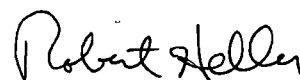


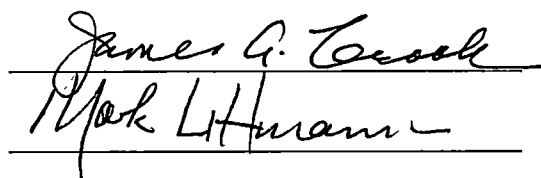
To the Graduate Council:

I am submitting herewith a thesis written by Sharon Linn Rasmussen entitled "And the winners are ... An examination of shared design characteristics among Society for News Design contest winners." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Communications.



Robert Heller, Major Professor

We have read this thesis
and recommend its acceptance:



Accepted for the Council:



Associate Vice Chancellor and
Dean of The Graduate School

**AND THE WINNERS ARE ...
AN EXAMINATION OF
SHARED DESIGN CHARACTERISTICS AMONG
SOCIETY FOR NEWS DESIGN CONTEST WINNERS**

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Sharon Linn Rasmussen
December 1999

Abstract

The newspaper industry is a veteran in the media battle for consumers' limited attention and dollars. Circulation is a measure of a newspaper's success as a business, and product quality has been shown to influence circulation. One aspect of quality is visual, or design, excellence. Industry contests are one measure of visual excellence.

This thesis examined winners in three recent annual Society for News Design contests, focusing on American broadsheet daily front pages, to determine whether the award basis for "best of the best" pages could be described.

The researcher found common characteristics in a range of areas, including a marked preference in later pages for traditional black-letter nameplate treatments; an average over the three years studied of four stories per page with three stories "jumping," or being completed on an inside page; index use on more than three-quarters of winning pages; and weather forecasts appearing on more than two-thirds of winning pages. Teasers, those brief items that give a front-page presence to selected inside stories, appeared on 84 percent of winning pages, while some type of display copy unit, generally used to break up story text, appeared on every page.

The researcher also found that half the primary packages, which are built around a page's dominant or lead subject, contained only one story, while nearly a third contained two stories. Primary packages averaged more than 60 percent of a page's overall space.

In addition, analysis of space occupied by text, headlines, and images revealed that text and headline space dropped over the three years studied while image space increased.

Analyses were supported by a group of 75 figures over more than 130 pages.

Common characteristics discovered in the analysis served as the basis for a group of 13 guidelines intended to provide news designers with a framework in the daily effort to communicate with consumers and thereby add to their company's success as a business.

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1. Introduction

The variety of mass media available today to the average American citizen boggles the mind, but experts believe that each new medium doesn't increase the use of media, it merely reduces the use of existing media, so that total media usage remains constant.

Because the usage remains constant, the ever-increasing number of media businesses must fight to retain or improve their share of consumer attention and dollars.

The newspaper industry is a veteran in this battle. It is always on the lookout for ways to increase the value of its product to the consumer and thereby increase its revenues from that product. It refers to its share of the mass media pie as circulation.

Research has shown product quality has an impact on newspaper circulation. Research also has shown a newspaper's front page is responsible for attracting the consumer's attention. One aspect of front-page quality is visual, or design, excellence.

Industry contests are a measure of design excellence. The Society for News Design (SND) is a professional organization founded in 1979 that has more than 2,500 members in more than 50 countries (Matlock, 1998). Its best-known program is likely the annual design contest — the only one of its type and size in the industry — which brings together more than a dozen peer judges to review thousands of submitted newspaper pages each year, then select winners in a variety of categories. Reproductions of the winning pages are published in a book that makes its way to newsrooms around the world.

In practice, each year's SND annual functions as a source of inspiration for news designers and as a kind of yardstick against which they measure their own work.

This thesis measures design characteristics of American daily broadsheet prize-winning front pages in the years 1993, 1995, and 1997. It describes commonly used design solutions such as average range of headline and image sizes, and it notes

extremes in a variety of design areas. By reporting shared characteristics of those news pages judged “the best” over a span of time, the writer suggests a model for excellence.

2. Review of literature

In today’s small world, where satellite links can deliver to-the-moment reports around the globe, a vast array of mass media exists to provide news and entertainment on a continuous basis: Newspapers, magazines, broadcast and cable television, radio, film, books, and the Internet all vie for the public’s attention, like some delectable dessert cart.

Despite the variety of media outlets, experts view the public as having a limited appetite for mass media. Maxwell McCombs (1972, p. 61), for example, described E.W. Scripps’ notion that the mass media “pie” is of finite size. Every new guest at the party requires that the pie be sliced in smaller pieces, or percentages. McCombs called this the Principle of Relative Constancy:

Only a small and fixed proportion of the economy is available to finance mass communication. ... New media in the marketplace did not produce a bigger pie; instead, the old pie was resliced to feed the newcomer. Some of the new communication technologies now on the horizon require such large dollar support, such a large slice of the pie, that they must drastically reduce the share of several existing competitors if they are to survive in the marketplace.

A Gallup poll reported in *American Journalism Review* (Newport & Saad, 1998) looked at the current division of the mass media pie and found Americans say they get their news primarily from nightly network broadcasts (75%), second from local TV news (73%), and third from local newspapers (62%).

Online industry analyst Steve Outing (1998, paragraph 3) reports a Paragon Research Center study, which found 16 percent of households “regularly access the Internet to read a newspaper site.” He also reports that 13 percent of those who read the news on the Internet dropped their home delivery of the print version; another 11 percent say they likely will halt their print subscription at some point now that they get the news online. Whether this new means of accessing the local newspaper’s content represents more or less pie for newspapers probably depends on whether the new medium contributes to the bottom line.

The newspaper industry has long claimed a slice of the mass media pie. Leo Bogart (1981, p. 111) wrote in *Press and Public*:

Newspapers have for so long been such a deeply embedded institution in Western urban culture that the practice of reading them has a momentum of its own, independent of the psychological needs that brought it about in the first place. Like the practice of instilling literacy among the young, acquiring useful current information is generally accepted as essential in a civilization in which creature comforts and material progress depend upon the mastery of information.

Klaus Schoenbach and Lori Bergen (1998, p. 90) also affirm the newspaper’s endurance: “One of the great strengths of the printed newspaper is that its format and its principal layout have been successfully tested now for almost 400 years. It has faced and survived the challenge of many new media — journals and magazines, telegraph and telephone, cinema, radio, and television” and now the Internet.

Media researchers Michael Wolf and Geoffrey Sands (1999) predict the next six years will see a blurring of media types, called convergence. Media companies will own several types of complementary outlets; radio will continue down a path of less music and more news/talk; and newspapers will creatively package and charge targeted audiences for content “published” in a variety of forms.

The case for newspapers

One observation related to shifts among media types is that modern consumers are finding fewer newspapers to read. McCombs (1972, p. 55) reported: "The high-water mark for the total number of daily newspapers in the United States was reached in 1909-1910. At that time, there were 2,202 daily newspapers." He noted that number had dropped to around 1,750 in 1972. Joe Strupp wrote in a 1999 *Editor & Publisher* report (p. 35) that "since 1990, the number of daily newspapers has dropped from 1,611 to 1,489." That's a loss from peak to current day of 32 percent.

According to an *Editor & Publisher* study reported on the Newspaper Association of America (1999) Web site, however, morning newspapers have more than doubled since 1950, from 322 to 721, while evening newspapers have been cut by nearly half, from 1,450 to 781. Despite this overall loss, Guido Stempel's 1991 telephone survey of 500 people across the nation found nearly twice as many respondents relied on their town's newspaper as on TV for local news. Bogart (1981, p. 129) determined in a study of five cities that 75 percent of respondents mostly agreed with the statement, "the newspaper gives me important news stories and details that I can't get from radio or TV."

Michael Krantz (1994) wrote in *MediaWeek* that newspaper circulation had stabilized and was expected to hold firm. Chip Brown agreed in his 1999 "State of the American Newspaper" assessment for *American Journalism Review*, and added that industry ad revenues were up 6.3 percent in 1998. Projections by the investment bank Veronis, Suhler and Associates Inc., reported in *Editor & Publisher* (Case, 1996), predicted growth in newspapers' core audience, ages 45 and up — the baby boomers — would result in a daily circulation rise to 60 million by 2000, and a NAA report in *Editor & Publisher* (Fitzgerald, 1999) noted 60 percent of newspapers with circulation greater than a half-million increased circulation during the first quarter of 1999.

