, 705–716.
- Schonhardt-Bailey, Cheryl. (2012, July). *Looking at congressional committee deliberations from different perspectives: Is the added effort worth it?* Paper prepared for the 5th ESRC Research Methods Festival, St. Catherine's College, Oxford. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2130909.
- Schonhardt-Bailey, Cheryl. (2016, in progress). *Accountability in the oversight of UK economic policy: Analysing the verbal and non-verbal deliberation in select committees*. Government Department, London School of Economics and Political Science.
- Schramm, Wilbur. (1954). How communication works. In Wilbur Schramm (Ed.), *The process and effects of communication* (pp. 3–26). Urbana: University of Illinois Press.
- Schramm, Wilbur, & Roberts, Donald F. (1971). *The process and effects of mass communication* (Rev. ed.). Urbana: University of Illinois Press.
- Schreer, George E., & Strichartz, Jeremy M. (1997). Private restroom graffiti: An analysis of controversial social issues on two college campuses. *Psychological Reports*, 81, 1067–1074.
- Schreier, Margrit. (2012). *Qualitative content analysis in practice*. London: Sage.
- Schroedel, Jean, Bligh, Michelle, Merolla, Jennifer, & Gonzalez, Randall. (2013). Charismatic rhetoric in the 2008 presidential campaign: Commonalities and differences. *Presidential Studies Quarterly*, 43, 101–128.
- Schulman, Peter, Castellon, Camilo, & Seligman, Martin E. P. (1989). Assessing explanatory style: The content analysis of verbatim explanations and the attributional style questionnaire. *Behavior Research and Therapy*, 27, 505–512.
- Schwalbe, Carol B., Silcock, B. William, & Keith, Susan. (2008). Visual framing of the early weeks of the U.S.-led invasion of Iraq: Applying the master war narrative to electronic and print images. *Journal of Broadcasting & Electronic Media*, 52, 448–465. doi:10.1080/08838150802205702
- Schwartz, H. Andrew, Eichstaedt, Johannes C., Dziurzynski, Lukasz, Kern, Margaret L., Seligman, Martin E. P., Ungar, Lyle H., et al. (2013). Toward personality insights from language exploration in social media. *AAAI Spring Symposium: Analyzing Microtext* (pp. 72–79).
- Scott, William A. (1955). Reliability of content analysis: The case of nominal scale coding. *Public Opinion Quarterly*, 19, 321–325.
- Seale, Clive, Rivas, Carol, & Kelly, Moira. (2013). The challenge of communication in interpreted consultations in diabetes care: A mixed methods study. *British Journal of General Practice*, 63(607), 125–133.
- Semetko, Holli A., & Valkenburg, Patti M. (2000). Framing European politics: A content analysis of press and television news. *Journal of Communication*, 50(2), 93–109.
- Severin, Werner J., & Tankard, James W., Jr. (1997). *Communication theories: Origins, methods, and uses in the mass media* (4th ed.). New York: Longman.

- Shaffer, David R., Pegalis, Linda, & Cornell, David P. (1991). Interactive effects of social context and sex role identity on female self-disclosure during the acquaintance process. *Sex Roles, 24*, 1–19.
- Shah, Dhavan V., Cappella, Joseph N., & Neuman, W. Russell. (2015). Big data, digital media, and computational social science: Possibilities and perils. *The Annals of the American Academy, 659*, 6–13.
- Shah, Dhavan V., McLeod, Douglas M., Gotlieb, Melissa R., & Lee, Nam-Jin. (2009). Framing and agenda setting. In Robin L. Nabi & Mary Beth Oliver (Eds.), *The SAGE handbook of media processes and effects* (pp. 83–98). Los Angeles, CA: Sage.
- Shannon, Claude E., & Weaver, Warren. (1998). *The mathematical theory of communication*. Urbana: University of Illinois Press.
- Shapiro, Gilbert, & Markoff, John. (1997). A matter of definition. In Carl W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 9–34). Mahwah, NJ: Lawrence Erlbaum.
- Shapiro, Gilbert, Markoff, John, & Weitman, Sasha R. (1973). Quantitative studies of the French revolution. *History and Theory, 12*, 163–191.
- Shelton, Ashleigh K., & Skalski, Paul. (2014). Blinded by the light: Illuminating the dark side of social network use through content analysis. *Computers in Human Behavior, 33*, 339–348.
- Shenk, Dena. (2001). Intergenerational family relationships of older women in central Minnesota. *Ageing and Society, 21*, 591–603.
- Shephard, Mark, & Cairney, Paul. (2005). The impact of the Scottish Parliament in amending executive legislation. *Political Studies, 53*, 303–319.
- Sherman, Barry L., & Dominick, Joseph R. (1986). Violence and sex in music videos: TV and rock 'n' roll. *Journal of Communication, 36*(4), 76–90.
- Sherry, John L. (2001). The effects of violent video games on aggression: A meta-analysis. *Human Communication Research, 27*, 409–431.
- Sherry, John. (2007). Violent video games and aggression: Why can't we find effects? In Raymond W. Preiss, Barbara Mae Gayle, Nancy Burrell, Mike Allen, & Jennings Bryant (Eds.), *Mass media effects research: Advances through meta-analysis* (pp. 245–262). Mahwah, NJ: Lawrence Erlbaum.
- Shifman, Limor. (2007). Humor in the age of digital reproduction: Continuity and change in Internet-based comic texts. *International Journal of Communication, 1*, 187–209.
- Shifman, Limor, & Blondheim, Menahem. (2010). The medium is the joke: Online humor about and by networked computers. *New Media & Society, 12*, 1348–1367.
- Shoemaker, Pamela J. (1984). Media treatment of deviant political groups. *Journalism Quarterly, 61*, 66–75, 82.
- Shoemaker, Pamela J., & Cohen, Akiba A. (2006). *News around the world: Content, practitioners, and the public*. New York: Routledge.
- Shoemaker, Pamela J., & Reese, Stephen D. (1990). Exposure to what? Integrating media content and effects studies. *Journalism Quarterly, 67*, 649–652.
- Shoemaker, Pamela J., & Reese, Stephen D. (1996). *Mediating the message: Theories of influences on mass media content* (2nd ed.). White Plains, NY: Longman.
- Short, Jeremy C., Broberg, J. Christian, Cogliser, Claudia C., & Brigham, Keith H. (2010). Construct validation using computer-aided text analysis (CATA): An illustration using entrepreneurial orientation. *Organizational Research Methods, 13*, 320–347.

- Short, Jeremy C., & Palmer, Timothy B. (2008). The application of DICTION to content analysis research in strategic management. *Organizational Research Methods, 11*, 727–752.
- Short, Jeremy C., Payne, G. Tyge, Brigham, Keith H., Lumpkin, G. T., & Broberg, J. Christian. (2009). Family firms and entrepreneurial orientation in publicly traded firms. *Family Business Review, 22*, 9–24.
- Shoukri, Mohamed M. (2011). *Measures of interobserver agreement and reliability* (2nd ed.). Boca Raton, FL: CRC Press.
- Shrout, Patrick E., & Fleiss, Joseph L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin, 86*, 420–428.
- Sieben, Johannes. (2014). *Twittering the #ArabSpring? An empirical content analysis of tweets*. Hamburg: Anchor Academic.
- Sigelman, Lee, & Jacoby, William. (1996). The not-so-simple art of imitation: Pastiche, literary style and Raymond Chandler. *Computers and the Humanities, 30*, 11–28.
- Signorielli, Nancy. (2009). Research ethics in content analysis. In Amy B. Jordan, Dale Kunkel, Jennifer Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 88–96). New York: Routledge.
- Signorielli, Nancy, & Bacue, Aaron. (1999). Recognition and respect: A content analysis of prime-time television characters across three decades. *Sex Roles, 40*, 527–544.
- Signorielli, Nancy, McLeod, Douglas, & Healy, Elaine. (1994). Gender stereotypes in MTV commercials: The beat goes on. *Journal of Broadcasting & Electronic Media, 38*, 91–101.
- Simon, Adam F., & Jerit, Jennifer. (2007). Toward a theory relating political discourse, media, and public opinion. *Journal of Communication, 57*, 254–271.
- Simon, Jonathan. (2011). *Measuring the convergence of media, candidate, and public agendas as a predictor of voter choice in federal, state, and local elections* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Simoni, Jane M. (1996). Confronting heterosexism in the teaching of psychology. *Teaching of Psychology, 23*, 220–226.
- Simons, Ian. (2008). Obama burnout paradise. *New Statesman*. Retrieved from <http://www.newstatesman.com/blogs/culture-tech/2008/10/usa-vote-obama-game>
- Simonton, Dean K. (1980a). Thematic fame, melodic originality, and musical zeitgeist: A biographical and transhistorical content analysis. *Journal of Personality and Social Psychology, 38*, 972–983.
- Simonton, Dean K. (1980b). Thematic fame and melodic originality in classical music: A multivariate computer-content analysis. *Journal of Personality, 48*, 206–219.
- Simonton, Dean Keith. (1981). The library laboratory: Archival data in personality and social psychology. In Ladd Wheeler (Ed.), *Review of personality and social psychology 2* (pp. 217–243). Beverly Hills, CA: Sage.
- Simonton, Dean Keith. (1984). Melodic structure and note transition probabilities: A content analysis of 16,618 classical themes. *Psychology of Music, 12*, 3–16.
- Simonton, Dean K. (1987). Musical aesthetics and creativity in Beethoven: A computer analysis of 105 compositions. *Empirical Studies of the Arts, 5*(2), 87–104.
- Simonton, Dean Keith. (1994). *Greatness: Who makes history and why?* New York: Guilford.

- Simonton, Dean Keith. (2003a). Qualitative and quantitative analyses of historical data. *Annual Review of Psychology*, 54(1), 617–640.
- Simonton, Dean Keith. (2003b). The first six notes: Computer content analyses of classical themes. *Bulletin of Psychology and the Arts*, 4, 13–15.
- Simonton, Dean Keith. (2006). Presidential IQ, openness, intellectual brilliance, and leadership: Estimates and correlations for 42 U.S. Chief Executives. *Political Psychology*, 27, 511–526.
- Simonton, Dean Keith. (2010). Emotion and composition in classical music: Historiometric perspectives. In Patrik N. Juslin & John A. Sloboda (Eds.), *Handbook of music and emotion: Theory, research, applications* (pp. 347–366). New York: Oxford University Press.
- Singel, Ryan. (2010, January 28). Jan. 28, 2001: Hey, don't Tampa with my privacy. *Wired.com*. Retrieved from <http://www.wired.com/thisdayintech/tag/facetrac/> [11/8/11]
- Singer, Benjamin D. (1982). Minorities and the media—A content-analysis of native Canadians in the daily press. *Canadian Review of Sociology and Anthropology*, 19, 348–359.
- Singer, Linda A. (1997). Native Americans on CD-ROM: Two approaches. *Multimedia Schools*, 4(1), 42–46.
- Slattery, Karen L., Hakanen, Ernest A., & Doremus, Mark E. (1996). The expression of localism: Local TV news coverage in the new video marketplace. *Journal of Broadcasting & Electronic Media*, 40, 403–413.
- Smith, Ann Marie. (1999). *Girls on film: Analysis of women's images in contemporary American and "Golden Age" Hollywood films* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Smith, Charles P., (Ed.), in association with Atkinson, John W., McClelland, David C., & Veroff, Joseph. (1992). *Motivation and personality: Handbook of thematic content analysis*. Cambridge, MA: Cambridge University Press.
- Smith, Charles P. (2000). Content analysis and narrative analysis. In Harry T. Reis & Charles M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 313–335). Cambridge: Cambridge University Press.
- Smith, Lauren Reichart, & Cooley, Skye C. (2012). International faces: An analysis of self-inflicted face-ism in online profile pictures. *Journal of Intercultural Communication Research*, 41, 279–296.
- Smith, Lois J. (1994). A content analysis of gender difference in children's advertising. *Journal of Broadcasting & Electronic Media*, 38, 323–337.
- Smith, Sharon S. (2008). From violent words to violent deeds: Assessing risk from FBI threatening communication cases. In J. Reid Meloy, Lorraine Sheridan, & Jens Hoffmann (Eds.), *Stalking, threatening, and attacking public figures: A psychological and behavioral analysis* (pp. 435–455). Oxford: Oxford University Press.
- Smith, Stacy L. (2005). From Dr. Dre to *Dismissed*: Assessing violence, sex, and substance use on MTV. *Critical Studies in Media Communication*, 22, 89–98.
- Smith, Stacy L. (2006). Pimps, perps, and provocative clothing: Examining negative content patterns in video games. In Peter Vorderer & Jennings Bryant (Eds.), *Playing video games: Motives, responses, and consequences* (pp. 57–76). Mahwah, NJ: Lawrence Erlbaum.
- Smith, Stacy L., Lachlan, Kenneth, & Tamborini, Ron. (2003). Popular video games: Quantifying the presentation of violence and its content. *Journal of Broadcasting & Electronic Media*, 47, 58–76.