Debra Gersh Hernandez's (1999, paragraph 2) spring report on NAA's Web page cites figures from the Competitive Media Index, which found "57.9 percent of all adults in the top 50 U.S. markets read a daily newspaper, and 67.8 percent read it on Sunday." She writes that's a slight drop from fall 1998 figures of 58.6 percent daily and 68.2 percent Sunday, but adds that primetime television viewership has dropped even more. It may well be that media, according to the Principle of Relative Constancy, are seeing their servings of pie change — which makes newspapers' relatively stable portion an even more impressive statistic.

The relationship of circulation and quality

A newspaper organization is a business. A successful business is one that spends money to create a quality product with value to the consumer. It must price that product at a rate that consumers will pay and that will cover associated costs and still provide a return to owners and stockholders.

One measure of a newspaper's success is its net paid circulation, a rigid value calculated for 95 percent of American daily newspapers by the Audit Bureau of Circulations on a daily basis and averaged over a five-day week (Thorn & Pfeil, 1987). The relationship of quality to circulation for newspapers is ongoing: If each published edition does not give value to the reader, a subscription may be canceled, or a newsstand may not sell its papers. Loss of circulation reduces revenues, and circulation has been shown to be influenced by quality.

Kyle Cole's 1995 case study found evidence that an index of quality variables has positive impact on circulation. Chic Bain and David Weaver remarked in their 1979 study (p. 59) of reader reaction to design that editors who altered page one layout according to their findings would be "making the newspaper a lot easier for the reader. And that may just improve the overall circulation of the newspaper." In a 1991

secondary content analysis of data gathered in a 1984 study, Stephen Lacy and Frederick Fico (p. 53) found strong support for a relationship between news quality and circulation, "with quality accounting for a fairly large proportion of variance in circulation." They warned that "newspapers that cut quality as a short-run cost-saving device may well lower their long-term profit by reducing circulation."

Newspaper executives who maintain their focus on the bottom line can still be found waving the banner for quality. Charles Layton (1999, p. 48) wrote that Burl Osborne, publisher of the *Dallas Morning News*, believes newspapers must make their content compelling, of such fine quality that consumers will reserve time to read. Osborne said, "If you create more value — that is, if readers spend more time with your newspaper — the advertising works better. You can charge more for it. And that's where you get the resources ... you can staircase your way into continual improvement if you keep adding value to readers. Because that will translate into value for advertisers, and that will translate into increased revenue."

In a recent issue of *Editor & Publisher*, Ken Liebeskind (1999) reports David McCollum, publisher of the *Las Cruces (N.M.) Sun-News*, believes papers lose circulation because "they don't offer enough value." McCollum says the best way to boost circulation is to provide a quality paper. And Strupp (1999, p. 36) quotes Madelyn Ross, managing editor of the *Pittsburgh Post-Gazette*, reminding editors not to allow business concerns to alter their focus: "If you take too much time away from directing content, you will see a diminishment of quality."

Alan M. Horton (1999), E.W. Scripps' senior vice president for newspapers wrote: "With the tremors of rapid change threatening the media landscape, all of us can stand confidently on the firm ground of quality. Quality content ... will prevail no matter how severe the quake in the media world."

What readers want from a newspaper

In their ongoing pursuit of improved circulation, some newspapers make change decisions guided primarily by intuition and convention (Stark, 1985), but others fund market research to determine what it is readers want from their newspapers. While Layton (1999, p. 49) smirks at this expenditure — “If market research has trouble predicting which automobile design will be a hit in the showroom, or what new trend in fashion will dominate the market a year from today, imagine trying to predict people’s appetite for news” — he gives a nod to the value of research by making some generalizations: “We can say with confidence that people want the paper delivered on time and that they want the ink to not rub off. We can say they want accurate, fair reporting and that good writing and compelling headlines are a plus.” In addition, he says these market research claims “seem to hold true consistently” (p. 54): Most readers want “serious, clear, in-depth coverage of the major issues of the day,” including national and world news. They want the paper to be “well-organized and accessible. They want the same features in the same places every day, so they can find them without hassle.”

Schoenbach and Bergen (1998, p. 93) list attributes they say are unique to the medium: A newspaper’s offerings are all available to a reader at the same time; a newspaper provides a variety of viewpoints; it includes “space for explanation and interpretation, for everyday orientation and context”; it is a low-tech databank requiring no special technological skills to use; it’s mobile; reader response is as easy as calling or writing the editor; and it offers a reader the “aesthetics of layout and typography, and even the haptic nature of unfolding a newspaper and paging through it.”

Noting reader response to when the medium is used, Bogart (1981, p. 129) identified another quality: user availability. In a study of 5 cities, he found 83 percent of respondents agreed that “I like to get my news from the paper because I can pick it up

or put it down whenever I want.” And Bogart (p. 117) found readers doing just that: “At any hour between 6:00 in the morning and midnight, no less than 3 percent of American adults are reading a newspaper.”

Mario Garcia (1993, p. 13) adds a final, vital quality: agenda setting. He asserts in *Contemporary Newspaper Design*, “Readers expect editors to make some decisions, to set priorities, to order the world for them.” They want to be told, by placement, story length and visual signals, what is the top story of the day.

The role of design

Enter any newsroom and ask page designers and reporters which makes more of an impression on readers, the writing or the layout, and you’ll get a chicken vs. egg response: If it lacks substance, the newspaper won’t get return readers. But if it doesn’t look good, a potential reader won’t pick up the paper. As Garcia (1993, p. 13) said: “The focus must be on the content. Newspaper artists are not fashion designers trying to make a ‘statement.’ We are journalists trying to make a world of information more accessible to readers.” Strong content and appealing presentation both have their role in the making of a successful newspaper.

George Bengé, SND president in 1994, identified the role of content in good design: “The truth is that every good designer has always approached every assignment or project with the question, ‘What’s the story?’ The good ones have always viewed design as effective presentation of content” (Benge, 1994).

Linda Brewer, deputy design director at *The New York Times*, emphasized her design staff’s role in a *Presstime* interview (Truitt, 1999, “Function feeds form,” paragraph 4), “We are journalists first and foremost. Everyone wants beautiful art, intriguing, evocative, but none of that happens at the expense of the news, the words. ...

Sometimes, a picture is beautiful but if it isn't relevant, if it doesn't help tell the story, then we don't use it. It has to make sense journalistically."

A respected competitor for the public's media dollar, *Time* magazine ranked "The Ten Best U.S. Dailies" in 1964, 1974, and 1984. In the last ranking, display copy for the article noted one reason to identify newspaper industry leaders: "Through their enterprise and style, they set a journalistic standard." In that ranking, *Time* (p. 58) recognized the importance of design by adding to the list of judgment criteria, "liveliness in ... layout and graphics." Visual qualities were described in summaries for half of their 10 selections that year (Henry, 1984). In the same year, Sandra Utt and Steve Pasternack (p. 883) surveyed 78 editors, who "overwhelmingly" agreed (94.9 percent) that at least in a competitive situation, "appearance can be a critical factor."

Audience judgment of a newspaper is influenced by the paper's presentation. Newspaper designer John Allen (1936, p. 1) said, "The way information is presented visually impacts on the receiver's perception of its clarity and credibility." Ed Henninger (1994, p. 33), a newspaper consultant, describes the basic function of design: "Newspaper design must serve the reader. An exciting design that the reader cannot follow is a design that fails." He adds that design techniques "ease and speed the reader's way" and notes "design is flexible, to respond to demands of the news."

When Pegie Stark (1985) asked 112 front-page designers and editors to name well-designed newspapers and describe why they thought their choices were well-designed, the respondents noted the selected papers were well-organized, easy for readers to get through, consistently designed, attractive, and fit the needs of their audience.

Consistency of design brings familiarity, which increases a reader's comfort with the product. Arnold (1981, p. 179) wrote: "The newspaper must be instantly recognizable. The reader who knows that this is a familiar paper whose quality has been

well established over a long period needs little cajolery to pick it up. So the designer must adopt a basic 'look' for the paper, one that will constantly remind the reader of all the good things the last issue brought and promises more of the same with the current issue." Bogart (1981, p. 164) agreed, "The fact that the news is packaged in a familiar and predictable format creates the comfortable feeling that confident forces are in control; it reduces anxiety about its content."