- Smith, Stacy L., Pieper, Katherine M., Granados, Amy, & Choueiti, Marc. (2010). Assessing gender-related portrayals in top-grossing G-rated films. *Sex Roles, 64*, 774–786.
- Snow, Karen. (2011, March 14). News broadcast, *MSNBC*.
- Snyder-Suhy, Sharon, Rudd, Jill, Neuendorf, Kimberly A., & Jakulin, Jenny. (2008, May). "It's not my fault": Male abusers' perspectives of recent violent episodes. Paper presented to the Interpersonal Communication Division of the International Communication Association, Montreal, Canada.
- Solomon, Michael R., & Greenberg, Lawrence. (1993). Setting the stage: Collective selection in the stylistic context of commercials. *Journal of Advertising, 22*(1), 11–24.
- Southall, Richard M., Nagel, Mark S., Amis, John M., & Southall, Crystal. (2008). A method to March Madness? Institutional logics and the 2006 National Collegiate Athletic Association Division I men's basketball tournament. *Journal of Sport Management, 22*, 677–700.
- Spangler, William D., Gupta, Alki, Kim, Dong Ha, & Nazarian, Serima. (2012). Developing and validating historiometric measures of leader individual differences by computerized content analysis of documents. *Leadership Quarterly, 23*, 1152–1172.
- Sparkman, Richard. (1996). Regional geography, the overlooked sampling variable in advertising content analysis. *Journal of Current Issues and Research in Advertising, 18*(2), 53–57.
- Sparks, Glenn G., & Fehlner, Christine L. (1986). Faces in the news: Gender comparisons of magazine photographs. *Journal of Communication, 36*(4), 70–79.
- Spencer, Gary. (1989). An analysis of JAP-baiting humor on the college campus. *Humor: International Journal of Humor Research, 2*, 329–348.
- Spicer, Jeffrey. (2012). *The changing face of the Western: An analysis of Hollywood Western films from director John Ford and others during the years 1939 to 1964* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Sproull, Lee, & Kiesler, Sara. (1986). Reducing social context cues: Electronic mail in organizational communications. *Management Science, 32*, 1492–1512.
- Stark-Rose, Rose M., Livingston-Sacin, Tina M., Merchant, Niloufer, & Finley, Amanda C. (2012). Group counseling with United States racial minority groups: A 25-year content analysis. *Journal for Specialists in Group Work, 37*, 277–296. doi:10.1080/01933922.2012.690831
- Stempel, Guido H. (1952). Sample size for classifying subject matter in dailies. *Journalism Quarterly, 29*, 333–334.
- Stepchenkova, Svetlana, Kirilenko, Andrei P., & Morrison, Alastair M. (2009). Facilitating content analysis in tourism research. *Journal of Travel Research, 47*, 454–469.
- Stern, Susannah, & Brown, Jane D. (2008). From twin beds to sex at your fingertips: Teen sexuality in movies, music, television, and the Internet, 1950 to 2005. In Patrick E. Jamieson & Daniel Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 313–343). Oxford: Oxford University Press.
- Sternthal, Brian, & Craig, C. Samuel. (1973). Humor in advertising. *Journal of Marketing, 37*(4), 12–18.
- Stevens, Bonnie, McKeever, Patricia, Booth, Marilyn, Greenberg, Mark, Daub, Stacey, Gafni, Amiram, Gammon, Janet, Yamada, Janet, & Beamer, Madelyn. (2004). Home chemotherapy for children with cancer: Perspectives from health care professionals. *Health and Social Care in the Community, 12*(2), 142–149.

- Stevens, S. S. (1951). Mathematics, measurement, and psychophysics. In S. S. Stevens (Ed.), *Handbook of experimental psychology* (pp. 1–49). New York: John Wiley.
- Stevenson, Robert L. (1994). *Global communication in the twenty-first century*. New York: Longman.
- Stevenson, Thomas H., & Swayne, Linda E. (1999). The portrayal of African-Americans in business-to-business direct mail: A benchmark study. *Journal of Advertising*, 28(3), 25–35.
- Stewart, David W., & Furse, David H. (1986). *Effective television advertising: A study of 1000 commercials*. Lexington, MA: Lexington Books.
- Stiles, Deborah A., Gibbons, Judith L., & Schnellmann, Jo. (1987). The smiling sunbather and the chivalrous football player: Young adolescents' images of the ideal woman and man. *Journal of Early Adolescence*, 7, 411–427.
- Stiles, William B. (1980). Comparison of dimensions derived from rating versus coding of dialogue. *Journal of Personality and Social Psychology*, 38, 359–374.
- Stirman, Shannon Wiltsey, & Pennebaker, James W. (2001). Word use in the poetry of suicidal and nonsuicidal poets. *Psychosomatic Medicine*, 63, 517–522.
- Stohl, Cynthia, & Redding, W. Charles. (1987). Messages and message exchange processes. In Fredric M. Jablin, Linda L. Putnam, Karlene H. Roberts, & Lyman W. Porter (Eds.), *Handbook of organizational communication* (pp. 451–502). Newbury Park, CA: Sage.
- Stohl, Cynthia, Stohl, Michael, & Popova, Lucy. (2009). A new generation of corporate codes of ethics. *Journal of Business Ethics*, 90, 607–622. doi:10.1007/s10551-009-0064-6
- Stone, Philip J. (1997). Thematic text analysis: New agendas for analyzing text content. In Carl W. Roberts (Ed.), *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts* (pp. 35–54). Mahwah, NJ: Lawrence Erlbaum.
- Stone, Philip J., Dunphy, Dexter C., Smith, Marshall S., & Ogilvie, Daniel M. (1966). *The general inquirer: A computer approach to content analysis*. Cambridge: MIT Press.
- Stone, Robalyn, & Young, Michael. (2009). The content and intersection of identity in Iraq. In Rawi Abdelal, Yoshiko M. Herrera, Alastair Iain Johnston, & McDermott, Rose (Eds.), *Measuring identity: A guide for social scientists* (pp. 237–249). Cambridge: Cambridge University Press.
- Straubhaar, Joseph, & LaRose, Robert. (1996). *Communications media in the information society*. Belmont, CA: Wadsworth.
- Streamsage, Inc. (2012). *Method and system for indexing and searching timed media information based upon relevance intervals [Patent number] US 8117206 B2*. Retrieved from <http://www.google.com/patents/US8117206>
- Srijbos, Jan-Willem, Martens, Rob L., Jochems, Wim M. G., & Broers, Nick J. (2007). The effect of functional roles on perceived group efficiency during computer-supported collaborative learning: A matter of triangulation. *Computers in Human Behavior*, 23, 353–380.
- Srijbos, Jan-Willem, Martens, Rob L., Prins, Frans J., & Jochems, Wim M. G. (2006). Content analysis: What are they talking about? *Computers & Education*, 46, 29–48.
- Srijbos, Jan-Willem, & Stahl, Gerry. (2007). Methodological issues in developing a multi-dimensional coding procedure for small-group chat communication. *Learning and Instruction*, 17, 394–404.