George Gladney (1996) surveyed more than 500 readers and editors of more than 250 newspapers, asking them to rank the value of nine content standards. One of those standards was "visual appeal," defined as "effective, attractive presentation of news through use of visual tools such as typography, photography, graphics, color, layout, design" (p. 324). While 44.4% of editors ranked visual appeal as essential, only 18.8% of readers agreed. Gladney surmised this was because of "reader backlash" to the industry's "reader-friendly" design efforts by using "dazzling color and graphics, and snazzy news packaging" (p. 328). Or it may be that editors are more knowledgeable about the work required to achieve good design than the reader, and therefore rank visual appeal higher in importance. It may also be true, as Brian Stallcop (1994, p. 22), then design editor for *The Virginian-Pilot* in Norfolk, Va., suggested, that the transparent consistency of a newspaper's design is key to its effectiveness: "If designers do their jobs well, the design is invisible, and there are no bells and whistles that don't add value for the reader."

The front-page microcosm

Newspapers rely on visual impact for newsstand sales. A newspaper's visual identity is first seen through the microcosm of its front page. Industry experts and researchers for years have recognized the value of an effective front page in persuading a potential reader to buy the paper.

Harold Evans (1973, p. 57) asserted, "The front page is not merely an act of publishing, it is an act of marketing. It is only the first of many pages of editorial, but it establishes the identity, character and freshness of the newspaper by its title, its display treatment and content. The public is induced to buy it, or pick it up and read it."

Arnold wrote in his 1981 (p. 179) book on newspaper design, "The front page must look different enough from all previous pages [front pages of previous editions] that the reader will instantly know that this is something new. ... A good format allows maximum flexibility without ignoring the maintained identity. ... The first function of the front page is to impel the reader to grab the paper in eager hands. Until the paper is held, it can't be read. The next function is to convert the looker into a reader."

The majority of Stark's (1985) survey respondents agreed on the primary goals of front-page design: selling the newspaper, conveying a mood of urgency and helping readers get through the page with ease.

Garcia (1993, p. 132) sums up front-page objectives as "to grab the reader's attention the moment he sees the page" and "to create sufficient visual interest to keep the reader's eyes moving on the page." Bogart (1981) found 53 percent of readers start with the front page, then move through the rest of the paper.

Design research

So how does a newspaper executive evaluate the impact design has on his business?

Rolf Rehe (1997a), a newspaper consultant and typographer, reports a meeting in which an editor asked, "Are there tests that show how much design contributes to circulation?" Rehe's response noted some papers had recorded circulation increases following redesign, but then he lamented that "little research has been undertaken into visual presentation." Rehe called for "systematic research of individual variables."

Some research has been done on specific front-page design characteristics in an effort to determine what draws potential readers to a newspaper and encourages them to buy it.

Style

In an effort to identify long-term trends in the design of American newspapers' front pages, Kevin Barnhurst and John Nerone (1991, p. 804) sampled papers over a span of 100 years: 1885-1985. They found that "during the century, the newspapers in the study moved from the complexity of the Victorian era to the simplicity of modernism." They noted "modern" design generally refers to horizontal layout, fewer columns, wider headlines with fewer lines, many visual elements, and prominent illustrations, including information graphics.

Stark's (1985) survey of front-page designers and editors found 68 percent of respondents reported their newspapers use modular design formats, where each story's elements are grouped for a boxlike appearance, and Pasternack and Utt's 1995 update of a study of front pages found most respondents design the page in the modular style.

In a study of college students in Florida, Ron Smith (1989, p. 79) wrote students "perceived traditional-design newspapers to be more old-fashioned, staler, more timid and duller than modern or modular papers."

Modern, modular, traditional: Although these terms seem somewhat loosely defined, a designer studying these findings could conclude that keeping a paper's design up-to-date and grouping stories in easy-to-read modules are common practices enjoying reader approval.

Color

Gerald Stone, John Schweitzer, and David Weaver's study (1978) found 64 percent of 380 papers used spot color. Stark's 1985 study found spot color used more frequently than full color, and that spot color was most frequently used in charts and/or

graphs. Utt and Pasternack (1984) found color more common in dailies with less than 50,000 circulation. They determined 34.6 percent “regularly” use full color on the front page, 28.2 percent “occasionally” use it, and 16.7 percent “never” use front-page full color. Their 1986 replication of an earlier study suggested a relationship between increased use of color and perceived decrease in accuracy and use of hard news, while their 1995 study found most respondents use more spot color than measured in previous studies. However, changes in technology may make these findings irrelevant to today’s papers.

Smith (1989, p. 83) found students rated newspapers that “used spot color higher in many categories such as interest, freshness and excitement.” Garcia’s (1993, p. 131) evaluation of front pages noted increased “artistic and functional” use of color.

Unfortunately, studies of color use often appear based on hard-to-measure emotional responses, and a designer may find it difficult to derive guidance from them.

Nameplate

Stone, Schweitzer, and Weaver (1978) found 54 percent of 380 papers studied did not use “Roman, Old English type style” on the nameplate. But Utt and Pasternack (1984) determined 53.2 percent of the nameplates in papers they studied retained a traditional text typeface, and that nameplates ran the full page width at 85.5 percent of papers. Their 1995 research confirmed that most newspapers they studied run a traditionally designed nameplate across the full page width.

Ken Smith’s research of non-dailies (1996) showed 88 percent run nameplates across the full page width. In a 1983 study of nearly 500 newspaper editions, Bruce Daugherty (1983) found about 19 percent of front-page space was devoted to the nameplate and other non-news elements.

It appears newspapers may have briefly tried nameplates in nontraditional type, but then returned to traditional renderings that run the full page width.

Columns (page grid)

David Weaver and L.E. Mullins' 1975 look at 46 competing newspapers in 23 cities found more than 65 percent used an 8-column format. Barnhurst and Nerone (1991) reported 1885 newspapers' high of nine columns on the front page decreased to five or six by 1985. Utt and Pasternack's 1984 survey of 78 daily newspapers found 85.5 percent used a 6-column format on the front page, and 62.4 percent said they vary column widths regularly. In a 1995 update, they found fewer (79.2%) used a 5- or 6-column format, but the number who varied column widths regularly had increased to 81.8 percent. Garcia's (1993) evaluation of front pages noted a variety of column widths being used on the front page.

Where page grids are in use, studies find 5- to 6-column formats preferred, but standard grids have become more flexible.

Index

Garcia's (1993) evaluation of front pages found more newspapers were regularly using a news summary and/or index box. Pasternack and Utt's 1995 study found most dailies (93.8%) run an index, usually boxed in the lower left-hand corner.

Teasers

Bain and Weaver suggested in their 1979 (p. 58) study of Indiana college students that teasers appeared a good solution to readers' dislike of jumps: Page one teasers gave inside stories front-page presence, while reducing the number of stories appearing on page one, and in a field study comparing several newspaper versions, "readership on the inside version was almost identical to the version that appeared on page one."

Stark's (1985) survey of front-page designers and editors found most displayed teasers across the top, above the nameplate, at least four days a week if not daily, in an effort to boost newsstand sales.

An Associated Press Managing Editors (1985) study of 30 newspapers on one day in three decades found an increase in teaser use from 1965 to 1985. Garcia's 1991 Eye-Trac research used a device that measured a reader's visual attention to parts of a page. He reported (p. 28) "strong evidence that promos at the top of page one generate high levels of reader traffic." Pasternack and Utt's 1995 study found 70.3 percent of respondents regularly run teasers above the nameplate.

Teaser use has apparently become the norm, and some research shows the preferred location is at the top of page one, above the nameplate.

Story count

Barnhurst and Nerone (1991) found over 100 years, the average number of stories on the front page decreased from a high of 58 in 1885 to a low of 7.29 in 1985. In a 1983 study of nearly 500 newspaper editions, Daugherty (1983) found an average of 6 stories on the front page, while the 1985 APME study concluded the increase in front-page graphics and in photo and teaser size was responsible for the reduction in story count from 13 in 1965 to six in 1985. Pasternack and Utt found five to six stories in 1984; they confirmed the finding in a 1995 update of that research.

Studies appear in agreement that page one supports about six stories.

Jumps

Barnhurst and Nerone (1991, p. 803) said the creative concept of jumping stories to inside pages helped reduce the front-page word count between 1885 and 1985. "As the front page showed fewer elements and enhanced orderliness, more information went inside."

Bain and Weaver's 1979 (p. 57) study found readers prefer few jumps: "Readers consume more of the newspaper front page when stories start and end in the same place," and in a focus-group study of "potential" newspaper readers commissioned by the American Society of Newspaper Editors and the Newspaper Association of

America (Garneau, 1994), researchers concluded this group of non-readers “hated” jumps. But when Wayne Wanta and Dandan Gao (1994) tested high-school students’ response to 20 actual newspaper front pages, they found pages with fewer stories — but more jumps — garnered more favorable response.

In 1984, Utt and Pasternack found 48 percent of daily papers studied jumped one-quarter to three-quarters of their front-page stories; 5 percent jumped all stories; and 8 percent jumped no stories. Their 1995 study found most papers jump at least half of their five to six front-page stories to an inside page. Smith (1996) found one-third of the 112 non-dailies he examined jumped half their front-page stories, while another third did not use any jumps.

Research finds jumps are used for some to all of page one stories, but reader reaction to jumps varies.

Headline variations

Weaver and Mullins (1975) found about 85 percent of competing papers in 23 cities used no headlines larger than 72 point. Stone, Schweitzer, and Weaver (1978) found 73 percent of 380 papers used kickers or overlines in their headline treatments; 49 percent chose a non-serif headline face; and for only 23 percent was the largest capital letter in the primary head at least 0.75 inch (72 point or about 4.5 picas tall).

Bain and Weaver (1979) determined readers see the size of a headline as the best clue to its importance, not the font choice or weight. Smith (1996) found more than half the nondailies he studied used serif headlines. Utt and Pasternack (1984) found 42 percent of headlines in papers they studied used a sans serif face, while 58 percent used serif (38 percent block serif, and 20 percent other serif). The largest front-page headline typically ran no larger than 72 point. In a 1995 update of their study, Pasternack and Utt found 55.2 percent of headlines were serif and 44.8 percent were sans serif.

Barnhurst and Nerone (1991) found that within 100 years, far fewer headlines on more recent front pages were rendered in all capital letters, and current designers used sans serif fonts more often.

All 112 respondents to Stark's (1985) survey of front-page designers and editors marked their top story with a headline larger than others on the page, while 25 percent said the primary headline ran bolder or in more lines than did other page one headlines. Stark also found 94 percent used the same typeface for all page one headlines, while about half repeat the headline font in package labels.

Garcia's (1991) Eye-Trac research found 56 percent of headlines were processed, or looked at. Garcia's 1993 evaluation of front pages noted substantial use of contrasting bold and light fonts.

In a survey of 185 readers of *The Washington Post*, Michel DuCille (1994, p. 50) reported an "overwhelming number of readers zeroed in the headline," with 57 percent saying it was the first element they saw.

Headline size signals story importance to readers, with the main headline often running 72 point or perhaps larger. Font choice seems less an issue, with heads rendered in both serif and sans serif faces and in differing weights. Little research appears to have done on the number of lines a head should run, or whether deckheads and/or overlines are useful headline variations.

Display copy units

Wanta and Gao (1994) noted the effectiveness of pull-quotes in subjects' reports of increased reading enjoyment and information recall, but no other research was found to have examined use of display copy units.

Images

Weaver and Mullins (1975) found three-quarters of the papers they analyzed used 0-3 photos on the front page, with the largest photo most often running 3-4 columns

wide. Michael Singletary (1978) looked at front-page photo use in six papers in three years: 1936, 1956, and 1976. He found the use of mug shots (small head-only portraits) declined from 59 percent in the first year studied to 42 percent, and finally to 30 percent in the final year.

Stone, Schweitzer, and Weaver (1978) determined 33 percent of 380 papers used a dominant image of at least 40 square inches (240 square picas; this is approximately equivalent to a 3-4 column image in a 6-column format). Bain and Weaver discovered larger images attract readers to an accompanying story better than smaller images, and more than half their respondents said they looked first at the image.

Paul Lester (1988) found in a sample of 300 front pages that 83 percent of visual elements — defined as photographs, illustrations, charts, maps, or a combination — in papers of similar design to *USA Today* were two or less columns wide; 67 percent of those with similarities in design to the *New York Times* and the *Los Angeles Times* ran visual elements two or more columns wide. In the first group, 63 percent did not pair the visual element with a story; in the second group, 69 percent ran stories with the visual element.

Daugherty (1983) found photographs occupied just under 23 percent of total front-page space. Stark (1985) found news photos used daily on front pages, and reported charts and graphs were used fewer than four days a week. A 1985 APME study found an increase in use of front-page graphics and in photo size from 1965 to 1985.

Garcia's 1991 Eye-Trac research revealed that artwork (80%) and photos (75%) dominated number of elements respondents actually looked at. Photos 3- or 5-columns wide were processed at the highest rate, with 92 percent and 94 percent, respectively. Four-column photos received 87 percent attention, 2-column 77 percent, 1-column 54 percent, and mug photos 44 percent. Caption reading increased with photo size, and color increased photo-group processing, even when the images were small. His 1993

(p. 129) evaluation of front pages noted an increase in “larger and dramatically cropped photos.”

Bain and Weaver (1979) discovered a link between photograph size and story consumption: The bigger the photo, the greater likelihood the related story will be read. Surveys of readers in two states concluded “news stories with a picture have higher readership than those without a picture” (McCombs, Mauro, and Son 1988, p. 28).

While only 7 percent of DuCille’s (1994) respondents said they looked at an image first, results indicated photos influence a reader’s selection of which story to read first, second, etc. He also reported the lead or prominent front-page story ran more often with a three-column photo (13%) or two-column photo (12%) than with a photo of any other size. However, Wanta and Gao’s (1994) results suggest that front pages using many small photographs created more interest for the test subjects than those showing a single dominant photo and that subjects responded more favorably to a page dominated by a large graphic than one with a large photograph.

Utt and Pasternack (1984) found front pages used one to four photographs, with most (66.7%) using two. Almost all (96.2%) used a dominant photo. Their 1995 study found most respondents average two photographs on the front page, and most average one information graphic each day on the front page. At 83.5 percent of the papers, the dominant photo ran equally either as a standalone or as part of a story package, but it ran alone with a refer to an inside story only 25 percent of the time. In addition, more than half the papers ran a mug photo daily, and information graphic use had increased at 78.4 percent of the papers over a 5-year period.

John King (1995) content-analyzed two newspapers for use of visual elements — one considered to have a traditional appearance and one considered more visual — then surveyed reader satisfaction with those papers. He found readers rated the paper with a more “visual” design — defined as generally using more and larger maps, graphics,

logos, boxes, photographs and other visual elements — as more “modern, appealing, and better on overall appearance.”

Smith found in a 1996 study of nondaily papers that only half used a dominant photo on their front page, almost three-quarters used no mug photos, and none used information graphics. He surmised these results were primarily due to the small staff size of nondaily papers.

Research on image use is abundant, but beyond seeming agreement that readers respond well to pages that contain images, conclusions are difficult. Is one large image with the main story enough to pull readers in, or should secondary stories also have images? How big is big enough? How small is still useful for reader attention? Findings vary.

Research as a tool to improve quality

Designers’ training and experience guide them on how best to create a quality product that will attract readers. Additional guidance based on research likely would be helpful as well. But obstacles are found in studies’ variance in subjects, materials, and communities researched. Differences in these and other factors lead to conflicts in findings. Studies may be correct within their described parameters, but how might a newspaper’s designers and editors glean guidance from them?

Notable news designers have published manuals of design (Harrower, 1998; Garcia, 1993; Arnold, 1981; Evans, 1973; Allen, 1947), but they rarely cite research as support for their instructions, relying instead on standard industry practice. For example, they generally define the elements of a newspaper’s front page as a lead or primary story group and a variety of subordinate story groups. Within each story group is, at minimum, a headline and text; these may expand to include sidebars and secondary stories, each with its own headline, text, and possibly images. Dominant art

usually serves to draw the reader into the page. Additional elements appear on the front page, including the nameplate, an index, and teasers to promote stories on other pages or in coming editions.