- Stroman, Carolyn A., & Dates, Jannette L. (2008). African Americans, Latinos, Asians, and Native Americans in the media: Implications for adolescents. In Patrick E. Jamieson & Daniel Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 198–220). Oxford: Oxford University Press.
- Stroman, Carolyn A., Merritt, Bishetta D., & Matabane, Paula W. (1989–1990). Twenty years after Kerner: The portrayal of African Americans on prime-time television. *Howard Journal of Communications*, 2, 44–55.
- Strong, Pauline Turner. (1996). Animated Indians: Critique and contradiction in commodified children's culture. *Cultural Anthropology*, 11, 405–424.
- Stryker, Jo Ellen, Wray, Ricardo, Hornik, Robert C., & Yanovitzky, Itzik. (2006). Validation of database search terms for content analysis: The case of cancer news coverage. *Journalism & Mass Communication Quarterly*, 83, 413–430.
- Sudnow, David. (Ed.). (1972). *Studies in social interaction*. New York: Free Press.
- Sullivan, Jonathan, & Lowe, Will. (2010, September). Chen Shui-bian: On independence. *China Quarterly*, 203, 619–638. doi:10.1017/S0305741010000627
- Sun, Chyng, Bridges, Ana, Wosnitzer, Robert, Scharrer, Erica, & Liberman, Rachael. (2008). A comparison of male and female directors in popular pornography: What happens when women are at the helm? *Psychology of Women Quarterly*, 32, 312–325.
- Sundar, S. Shyam, Kalyanaraman, Sriram, & Brown, Justin. (2003). Explicating website interactivity: Impression-formation effects in political campaign sites. *Communication Research*, 30, 30–59.
- Sundar, S. Shyam, & Kim, Jinhee. (2005). Interactivity and persuasion: Influencing attitudes with information and involvement. *Journal of Interactive Advertising*, 5(2), 6–29. Retrieved from <http://www.jiad.org/article59>
- Sung, Eunjung, Jang, Won Yong, & Frederick, Edward. (2011). Mediated reality of globalization, 1995–2000: How did AP and IPS construct the concept and process of globalization? *Journal of Global Mass Communication*, 4, 39–54.
- Suzuki, Takafumi. (2009). Extracting speaker-specific functional expressions from political speeches using random forests in order to investigate speakers' political styles. *Journal of the American Society for Information Science and Technology*, 60, 1596–1606.
- Sweeney, Kevin, & Whissell, Cynthia. (1984). A dictionary of affect in language: 1. Establishment and preliminary validation. *Perceptual and Motor Skills*, 59, 695–698.
- Szillis, Ursula, & Stahlberg, Dagmar. (2007). The face-ism effect in the Internet differences in facial prominence of women and men. *International Journal of Internet Science*, 2(1), 3–11.
- Tabachnick, Barbara G., & Fidell, Linda S. (2012). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson.
- Tak, Jinyoung, Kaid, Lynda Lee, & Lee, Soobum. (1997). A cross-cultural study of political advertising in the United States and Korea. *Communication Research*, 24, 413–430.
- Tamborini, Ron, Skalski, Paul, Lachlan, Kenneth, Westerman, David, Davis, Jeff, & Smith, Stacy L. (2005). The raw nature of televised professional wrestling: Is the violence a cause for concern? *Journal of Broadcasting & Electronic Media*, 49, 202–221.

- Tandoc, Edson C., Jr., & Skoric, Marko M. (2010). The pseudo-events paradox: How pseudo-events flood the Philippine press and why journalists don't recognize it. *Asian Journal of Communication*, 20, 33–50.
- Tangpong, Chanchai. (2011). Content analytic approach to measuring constructs in operations and supply chain management. *Journal of Operations Management*, 29, 627–638.
- Tardy, Charles H. (1988). Interpersonal interaction coding systems. In Charles H. Tardy (Ed.), *A handbook for the study of human communication: Methods and instruments for observing, measuring, and assessing communication processes* (pp. 285–300). Norwood, NJ: Ablex.
- Tausczik, Yla R., & Pennebaker, James W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, 29, 24–54.
- Taylor, Charles R. (2005). Moving international advertising research forward: A new research agenda. *Journal of Advertising*, 34(1), 7–16.
- Taylor, Charles R., & Bang, Hae-Kyong. (1997). Portrayals of Latinos in magazine advertising. *Journalism & Mass Communication Quarterly*, 74, 285–303.
- Taylor, Charles R., Lee, Ju Yung, & Stern, Barbara B. (1996). Portrayals of African, Hispanic, and Asian Americans in magazine advertising. In Ronald Paul Hill (Ed.), *Marketing and consumer research in the public interest* (pp. 133–150). Thousand Oaks, CA: Sage.
- Taylor, Charles R., & Stern, Barbara B. (1997). Asian-Americans: Television advertising and the “model minority” stereotype. *Journal of Advertising*, 26(2), 47–61.
- Taylor, Julia M., & Mazlack, Lawrence J. (2007). An investigation into computational recognition of children's jokes. *Proceedings of AAAI'07, the 22nd National Conference on Artificial Intelligence*, Vol. 2, 1904–1905.
- Te'eni, Daniel R. (1998). Nomothetics and idiographics as antonyms: Two mutually exclusive purposes for using the Rorschach. *Journal of Personality Assessment*, 70, 232–247.
- Tellegen, Auke, Watson, David, & Clark, L. A. (1999). On the dimensional and hierarchical structure of affect. *Psychological Science*, 10, 297–303.
- Terdiman, Daniel. (2012, October 26). *Report: Twitter hits half a billion tweets a day*. Retrieved from http://news.cnet.com/8301-1023_3-57541566-93/report-twitter-hits-half-a-billion-tweets-a-day/
- The Netherlands Institute for Sound and Vision*. (n.d.). Retrieved from <http://www.beeldengeluid.nl/en/about>
- Thelwall, Mike. (2006). Interpreting social science link analysis research: A theoretical framework. *Journal of the American Society for Information Science and Technology*, 57, 60–68.
- Thelwall, Mike. (2007). Blog searching: The first general-purpose source of retrospective public opinion in the social sciences? *Online Information Review*, 31, 277–289.
- Thelwall, Mike. (2016, in press). Heart and soul: Sentiment strength detection in the social web with SentiStrength. In Janusz Holyst (Ed.), *Cyberemotions*.
- Thelwall, Mike, & Buckley, Kevan. (2013). Topic-based sentiment analysis for the social Web: The role of mood and issue-related words. *Journal of the American Society for Information Science and Technology*, 64, 1608–1617.