Other elements, according to Stallcop (1994, p. 24), include these: "he said/she said boxes, bio boxes, background boxes, quotes, bold lead-ins, maps, graphics, photos, etc." They are among the "graphic strategies" newspaper consultant Mario Garcia (1993, p. 34) says the page designer employs to ease the communication of information: "through a series of visual signals." He asserts the use of "boxes, color backgrounds, headline sizes, and other signals are not mere ornaments. They help guide the reader through the information."

These standard industry practices as described in newspaper design manuals are useful in acquainting designers fresh to the field with the tools of the trade. But how does a designer on deadline come up with fresh solutions, with pages that reach beyond industry practice to "wow" the reader? And can research evaluate the results of such solutions?

Contests as a measure of design quality

One apparently little-researched measure of design quality within the newspaper industry is contests. This is surprising, given factors that appear to solve problems seen in other research: Contests are based on published pages, not pages created by a researcher who may color the work with his own judgments. They are geographically broadly based, so that variance in subjects and communities casts no undue influence. And the pages present the "best" work of professionals in the field, so they are highly regarded as quality work.

Individual companies sponsor their own in-house contests. In the 1999 announcement of winners in the E.W. Scripps in-house contest, Alan Horton marked

the value of the contest by saying, "The winners ... have earned the right to carry our colors as the best of our best, and their best helps us prove our worth to our readers ... Bottom line: Excellence boosts readership, protects our brands, enhances our credibility and better serves customers and consumers. That's why we honor it." Indeed, Randal Beam, Sharon Dunwoody, and Gerald Kosicki (1986) surveyed 190 journalists and found contest winners achieve a higher level of prestige among peers than non-winners, and Wanta and Gao (1994) selected some newspapers to be treatments in a study because the papers had won multiple Society of News Design awards.

An industrywide organization, the Society for News Design, begun in 1979 as The Society of Newspaper Design, is known for its annual review of excellence in news design. A panel of experts in the newspaper field judges thousands of pages from around the world in a variety of categories, then awards several levels of excellence. Small reproductions of the winning entries are published in a book provided to SND members as a benefit of membership, and the annuals are also available in bookstores.

Evans (1973, p. 202) commented on one value of design contests in his book, *Newspaper Design*, saying: "Despite the furious argument the judgments provoke, they are slowly enabling some minimal standards of good design to be agreed." Alicia Shepard (1996) and Rosalind Truitt (1999) are among writers who have cited awards as evidence of a newspaper's design quality.

By virtue of judging contest winners as the best, industry leaders who serve as contest judges appear to set winners up as a potential yardstick against which designers can measure their own performance. In the preface to the tenth edition of the Society for News Design awards, the contest chairman, Dierck Casselman of *The Detroit News*, expressed hope that the annual would be a "directional sign for design in the years to come." In practice, each year's SND annual and other volumes of winning pages function as a source of inspiration for news designers.

Whether a newspaper page is contest-worthy could, of course, distract a designer from his primary mission, to use design to improve communication with the reader. Del Stone (1997a) reflects, tongue-in-cheek, on this problem in a soliloquy following an editor's negative review of a page design: "Was it true? Was I sacrificing content for design? Had I tromped on common sense, told my readers to go to hell, and ignored my newspaper's primary mission to inform, in a mad desire to produce a work of 'art' that pleased only me? Should I step back from this process, rethink my approach to the issue of design, and concentrate on making my work more accessible to readers? ... Nah! Let the publisher worry about that stuff. I've got prizes to win."

Garcia (1993, p. 9) frowns at the suggestion of this kind of thinking, admonishing:

Good design should trigger a need to read. Building that need, however, should begin with an enticing headline, an attractive photograph, a carefully crafted cutline, a compellingly written story. There's nothing new about this advice, but in our zeal for good design, we forget that "design" is the relationship of all these elements, and that its purpose is to win readers, not contests.

Another difficulty with contests is an ongoing concern with how they are conducted. According to Alan Jacobson (1990), chairman of the 12th SND contest, myths about that contest — and his rebuttals — include these:

- Papers that saturate a category gain advantage. He notes that in the front-page category in the 10th edition contest, nearly 100 of the 500 entries were from a single paper. That paper garnered no awards.
- There are too many (or not enough) winners. Jacobson wryly notes that winners think too many awards are given out, losers not enough. He writes that from among 7,500 entries in the 10th and 11th editions, 300 won awards; 54 of those received gold or silver medals.
- Judges are fickle. Jacobson says judges "desperately try to be fair," and that a minimum number of judges must vote to remove an entry from competition.

Despite criticisms, some feel the true value of these contests lies in their ability to identify pages that fulfill the designer's mission. For example, in describing why *The Miami Herald* won Best of Show in the Society for News Design's 14th edition, G.W. Babb (1993), contest chairman, noted the "judges said the graphics and design of the work obviously were as important as any other element — the reporting, the writing, the editing, the photography. One judge said this effort by *The Herald* could be looked on as a watershed for the Society as well because it exemplified the role design should play as the building block of journalistic planning and execution."

Jim Jennings (1999, p. 32) editorial director of Thomson Newspapers, derived certain "lessons" designers could learn from 20th edition SND winners:

- Allow content to drive design.
- Create a sense of place, community and culture.
- Provide a relevant content within an understandable context.
- Engage and interact with the reader.
- Experiment — seek new solutions to old problems.
- Give the same care and attention to words as design.
- Design the entire paper.
- Treat photography with respect.

While these general guidelines suggest a philosophy, they do not provide specific guidance on, say, how large the front page's dominant photograph should be to attract a potential reader's attention and sell the newspaper — or win a contest.

Design contests offer a largely untapped source of concrete research material. The SND contests, by virtue of being industrywide, appear a virtual gold mine that, if researched, could provide guidance to designers. Analyzing contest winners' design decisions may suggest a range of image sizes, for example, that constitute a norm, thereby marking more exact increments on the yardstick of excellence against which designers may measure their work.

3. Objective

This thesis evaluates recent SND American broadsheet contest winners in the front-page category to determine if shared design characteristics might suggest guidelines to newspaper designers for effective layout.

4. Method

Sample

Characteristics are described and compared across a sample of 68 subjects: 20 from the 1993 Society for News Design annual (15th edition), 23 from the 1995 annual (17th edition), and 25 from the 1997 annual (19th edition). All were winning entries in the front-page category. All were American broadsheet city newspapers.

Procedure

Reproductions of winning entries were photocopied from the published annuals to approximately 25 picas of live print width (excluding outer page margins, since cropping for reproduction in the annual may have altered the original margin area). The photocopy size was selected as the best balance between the small reproduction used in the annuals and the need for measurement accuracy, which demands a larger size.

Following other researchers' method (Daugherty, 1983; Lacy & Fico, 1991; and Bridges, 1986 and 1997), each element on a page was measured and converted into a proportion of the overall available page space. Using a proportional measurement negated the effect of varying reproduction size. In addition, broadsheet publications vary somewhat in their published size, and recording area data as a percentage of each

paper's total area made the units comparable for analysis across publications. However, instead of using square centimeters as Daugherty did, measurements were made in picas and points, which is a standard system in the publishing industry. An inch contains 6 picas, and a pica contains 12 points. Points were converted to two decimal places, rounded from three, for ease in computations. One point divided by the 12 points in a pica means 1 point equals 0.08 of a pica. Two points equal 0.17; 3 is 0.25; 4 is 0.33; 5 is 0.42; 6 is 0.5; 7 is 0.58; 8 is 0.67; 9 is 0.75; 10 is 0.83; and 11 is 0.92.

Counts were also made, such as how many stories, display copy units, and photographs appeared on a page. The third type of measure was font choice: for example, headlines were designated as serif, sans serif, or both. See Appendix A, beginning page 53 for a sample of the final coding form.

Measures

Every item appearing on each front page was accounted for within some category of measurement except for white space (open areas), reference to a paper's Web site, and bar codes. This thoroughness required stretching beyond parameters of existing research to include areas previously described only in design instruction manuals.

Categories of measurement included: total page space; primary story unit/package; story count; headlines (primary and all others); text amount (reproduction size prohibited study of text font, size, or spacing); and images (primary and all others), including photographs, illustrations (rendered images without text), and graphics (rendered images with explanatory text).

The category of display copy units included elements used chiefly to provide entry points for the reader and to break up the gray of text. They were: refers (references to related stories within the same day's edition); pull-quotes (direct quotations pulled from the body of the story and reproduced in a larger type size within the story's designated

page area); lifts (story text segments reproduced in a larger type size within the story's designated page area), intertext headlines (including subheads that interrupt the flow of text and headlines within briefs or digest packages); and initial caps (large capital letters replacing the first letter of the first word of a story or starting a new story section).

Standing elements, including the nameplate, index (a guide in list form to sections or featured items inside the same day's paper), teasers (short items — with or without art — promoting stories within the day's or an upcoming edition), and weather forecasts were also coded. The paper's date and any price notation, if in the nameplate area, were included as part of it; if elsewhere on the page, they were disregarded.

Additional clarifications:

- Pages were not evaluated for design style or color use. The researcher found both areas too dependent on vague or emotionally based measures rather than hard measures of physical area.

- The width of the nameplate was generally measured as the page width unless the nameplate design was clearly defined otherwise, as by a box.

- Where the primary package included multiple stories, it was assumed the art was part of the main story unless it clearly made reference to or was grouped with another story in the package.

- A photoillustration — a group of photographic elements manipulated in some manner to form a new combination image — was counted as an illustration.

- If stories or other elements were bounded by a screen tint or box or otherwise obviously included a framing device, that additional space was counted as part of the story or element's total space; in other words, the dimensions of printed matter relating to a specific story or element defined the limits for that story or element.

- Bylines and photo captions were counted as part of the story's body text.

- Where text wrapped around another element, such as an image or display copy unit, the text was measured as if it were an uninterrupted block. This resulted in page elements taken together adding up to more than 100 percent of the available space.

Data analysis and rationale

Given this study's descriptive nature and large number of variables, discussion narrowly focused on variables that demonstrate minimal variation; this approach was based on the rationale that designers may derive guidance from looking at situations where winners made similar design decisions, while variables with scattered distributions probably indicate designers have a free rein in those decisions. Supporting figures, however, were included for all variables.

Several types of analysis were conducted on the data, depending on its type, using the Statistical Package for Social Sciences (SPSS). This package allows data depiction in a variety of forms, and it permits any cases with a missing value to be excluded from analysis on that variable; consequently, the sample size for a given variable was reduced by the number of missing cases for that variable.

Categorical variables (such as nameplate lettering style) were illustrated by bar graphs, which provide a clear view of frequency distributions for nonnumerical data. Continuous variables (such as the number of photographs or the percent of page space occupied by the index) were illustrated by boxplots, which succinctly depict a distribution's center, spread, and range. Outliers were not shown, since the goal of this analysis was to focus on similar rather than extreme cases.

Both categorical and continuous variables were analyzed by year, and figures were clarified by measures of mean (average of the measures), median (center measure), mode (measure occurring most often), standard deviation (measure of spread about the

mean), and range (distance between lowest and highest measures). See Appendix B for figures, beginning page 59.

Post hoc analysis added evaluation of variable sums, including the sum of all image space and the sum of all display copy units on each page. Selected variables, such as headline space and number of deckheads/overlines, were also scrutinized by story count.

5. Results

The 68 winning American city broadsheet pages in the front-page category of SND's 1993, 1995, and 1997 contests showed the tremendous range of visual elements available to a news designer. However, many similarities were isolated, and in cases where a practice appeared to be increasing or decreasing in use over time, these potential trends were noted.

Nameplate

A nameplate, or newspaper title, is generally rendered in one of three styles: a traditional black-letter font, which is a gothic style resembling medieval calligraphy; a serif font, whose letterforms have short cross-strokes; or a sans serif, which has smooth letterforms without cross-strokes. Front pages receiving design awards preferred a serif font to sans serif or black letter by a slight margin in 1993, but 1995 winners were split 50/50 between serif and black letter, and 1997 winners preferred black-letter treatments nearly 2 to 1. Space devoted to the nameplate remained fairly consistent at about 8 percent. Nameplate space gradually increased over time, though the range narrowed in the amount of space this item occupied.

Columns (page grid)

The number of columns on a page is an observation of the designer's use of a page grid. Most winning front pages appeared to use 5- to 6-column grids, but some pages exhibited no discernible overall grid — grids changed from story module to story module — so the sample size was reduced by those 11 questionable pages. In addition, 60 percent of the 1993 winners, 57 percent of the 1995 winners, and 60 percent of the 1997 winners, although using an underlying grid structure, stretched it to include odd column measures within individual story layouts.

Story count

Four stories appeared on nearly one-third of the winning front pages (23). Pages with five stories numbered 14; three stories, 11; two stories, 10; and one story, six. Three pages had six stories, while only one page had seven stories. Any trend would be toward fewer stories: The middle half of 1993 pages ranged from three to five stories; 1995, two and a half to five; and 1997, two to four.

Jumps

The median number of front-page stories jumping, or being completed on an inside page, was three for all years. As would be expected, the more stories placed on the front page, the more stories jumped inside.

Index

Of 68 pages, 55 (81%) used a small index on the lower half of the front page to list selected interior contents for that edition. None used an image within the index area. The mean proportion of page space used by an index remained well under 2 percent for most winning pages, although four pages pushed the area up to 3 to 4 percent.

Weather forecast

In the first year measured, winning front pages were as likely to omit a weather forecast as to include one: 50 percent used a forecast. However, by the third year, forecast use outpaced nonuse by 3 to 1 (76%). Of forecast users, more than two-thirds included some kind of image along with the text. Space use remained small, averaging about 0.5 percent to 1 percent of the page.

Teasers

Of 68 winning pages, 57 (84%) used teasers, also called promos, to give a front-page presence to stories inside the same day's or a coming edition. Treatments shifted from a strong horizontal orientation to an even division between primarily horizontal and vertical orientations. Pages promoted an average of three stories and exhibited a median use of two images within the teaser space. Each teaser used about five lines of text, though pages with two stories were a little wordier in their teasers with a median of 6.77 lines of text. Pages with four and three stories had medians of 6.00 and 5.95 lines of teaser text, respectively.

Page space dedicated to teasers varied from more than 7 percent in the first year up to more than 9 percent in the second year. It dropped to less than 6 percent in the third year. The seesaw variation was repeated in a look at space by story count: Pages with two, four, and six stories had mean teaser space of around 8 percent, and 3- and 5-story pages used around 7 percent; 1-story pages had the least space for teasers at 2.26 percent, and the single 7-story page had the most at 9.23 percent.

Display copy units

All winning pages used some type of display copy unit to break up the "gray" of text, whether refer, pull-quote, lift-out, intertext headline, or initial capital letter. Most

pages used several of these devices, with a median use of three in the first year, five in the second, and four in the third. Heavy users included four pages that each used more than 10. Total space devoted to display copy units, however, was small, with a mean for all cases of 3.49 percent. Interestingly, of the four pages with the highest total display copy unit space (more than 13 percent), none used more than four.

Refers

The device known as a “refer,” or a copy bit that refers the reader to a related story on another page, appears most favored of all display copy units. Of 68 pages in the sample, 51 used at least one refer (75%), and the mean use was three. As story counts increased, however, average refer number and space appeared to decrease. One-story pages used a mean of 4.20 refers, with a mean space of 5.16 percent; the steady drop ended in 6-story pages showing a mean use of one refer over a mean space of only 0.18 percent.

Pull-quotes

Only 13 pages (19%) used a pull-quote, a direct quote lifted from the story and rendered in a typeface larger than body copy. Of those that used them, four used two and the rest used only one. Space allocation was minimal, with a median per-page percentage of 2.

Lift-outs

Lift-outs, highlighted bits of text, often are designed similarly to pull-quotes. They appeared on only seven winning pages (10%): One page used two, and the remainder used one each. Area averaged around 1 percent of the total page space, except for the two 4-story pages, which had a median lift-out area of nearly 3.5 percent.

Intertext headlines

Small and usually rendered in a bold font, intertext headlines often appear as subheads within a story or as headlines on individual stories within digests, or packages

of several brief stories. Of the winning pages, nearly one-third (22) used an average of four of these devices, but most devoted only slightly more than 1 percent of total page space to all of them.

Initial capital letters

Often called "i-caps," oversized initial capital letters replace the first letter of the first word of a story or are used within a story to signal the start of a new section. Nearly half the winning pages (33) averaged one i-cap per page; they were evenly distributed over pages in each year. The mean page space for i-caps was 0.25 percent over all pages. Two-story and three-story pages averaged the highest use of page space devoted to i-caps at 0.29 percent. None of the four 6- and 7-story pages used an initial capital letter.