- Thelwall, Mike, Buckley, Kevan, & Paltoglou, Georgios. (2011). Sentiment in Twitter events. *Journal of the American Society for Information Science and Technology*, 62, 406–418.
- Thelwall, Mike, Buckley, Kevan, Paltoglou, Georgios, Cai, Di, & Kappas, Arvid. (2010). Sentiment strength detection in short informal text. *Journal of the American Society for Information Science and Technology*, 61, 2544–2558.
- Thelwall, Mike, Byrne, Aidan, & Goody, Melissa. (2007). Which types of news story attract bloggers? *IR Information Research*, 12(4). Retrieved from <http://informationr.net/ir/12-4/paper327.html>
- Thelwall, Mike, Wilkinson, David, & Uppal, Sukhvinder. (2010). Data mining emotion in social network communication: Gender differences in MySpace. *Journal of the American Society for Information Science and Technology*, 61, 190–199.
- Thompson, Bruce. (1984). *Canonical correlation analysis*. Beverly Hills, CA: Sage.
- Thompson, Isabelle. (1996). Competence and critique in technical communication: A qualitative content analysis of journal articles. *Journal of Business and Technical Communication*, 10, 48–80.
- Thompson, Marjorie A., & Gray, James J. (1995). Development and validation of a new body-image assessment scale. *Journal of Personality Assessment*, 64, 258–269.
- Thorson, Esther. (1989). Television commercials as mass media messages. In James J. Bradac (Ed.), *Message effects in communication science* (pp. 195–230). Newbury Park, CA: Sage.
- Tian, Yan, & Robinson, James D. (2014). Content analysis of health communication. In Bryan A. Whaley (Ed.), *Research methods in health communication: Principles and application* (pp. 190–212). New York: Routledge.
- Tickle, Jennifer J., Beach, Michael L., & Dalton, Madeline A. (2009). Tobacco, alcohol, and other risk behaviors in film: How well do MPAA ratings distinguish content? *Journal of Health Communication*, 14, 756–767.
- Ting-Toomey, Stella. (2005). The matrix of face: An updated face-negotiation theory. In William B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 71–92). Thousand Oaks, CA: Sage.
- Tinsley, Howard E., & Weiss, David J. (1975). Interrater reliability and agreement of subjective judgments. *Journal of Counseling Psychology*, 22, 358–376.
- Tolhurst, William. (1985). Form and content: An aesthetic theory of art. *British Journal of Aesthetics*, 42, 261–270.
- Tov, William, Ng, Kok Leong, Lin, Han, & Qiu, Lin. (2013). Detecting well-being via computerized content analysis of brief diary entries. *Psychological Assessment*, 25, 1069–1078.
- Tracey, Terence J., & Ray, Philip B. (1984). Stages of successful time-limited counseling: An interactional examination. *Journal of Counseling Psychology*, 31, 13–27.
- Trammell, Kaye D., & Keshelashvili, Ana. (2005). Examining the new influencers: A self-presentation study of A-List blogs. *Journalism & Mass Communication Quarterly*, 82, 968–982.
- Traub, Ross E. (1994). *Reliability for the social sciences: Theory and applications*. Thousand Oaks, CA: Sage.
- Trevino, Melina, Kanso, Ali M., & Nelson, Richard Alan. (2010). Islam through editorial lenses: How American elite newspapers portrayed Muslims before and after September 11, 2001. *Journal of Arab & Muslim Media Research*, 3, 3–17. doi:10.1386/jammr.3.1-2.3_1

- Trohidis, Konstantinos, Tsoumakas, Grigorios, Kalliris, George, & Vlahavas, Ioannis. (2008, September). *Multi-label classification of music into emotions*. Paper presented to the Conference on Music Information Retrieval (ISMIR 2008), Philadelphia, PA.
- Tully, Bryan. (1998). Reliability of criteria-based content analysis of child witness statements: Cohen's kappa doesn't matter. *Legal and Criminological Psychology*, 3, 183–188.
- Turner, Tammara C., Smith, Marc A., Fisher, Danyel, & Welser, Howard T. (2005). Picturing usenet: Mapping computer-mediated collective action. *Journal of Computer Mediated Communication*, 10(4).
- Tweedie, Fiona J., Singh, Sameer, & Holmes, David I. (1996). Neural network approaches in stylometry: The Federalist Papers. *Computers and the Humanities*, 30, 1–20.
- Twitter usage: Company facts. (2015, September 30). *Twitter.com*. Retrieved from <https://about.twitter.com/company>.
- Twitter usage statistics. (2013). *internetlivestats.com*. Retrieved from <http://www.internetlivestats.com/twitter-statistics/>.
- Uebersax, John S. (1987). Diversity of decision-making models and the measurement of interrater agreement. *Psychological Bulletin*, 101, 140–146.
- Uebersax, John S. (1992). Modeling approaches for the analysis of observer agreement. *Investigative Radiology*, 27, 738–743.
- Urist, Jeffrey. (1977). The Rorschach Test and the assessment of object relations. *Journal of Personality Assessment*, 41, 3–9.
- U.S. Commission on Civil Rights. (1977). *Window dressing on the set: Women and minorities on television*. Washington, DC: Government Printing Office.
- U.S. Commission on Civil Rights. (1979). *Window dressing on the set: An update*. Washington, DC: Government Printing Office.
- Vail, Laura, Sandhu, Harbinder, Fisher, Joanne Fisher, Cooke, Heather, Dale, Jeremy, & Barnett, Mandy. (2011). Hospital consultants breaking bad news with simulated patients: An analysis of communication using the Roter Interaction Analysis System. *Patient Education and Counseling*, 83, 185–194.
- Valcke, Martin, & Martens, Rob. (2006). The problem arena of researching computer supported collaborative learning: Introduction to the special section. *Computers & Education*, 46, 1–5.
- Vanden Heuvel, Jon. (1991). *Untapped sources: America's newspaper archives and histories*. New York: Gannett Foundation Media Center.
- Van Gorp, Baldwin. (2005). Where is the frame? Victims and intruders in the Belgian press coverage of the asylum issue. *European Journal of Communication*, 20, 484–507.
- Van Gorp, Baldwin. (2007). The constructionist approach to framing: Bringing culture back in. *Journal of Communication*, 57, 60–78.
- van Uden-Kraan, C. F., Drossaert, C. H. C., E., Lebrun, C. E. I., Drossaers-Bakker, K. W., Smit, W. M., Seydel, E. R., & van de Laar, M. A. F. J. (2008). Coping with somatic illnesses in online support groups: Do the feared disadvantages actually occur? *Computers in Human Behavior*, 24, 309–324.
- Verhellen, Yann, Dens, Nathalie, & de Pelsmacker, Patrick. (2016, in press). A longitudinal content analysis of gender role portrayal in Belgian television advertising. *Journal of Marketing Communications*. doi:10.1080/13527266.2013.871321

- Verhoeven, Piet. (2008). Where has the doctor gone? The mediazation of medicine on Dutch television, 1961–2000. *Public Understanding of Science*, 17, 461–472.
- Verrocchio, Maria Cristina, Cortini, Michela, & Marchetti, Daniela. (2012). Assessing child sexual abuse allegations: An exploratory study on psychological reports. *International Journal of Multiple Research Approaches*, 6, 175–186.
- Vincent, Richard C., Davis, Dennis K., & Boruszkowski, Lilly Ann. (1987). Sexism on MTV: A content analysis of rock videos. *Journalism Quarterly*, 64, 750–755, 941.
- VIP report compares big three database news vendors. (2007, November 29). *CommPilings*. Retrieved from <http://commpilings.asc.upenn.edu/2007/11/>
- Voelker, David H., Orton, Peter Z., & Adams, Scott. (2001). *Statistics*. Lincoln, NE: Cliff Notes.
- Vossen, Piek. (1998). Introduction to EuroWordNet. *Computers and the Humanities*, 32, 73–89.
- Wagner, E. R., & Hansen, E. N. (2002). Methodology for evaluating green advertising of forest products in the United States: A content analysis. *Forest Products Journal*, 52(4), 17–23.
- Waite, Kathryn, & Harrison, Tina. (2007). Internet archaeology: Uncovering pension sector web site evolution. *Internet Research*, 17, 180–195.
- Walker, Marilyn A., Grant, Ricky, Sawyer, Jennifer, Lin, Grace I., Wardrip-Fruin, Noah, & Buell, Michael. (2011, December). Perceived or not perceived: Film character models for expressive NLG. In Mei Si, David Thue, Elisabeth Endre, James C. Lester, Joshua Tanenbaum, & Veronica Zammitto (Eds.), *Interactive Storytelling: Fourth International Conference on Interactive Digital Storytelling Proceedings* (pp. 109–121). Vancouver, Canada. doi:10.1007/978-3-642-25289-1_12
- Wallace, Laci, Wilson, Jacquelyn, & Miloch, Kimberly. (2011). Sporting Facebook: A content analysis of NCAA organizational sport pages and Big 12 Conference athletic department pages. *International Journal of Sport Communication*, 4, 422–444.
- Wallis, Cara. (2011). Performing gender: A content analysis of gender display in music videos. *Sex Roles*, 64, 160–172. doi:10.1007/s11199-010-9814-2
- Walsh, Janet. (2007). Experiencing part-time work: Temporal tensions, social relationships and the work–family interface. *British Journal of Industrial Relations*, 45, 155–177.
- Walsh, Jennifer L., & Ward, L. Monique. (2008). Adolescent gender role portrayals in the media: 1950 to the present. In Patrick E. Jamieson & Daniel Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 132–164). Oxford: Oxford University Press.
- Walther, Joseph B. (2004). Language and communication technology: Introduction to the special issue. *Journal of Language and Social Psychology*, 23, 384–396.
- Walther, Joseph B. (2007). Selective self-presentation in computer-mediated communication: Hyperpersonal dimensions of technology, language, and cognition. *Computers in Human Behavior*, 23, 2538–2557.
- Walther, Joseph B., & Parks, Malcolm R. (2002). Cues filtered out, cues filtered in: Computer-mediated communication and relationships. In Mark L. Knapp & John A. Daly (Eds.), *Handbook of interpersonal communication* (3rd ed., pp. 529–563). Thousand Oaks, CA: Sage.
- Walton, David, & Fendell Satinsky, Rachel. (2013). Dropbox and the impact of personal cloud storage on ESI. *The Legal Intelligencer*. Retrieved from <http://www.cozen.com>.

- Wang, Yazhe, Callan, Jamie, & Zheng, Baihua. (2015). Should we use the sample? Analyzing datasets sampled from Twitter's Stream API. *ACM Transactions on the Web*, 9(3), 13:1–13:23.
- Wansink, B., & Wansink, C. S. (2010). The largest Last Supper: Depictions of food portions and plate size increased over the millennium. *International Journal of Obesity*, 34, 943–944.
- Wanta, Wayne, Golan, Guy, & Lee, Cheolhan. (2004). Agenda setting and international news: Media influence on public perceptions of foreign nations. *Journalism & Mass Communication Quarterly*, 81, 364–377.
- Wanzer, Melissa, Booth-Butterfield, Melanie, & Booth-Butterfield, Steven. (2005). "If we didn't use humor, we'd cry": Humorous coping communication in health care settings. *Journal of Health Communication*, 10, 105–125.
- Ward, L. Monique. (1995). Talking about sex: Common themes about sexuality in the prime-time television programs children and adolescents view most. *Journal of Youth and Adolescence*, 24, 595–615.
- Warrens, Matthijs J. (2010). A formal proof of a paradox associated with Cohen's Kappa. *Journal of Classification*, 27, 322–332.
- Waters, Richard D., Burnett, Emily, Lamm, Anna, & Lucas, Jessica. (2009). Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. *Public Relations Review*, 35, 102–106.
- Waters, Richard D., & Jamal, Jia Y. (2011). Tweet, tweet, tweet: A content analysis of nonprofit organizations' Twitter updates. *Public Relations Review*, 37, 321–324.
- Waters, Richard D., & Jones, Paul M. (2011). Using video to build an organization's identity and brand: A content analysis of nonprofit organizations' YouTube videos. *Journal of Nonprofit & Public Sector Marketing*, 23, 248–268.
- Waters, Richard D., Tindall, Natalie T. J., & Morton, Timothy, S. (2010). Media catching and the journalist—Public relations practitioner relationship: How social media are changing the practice of media relations. *Journal of Public Relations Research*, 22, 241–264.
- Watkins, Patsy G. (1996). Women in the work force in non-traditional jobs. In Paul Martin Lester (Ed.), *Images that injure: Pictorial stereotypes in the media* (pp. 69–74). Westport, CT: Praeger.
- Watt, James H., Jr. (1979). Television form, content attributes, and viewer behavior. In Melvin J. Voigt & Gerhard J. Hanneman (Eds.), *Progress in communication sciences, Volume 1* (pp. 51–89). Norwood, NJ: Ablex.
- Watt, James H., & Krull, Robert. (1974). An information theory measure for television programming. *Communication Research*, 1, 44–68.
- Watt, James H., Mazza, Mary, & Snyder, Leslie. (1993). Agenda-setting effects of television news coverage and the effects decay curve. *Communication Research*, 20, 408–435.
- Watt, James H., Jr., & Welch, Alicia J. (1983). Effects of static and dynamic complexity on children's attention and recall of televised instruction. In Jennings Bryant & Daniel R. Anderson (Eds.), *Children's understanding of television: Research on attention and comprehension* (pp. 69–102). New York: Academic Press.
- Watts, Mark D., Domke, David, Shah, Dhavan V., & Fan, David P. (1999). Elite cues and media bias in presidential campaigns. *Communication Research*, 26, 144–175.
- Watzlawick, Paul, Beavin, Janet Helmick, & Jackson, Don D. (1967). *Pragmatics of human communication: A study of interactional patterns, pathologies, and paradoxes*. New York: Norton.