Primary packages

All newspaper front pages have a lead story or package of stories that dominates the page and serves as a focal point for the reader.

The mean page space for all primary packages was 60.74 percent. In 1993, the middle half of winning pages had packages that occupied between about 52 and 68 percent of the page, with a mean of 59.40 percent. That broadened for 1995 winners: The middle half stretched from about 46 to 82 percent, with a mean of 62.76 percent. The middle half of 1997 winning pages had primary packages that varied from about 48 to 75 percent of total page space, with a mean of 59.95 percent.

As might be expected, the average space generally increased as primary packages included more stories: One-story packages averaged 54.65 percent; 2-story, 64.39 percent; and 3-story, 67.98 percent. The single 4- and 5-story pages used 88.31 percent and 81.10 percent of the page, respectively, for their primary packages.

Story count and jumps

For 11 of the 68 SND winners (16%), all the stories on the page were related, so all were counted as part of the primary package.

Six pages had only one "story," often a large image with a minimal amount of text heralding a single news item. Those six pages were part of a larger group of 33 having only one story in the primary package.

The next-largest group was 2-story packages, with 24 winning pages. There also were nine 3-story packages and one each of 4- and 5-story primary packages. Generally, one to two primary package stories jumped to an inside page.

Headline

The main headline in a primary package — generally the dominant headline for an entire front page — was typically confined to one line, had a mean of nearly 23 characters (letters and spaces), and occupied about 5.50 percent of the page. Serif headlines were used almost twice as often as sans serif on the 1993 pages; 1995 pages showed a fairly equal distribution, and 1997 pages showed a marked preference for sans serif headlines. Only one page in each year mixed fonts in their main headlines.

Text

Individual units of text were counted and the space each occupied was added together for an idea of the amount of text designers used within primary packages. Text blocks included photograph captions and "nut graphs," or story synopses, which are printed at the beginning of a story.

The mean number of text blocks within a primary package was 4.82, with the greatest number appearing on the pages with higher story counts. The mean number of text blocks dropped over time: 1993's mean was 6.20; 1995's was 4.57; and 1997's was 3.96.

The amount of space occupied by text within the primary package averaged around 11.5 percent in the first two years and then dropped to a mean of 8.16 percent in the third year. Overall mean space devoted to text within primary packages for all 68 pages was 10.35 percent.

The mean text space tended to increase by the number of stories within a primary package. However, the only page with four stories in its primary package had less total text space than did pages having 3-story primary packages.

Images

Winning pages averaged three images within their primary packages. Three-story packages, however, averaged five images. Image space averaged about 33 percent of the total page. The smallest primary-package image averaged nearly 2 percent, and the largest about 25 percent.

Analyses by year published and by story count

Sums of individual story elements provided an additional avenue for analysis. These characteristics were also examined by story count.

Story units

The researcher compared the total amount of space occupied by all story units on 1-, 2-, 3-, 4-, 5-, 6-, and 7-story pages. Taken together, story units averaged 75 percent of a page. However, when a page was given over to a single story, that proportion climbed to 90 percent. The single winning page with seven stories, on the other hand, used only 65 percent for story units. The remainder of the pages hopscotched around the mean: 2-story pages used 71.96 percent of space for story units; 3-story pages, 74.43; 4-story pages, 73.09; 5-story pages, 74.81; and 6-story pages, 77.35. The range was narrowest on 5-story pages, at 14.00, and broadest on 4-story pages, at 40.87.

Grouping cases by year awarded resulted in means less than 2 points removed from the mean of 75 percent noted for all pages.

Headlines

An analysis of headlines showed the mean space for all headlines on a page was 9.09. The by-story and by-year means differed no more than 1 percentage point from that number, except for the single 7-story page at 12.25 percent. A possible trend was noted in 3-story pages, where the median headline space of 10.99 in 1993 dropped to 8.34 in 1995 and to 7.25 in 1997. The researcher did not determine whether the change in headline space was because pages used fewer letters within headlines or whether font choices or sizes were the cause.

Deckheads/overlines

Most winning front pages included an average of two deckheads/overlines. These small headlines usually appeared immediately above or below a story's main headline. Because of their reduced size, deckheads/overlines often have more characters than main headlines and can provide additional information to a reader before he or she tackles the story text.

Pages with three stories showed the greatest range (5.00) in number of deckheads/overlines. The total page space occupied by deckheads/overlines averaged 2.46 percent, and the largest range of deckhead/overline space was seen on 5-story pages, at 10.68.

Text

The mean number of text blocks over all stories on a page was 8.62, and the mean by story count increased with the number of stories: One-story pages had a mean of less than 3, while the 7-story page numbered 15 text blocks. The range was greatest on 3- and 4-story pages, at 12 and 10, respectively.

Taken together, all text blocks occupied an average of 19.41 percent of the page. The mean was highest for 5-story pages, at 24.80 percent, but both 3- and 4-story pages showed a broader range than 5-story pages, at 21.71 and 19.54, respectively.

By-year analysis indicated text space may be dropping for all pages over time. The mean of 21.43 in the first year sank to 19.16 in the second year, and the mean fell to 17.56 percent of page space in the third year.

Three-story pages followed the pattern of reduced text-block space over time, but 5-story pages moved the other direction — from 23.29 to 25.24 to 27.08 mean page space devoted to all text.

Images

Winning pages averaged 4.59 images, but a range of 11.00 suggested the designer had an option to use fewer or considerably more. Photographs were by far the most-used image type, appearing at least once on every page, with a fairly stable mean over time of 3.47. At the other extreme, illustrations (rendered images lacking explanatory text) appeared on only 10 pages (15%) of the 68 studied. Graphics (rendered images containing explanatory text) were used on 42 pages (62%), with a steady mean of 1.5 graphics on winning front pages over time.

Total image space averaged 34.60 percent of a page, increasing slightly from 29.63 in the first year to 36.05 in the second to 37.24 in the third. A range of 93.36 recognized the variation from a single full-page image to the tiniest mug-shot portrait photograph or logo graphic. The largest images on winning pages averaged 25.75 percent of the total page, while the smallest weighed in at only 2.18 percent.

6. Discussion

The objective of this study was to evaluate recent Society for News Design front-page contest winners to determine if shared design characteristics might suggest guidelines to newspaper designers for effective layout.

Observed commonalities adding up to nearly 90 percent of total page space suggest a group of general guidelines:

- Render the nameplate (newspaper title) in a traditional black-letter medieval-styled font and size it to occupy about 8 percent of the front page.
- If you want to use a page grid, five or six columns is probably best, but you may also vary the grid by story module.
- Run about four stories on the front page.
- “Jump,” or continue, three of your stories to an inside page.
- Print a small index to inside features on the bottom half of the front page; keep its area under 2 percent of the page.
- Tell your readers what weather to expect, and help them locate the information by adding a small image. Keep it short: 0.5 to 1 percent of the page.
- Promote three of your best inside stories in teasers somewhere on the front page, and include a couple of images to attract attention. Five lines of text for each is plenty, and size the teasers to occupy a combined area of between 6 and 9 percent of the page.
- Small display copy units are useful for breaking up text, but use a light hand: 3-5 are enough. Refers to related inside stories are good choices, as are initial capital letters to flag the start of a story or a directional shift within a story. Also try intertext headlines as subheads within stories or as headlines within multi-story digests. Pull-quotes (direct quotes) or lift-outs (bits of text from the story) used for display are not the preferred

choice of award-winning SND designers. Restrict total space use for display copy units to 3 percent or so.

- All your stories together should fill about 75 percent of your page.
- Within that story space, spend about 10 percent of your page on headlines and add a couple of deckheads or overlines for extra headline-style information nuggets.
- Text within all of your stories can fill about 20 percent of the front page.
- Use the rest of the story space on images, primarily photographs (three to four or more, over 35 percent of the page), but reserve a little room for a graphic (a rendered image with explanatory text).
- Plan your primary package, or lead story unit, to use about 60 percent of your page space, but focus around only one or two stories. Run your main headline in a single font on one line of about 25 characters, and size it to fill about 5 percent of your page. Use around four text blocks in the primary package for about 10 percent of total page space. Use three or four images to bring the reader in; your largest can fill up to a quarter of the page.