- Weare, Christopher, & Lin, Wan-Ying. (2000). Content analysis of the World Wide Web—Opportunities and challenges. *Social Science Computer Review*, 18, 272–292.
- Weaver, David A., & Bimber, Bruce. (2008). Finding news stories: A comparison of searches using LexisNexis and Google News. *Journalism & Mass Communication Quarterly*, 85, 515–530.
- Weaver, James B., III. (1991). Are “slasher” horror films sexually violent? A content analysis. *Journal of Broadcasting & Electronic Media*, 35, 385–392.
- Weber, Rene, Behr, Katharina-Maria, Tamborini, Ron, Ritterfeld, Ute, & Mathiak, Klaus. (2009). What do we really know about first-person-shooter games? An event-related, high-resolution content analysis. *Journal of Computer-Mediated Communication*, 14, 1016–1037.
- Weber, Robert Philip. (1990). *Basic content analysis* (2nd ed.). Newbury Park, CA: Sage.
- Weigley, Samuel. (2013, March). 10 web sites where surfers spend the most time. *USA Today*. Retrieved from <http://www.usatoday.com/>.
- Weinberger, Marc G., Spotts, Harlan, Campbell, Leland, & Parsons, Amy L. (1995). The use and effect of humor in different advertising media. *Journal of Advertising Research*, 35(3), 44–56.
- Weisburd, A. Aaron. (2009). Comparison of visual motifs in *Jihadi* and *Cholo* videos on YouTube. *Studies in Conflict & Terrorism*, 32, 1066–1074.
- West, Mark D. (Ed.). (2001a). *Applications of computer content analysis*. Westport, CT: Ablex.
- West, Mark D. (Ed.). (2001b). *Theory, method, and practice in computer content analysis*. Westport, CT: Ablex.
- Westley, Bruce H., & MacLean, Malcolm. (1957). A conceptual model for communication research. *Journalism Quarterly*, 34, 31–35.
- Weyls, Ryan. (2001). *Changing media presentations of adult entertainment* (Unpublished master's thesis). Cleveland State University, Cleveland, OH.
- Whissell, Cynthia M. (1994a). A computer program for the objective analysis of style and emotional connotations of prose: Hemingway, Galsworthy, and Faulkner compared. *Perceptual and Motor Skills*, 79, 815–824.
- Whissell, Cynthia. (1994b). Objective analysis of text: I. A comparison of adventure and romance novels. *Perceptual and Motor Skills*, 79, 1567–1570.
- Whissell, Cynthia. (1996). Traditional and emotional stylometric analysis of the songs of Beatles Paul McCartney and John Lennon. *Computers and the Humanities*, 30, 257–265.
- Whissell, Cynthia. (2000). Phonoemotional profiling: A description of the emotional flavour of English texts on the basis of the phonemes employed in them. *Perceptual and Motor Skills*, 91, 617–648.
- Whissell, Cynthia, Fournier, Michael, Pelland, Rene, Weir, Deborah, & Makarec, K. (1986). A dictionary of affect in language: IV. Reliability, validity, and applications. *Perceptual and Motor Skills*, 62, 875–888.
- White, Marilyn Domas, & Marsh, Emily E. (2006). Content analysis: A flexible methodology. *Library Trends*, 55, 22–45.
- Whitehurst, Grover J. (1984). Interrater agreement for journal manuscript reviews. *American Psychologist*, 39, 22–28.
- Whitney, D. Charles, Wartella, Ellen, & Kunkel, Dale. (2009). Non-academic audiences for content analysis research. In Amy B. Jordan, Dale Kunkel, Jennifer

- Manganello, & Martin Fishbein (Eds.), *Media messages and public health: A decisions approach to content analysis* (pp. 233–245). New York: Routledge.
- Wilke, Jürgen, Heimprecht, Christine, & Cohen, Akiba. (2012). The geography of foreign news on television: A comparative study of 17 countries. *International Communication Gazette*, 74, 301–322. doi:10.1177/1748048512439812
- Wilkes, Robert E., & Valencia, Humberto. (1989). Hispanics and Blacks in television commercials. *Journal of Advertising*, 18(1), 19–25.
- Wilkinson, Gene L., Bennett, Lisa T., & Oliver, Kevin M. (1997). Evaluation criteria and indicators of quality for internet resources. *Educational Technology*, 37(3), 52–58.
- Williams, Brian C., & Plouffe, Christopher R. (2007). Assessing the evolution of sales knowledge: A 20-year content analysis. *Industrial Marketing Management*, 36, 408–419.
- Williams, Frederick, & Monge, Peter. (2000). *Reasoning with statistics: How to read quantitative research* (5th ed.). Fort Worth, TX: Harcourt College.
- Williamson, Ian O., King, James E., Jr., Lepak, David, & Sarma, Archana. (2010). Firm reputation, recruitment web sites, and attracting applicants. *Human Resource Management*, 49(4), 669–687. doi:10.1002/hrm.20379
- Willnat, Lars, & Zhu, Jian-Hua. (1996). Newspaper coverage and public opinion in Hong Kong: A time-series analysis of media priming. *Political Communication*, 13, 231–246.
- Winer, B. J. (1971). *Statistical principles in experimental design* (2nd ed.). New York: McGraw-Hill.
- Witherspoon, Candace L., & Stone, Dan N. (2013). Analysis and sentiment detection in online reviews of tax professionals: A comparison of three software packages. *Journal of Emerging Technologies in Accounting*, 10, 89–115.
- Woelfel, Joseph, & Fink, Edward L. (1980). *The measurement of communication processes: Galileo theory and method*. New York: Academic Press.
- Wohlsen, M. (2014, July 2). Don't worry, Facebook still has no clue how you feel. *Wired*. Retrieved from <http://www.wired.com/2014/07/business-facebook-feelings/>
- Wölfel, Joe, Hsieh, R., Chen, H., Hwang, J., Cheong, P., Rosen, D., et al. [Woelfel, J.] (2005, February). *Wölfpak: A neural network for multilingual text analysis*. Paper presented at the 25th Annual Meeting of the International Network for Social Network Analysis (INSNA) conference, Redondo Beach, CA.
- Wongpakaran, Nahathai, Wongpakaran, Tinakon, Wedding, Danny, & Gwet, Kilem L. (2013). A comparison of Cohen's Kappa and Gwet's AC1 when calculating inter-rater reliability coefficients: A study conducted with personality disorder samples. *BMC Medical Research Methodology*, 13, 1–7. doi:10.1186/1471-2288-13-61.
- Wongthongsri, Patinuch. (1993). *A comparative analysis of Thai and U.S. TV commercials* (Unpublished master's thesis). Cleveland State University, Cleveland, Ohio.
- Wood, Wally. (1989, January). Tools of the trade: B-to-B's 60% standard. *Marketing and Media Decisions*, 98–99.
- Woolley, Julia K., Limperos, Anthony M., & Oliver, Mary Beth. (2010). The 2008 Presidential election, 2.0: A content analysis of user-generated political Facebook groups. *Mass Communication & Society*, 13, 631–652.
- Wrench, Jason S., & McCroskey, James C. (2001). A temperamental understanding of humor communication and exhilaratability. *Communication Quarterly*, 49, 142–159.

- Wright, Robert. (1988). *Three scientists and their gods: Looking for meaning in an age of information*. New York: Times.
- Wu, Mu, & Neuendorf, Kimberly A. (2011, November). *Content analysis as a predictive methodology: Online video game auctions on eBay*. Paper presented to the Mass Communication Division of the National Communication Association, New Orleans, LA.
- Wu, Tailai, Peng, Chih-Hung, Shi, Yani, & Sia, Choon Ling. (2015). An exploratory study of website localization strategies: The effect of exogenous factors. *HCI in Business, 9191*, 392–402.
- Wurtzel, Alan, & Lometti, Guy. (1984). Determining the acceptability of violent program content at ABC. *Journal of Broadcasting, 28*, 89–97.
- Xenos, Michael A., & Foot, Kirsten A. (2005). Politics as usual, or politics unusual? Position taking and dialogue on campaign websites in the 2002 U.S. elections. *Journal of Communication, 55*, 169–185.
- Xue, Fei, & Ellzey, Marilyn. (2009). What do couples do? A content analysis of couple images in consumer magazine advertising. *Journal of Magazine and New Media Research, 10*(2), 1–17.
- Yale, Laura, & Gilly, Mary C. (1988). Trends in advertising research: A look at the content of marketing-oriented journals from 1976 to 1985. *Journal of Advertising, 17*(1), 12–22.
- Yang, Dan, & Lee, WonSook. (2004, October). *Disambiguating music emotion using software agents*. Paper presented to the Conference on Music Information Retrieval (ISMIR 04), Barcelona, Spain.
- Yang, Yi Edward. (2010). Leaders' conceptual complexity and foreign policy change: Comparing the Bill Clinton and George W. Bush foreign policies toward China. *Chinese Journal of International Politics, 3*, 415–446.
- Yang, Yi-Hsuan, & Chen, Homer H. (2011). *Music emotion recognition*. London: Taylor & Francis LLC.
- Yanovitzky, Itzhak, & Blitz, Cynthia L. (2000). Effect of media coverage and physician advice on utilization of breast cancer screening by women 40 years and older. *Journal of Health Communication, 5*, 117–134.
- Yasin, Mohamad Subakir Mohd, Hamid, Bahiyah Abdul, Keong, Yuen Chee, Ochman, Zarina, & Jaludin, Azhar. (2012). Linguistic sexism in Qatari primary mathematics textbooks. *GEMA Online Journal of Language Studies, 12*(1), 53–68.
- Yee, Fanny Chan Fong. (2011). The use of humor in television advertising in Hong Kong. *Humor, 24*, 43–61.
- Yin-Poole, Wesley. (2008). GTA 4 will take roughly 100 hours to finish. *Videogamer.com*. Retrieved from http://www.videogamer.com/news/gta_4_will_take_roughly_100_hours_to_finish.html
- Young, Michael D. (1996). Cognitive mapping meets semantic networks. *Journal of Conflict Resolution, 40*, 395–414.
- Yu, Yang, & Wang, Xiao. (2015). World Cup 2014 in the Twitter world: A big data analysis of sentiments in U.S. sports fans' tweets. *Computers in Human Behavior, 48*, 392–400.
- Zängle, Michael. (2014). Trends in papal communication: A content analysis of encyclicals, from Leo XIII to Pope Francis. *Historical Social Research, 39*(4), 329–364.
- Zemel, Alan, Xhafa, Fatos, & Cakir, Murat. (2007). What's in the mix? Combining coding and conversation analysis to investigate chat-based problem solving. *Learning and Instruction, 17*, 405–415.

- Zhang, Yan, & Wildemuth, Barbara M. (2009). Qualitative analysis of content. In Barbara Wildemuth (Ed.), *Applications of social research methods to questions in information and library science* (pp. 308–319). Westport, CT: Libraries Unlimited.
- Zhang, Yuan. (2009). Individualism or collectivism? Cultural orientations in Chinese TV commercials and analysis of some moderating factors. *Journalism & Mass Communication Quarterly*, 86, 630–653.
- Zhang, Yuanyuan, Dixon, Travis L., & Conrad, Kate. (2009). Rap music videos and African American women's body image: The moderating role of ethnic identity. *Journal of Communication*, 59, 262–278.
- Zhao, Xinshu, Liu, Jun S., & Deng, Ke. (2013). Assumptions behind intercoder reliability indices. In Charles T. Salmon (Ed.), *Communication yearbook 36* (pp. 419–480). New York: Routledge.
- Zheludev, Ilya, Smith, Robert, & Aste, Tomaso. (2014). When can social media lead financial markets? *Scientific Reports*, 4, 1–12. doi:10.1038/srep04213.
- Zhou, Lina, Burgoon, Judee K., Nunamaker, Jay F., Jr., & Twitchell, Doug. (2004). Automating linguistics-based cues for detecting deception in text-based asynchronous computer-mediated communication. *Group Decision and Negotiation*, 13, 81–106.
- Zhu, Junhuan, You, Quanzeng, Luo, Jiebo, & Smith, John R. (2013, December). *Towards understanding the effectiveness of election related images in social media*. Paper presented to the IEEE International Conference on Data Mining (ICDM), Workshop on Domain-driven Data Mining. doi:10.1109/ICDMW.2013.112
- Zhu, Ying, Basil, Debra Z., & Hunter, M. Gordon. (2009). The Extended Website Stage Model: A study of Canadian winery websites. *Canadian Journal of Administrative Sciences-Revue Canadienne Des Sciences De L'Administration*, 26, 286–300. doi:10.1002/cjas.118
- Zickuhr, Kathryn, & Rainie, Lee. (2014, January 16). E-reading rises as device ownership jumps. *Pew Research Center*. Retrieved from <http://www.pewinternet.org/2014/01/16/e-reading-rises-as-device-ownership-jumps/>
- Zillmann, Dolf. (1971). Excitation transfer in communication-mediated aggressive behavior. *Journal of Experimental Social Psychology*, 7, 419–434.
- Zillmann, Dolf. (1977). Humour and communication: Introduction to symposium. In Antony J. Chapman & Hugh C. Foot (Eds.), *It's a funny thing, humour* (pp. 291–301). Oxford, U.K.: Pergamon.
- Zillmann, Dolf, Bryant, Jennings, & Cantor, Joanne R. (1974). Brutality of assault in political cartoons affecting humor appreciation. *Journal of Research in Personality*, 7, 334–345.
- Zillmann, Dolf, Johnson, Rolland C., & Day, Kenneth D. (2000). Attribution of apparent arousal and proficiency of recovery from sympathetic activation affecting excitation transfer to aggressive behavior. In E. Tory Higgins & Arie W. Kruglanski (Eds.), *Motivational science: Social and personality perspectives* (pp. 416–424). Philadelphia, PA: Psychology Press/Taylor & Francis.
- Zimmerman, Don H., & West, Candace. (1975). Sex roles, interruptions and silences in conversation. In Barrie Thorne & Nancy Henley (Eds.), *Language and sex: Difference and dominance* (pp. 105–129). Rowley, MA: Newbury.
- Ziv, Avner. (1984). *Personality and the senses of humor*. New York: Springer.

- Zuckerman, Milton. (1986). On the meaning and implications of facial prominence. *Journal of Nonverbal Behavior, 10*, 215–229.
- Zullo, Harold M. (1991). Pessimistic rumination in popular songs and newsmagazines predict economic recession via decreased consumer optimism and spending. *Journal of Economic Psychology, 12*, 501–526.
- Zullo, Harold M., & Seligman, Martin E. P. (1990). Pessimistic rumination predicts defeat of presidential candidates, 1900 to 1984. *Psychological Inquiry, 1*, 52–61.
- Zurbruggen, Eileen L., & Sherman, Aurora M. (2010). Race and gender in the 2008 U.S. Presidential election: A content analysis of editorial cartoons. *Analyses of Social Issues and Public Policy, 10*, 223–247.
- Zwick, Rebecca. (1988). Another look at interrater agreement. *Psychological Bulletin, 103*, 374–378.