Limitations

While this thesis has drawn conclusions about shared characteristics of award-winning newspapers and suggests characteristics that could form a yardstick against which American dailies may measure their own products, it did not apply those conclusions to the design of non-winning newspapers, because that was seen as a separate endeavor.

In addition, this thesis did not look at issues of content — staff-written vs. wire stories or features vs. news, for example. This research was limited to issues associated with the appearance of prize-winning front pages.

The restriction of the sample under study to American newspapers was an effort to capture design philosophies that are most similar. As Mario Garcia (1993, p. 5) recognized, "What plays in Peoria may not be a la mode in Paris. ... Each culture must evolve its own conventions and imaginative solutions to design problems." American newspapers were deemed most likely, of those appearing in the SND annuals, to share design philosophies. Sunday papers were included as an extension of the daily series.

As much as design shifts with cultures, it shifts in time. The researcher limited subjects to a five-year publication period in order to restrict design styles to today's visual language.

The birth of *USA Today* in 1982 (Garcia, 1993); the rush of newspapers to the Internet beginning in 1993 with the America Online launch of Mercury Center (Brown, 1999); the perceived hectic pace of today's consumer; and an increased range of media choices combine to reduce story length and increase the visual drama publishers believe necessary to attract readers (Garcia, 1993). As a result, papers published and awarded earlier than 1993 share a good chance of being regarded today as dated in their design.

It was hoped that by beginning the review of pages with that year, font choices, information graphic and display copy styles, and other design elements would be those still in use today, making conclusions also relevant today. (The 1999 contest, covering the 1998 publication year, had been judged and winners announced, but at the time of this research, the annual had not been published.)

Limitation to broadsheet entries eliminated the variation in design between tabloid and broadsheet formats.

Limitation to city newspapers was in recognition of the time and resources used to publish an edition. University newspapers, while often restricted by smaller staffs and budgets and fewer resources than city newspapers, often have more flexible schedules and fewer pages to design. Community newspapers published on a weekly or other

basis also differ in process from daily newspapers. These differences have an unknown effect on the final product.

While these limitations constitute an attempt to control for differences among prize-winning front pages, the researcher was unable to control for any number of other factors. For example, the judging team, while selected from industry professionals each year, comprised a different group of individuals faced with a different group — and number — of entries in each contest. These individuals brought their own experiences and opinions to the task, and judged entries against one another to award the best of that particular group. In addition, each awards edition mentioned the importance of content to judging decisions, but this researcher limited her task to concrete measures of visual elements.

Perhaps the greatest limitation was the one that restricted analysis to descriptive methods: Contest winners represent only one end of a spectrum of news pages. Statistical comparisons require samples to be gathered across the range of the spectrum, or at the very least, each end — both the “best” and the “worst.” And while it was interesting and informative to speculate about the “ideal” page, it is possible a contest entry that was not selected to win an award may have met the general guidelines suggested by this study, making it the “ideal” page.

Recommendations for further study

This study evaluated SND award-winning American daily broadsheet front pages in three years over a five-year period. A study of non-winning entries meeting the same criteria, if entries can be gathered from the Society for News Design, would broaden the data to enable statistical inference.

Expectations are that the contest will continue, and researchers also may find it interesting to add to this study by examining future winners meeting the same criteria in

alternating years, beginning with the 1999 edition, then the 2001 edition, etc. Or a new study that evaluates 1999, 2001, and 2003 winners could compare results to those found here, which might enable additional findings of design trends.

Other comparisons might be drawn by changing one or two criteria: How might non-American or tabloid pages, for example, compare with those studied here?

Researchers also might select other editions of these award-winning newspapers to evaluate whether the prize-winning norm was followed consistently over time at a single newspaper.

Dierck Casselman, contest chairman for SND's tenth awards edition, wrote in the preface that he hoped the edition would be a "directional sign for design in the years to come." These findings present a snapshot of the "best" newspaper front-page design with consideration given to the range of layout options in use by designers in the years studied. This researcher hopes future studies may incorporate similar range so that the "sign" illuminates the well-traveled road.

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Appendices

Appendix A

Data sources

Coding form

_____form number

_____Newspaper

_____headline keyword

T. Total page

TP1._____total area of printed page in square picas, with points converted to 2 decimal places:

1 point = .08 7 points = .58
2 points = .17 8 points = .67
3 points = .25 9 points = .75
4 points = .33 10 points = .83
5 points = .42 11 points = .92
6 points = .50 (6.58 is 6 picas, 7 points)

TP2._____No. individual story units on page

*count each story in dominant pkg as one story unit; count each briefs/digest package as one story unit.

TP3._____No. stories that jump to inside page

TP4._____Year awarded

TP5._____No. columns (page grid)

PP. Primary/dominant package:

PP1._____No. stories in primary package

(count introduction as a story)

PP2._____No. stories that jump to inside page

PP3._____percentage of page for primary package

PH. Primary headline

PH1._____No. letters & spaces in primary head

PH2._____No. lines in primary head

PH3._____Serif(1), sans-serif(2) or both(3)?

PH4._____percentage of page for headline

PB. Primary package body text

PB1._____No. body copy text blocks

PB2._____percentage of page for body text

PI. Primary package image(s)

PI1._____No. images

PI2._____percentage of page for smallest image

PI3._____percentage of page for largest image

PI4._____percentage of page for all p.p. images

****Does any element on the front page remain uncoded? Describe.

D. Display copy units (If inset into body text, their space is *not* deducted from text area)

DR1._____No. refers (material set off within a story unit that refers to a related story inside the same or a coming paper.)

DR2._____percentage of page for refers

DQ1._____No. pull-quotes (direct quotes lifted from story and rendered as highlighted element)

DQ2._____percentage of page for pull-quotes

DL1._____No. lift-outs (lines of text lifted from story and rendered as highlighted element)

DL2._____percentage of page for lift-outs

DH1._____No. intertext headlines (heads on separate stories within a briefs package; heads appearing within a single story to break up text)

DH2._____percentage of page for intertext heads

DI1._____No. initial caps (large capital letter replacing first letter of first word of story or used to lead story sections)

DI2._____percentage of page for initial caps

Standing elements

NP. Nameplate

NP1._____Lettering: serif(1), sans serif (2), black letter(3), other (4)

NP2._____percentage of page for nameplate

I. Index (list of sections or features and locations)

I1._____Position: upper(1), lower(2) half of page?

I2._____All text (1) or has graphic element (2)?

I3._____percentage of page for index

W. Weather forecast

W1._____Position: upper(1), lower(2) half of page?

W2._____All text(1) or has graphic element(2)?

W3._____percentage of page for forecast

T. Teasers/promotionals (descriptive standalone references, often with art, to other stories inside the same or a coming paper)

T1._____primarily horizontal(1), vertical(2), or scattered(3)?

T3._____No. images

T4._____No. articles promoted

T5._____average | No. text lines in each unit_____

T6._____percentage of page for teasers

[illegible]

1

2

3

4

5

6

7

8

S1. percentage of page for story unit

H. Story primary headline

H1. percentage of page for primary headline

D. Deckheads & overlines

D1. No. deckheads and overlines

D2. percentage of page for all deckheads

B. Story body text

B1. No. body copy blocks

**B2. percentage of page for all
body text**

I. Story image(s)

I1. No. photographs

**I2. No. illustrations/
photoillustrations (art w/o text)**

I3. No. graphics (art with explanatory text)

I4. % of page for smallest image

I5. % of page for largest image

I6. percentage of page for all story images

Winning front pages

Winners in the 1993 Society for News Design Contest, category 03A, front page, as published in:

Matlock, C.M. (Ed.). (1994). *The best of newspaper design*. (15th ed.). Rockport, MA: Rockport Publishers.

NEWSPAPER	PRIMARY HEADLINE KEYWORDS	AWARD
1. Detroit Free Press	7 die alone	silver
2. The (New Orleans) Times-Picayune	N.O. makes a comeback	bronze
3. Akron Beacon Journal (Ohio)	Race: The great divide	excellence
4. Detroit Free Press	20 years is enough	excellence
5. The Detroit News and Free Press	Michiganians of the year	excellence
6. The Miami Herald	A dream come true	excellence
7. The Orange County Register	5 days of fire	excellence
8. San Jose Mercury News	...smack into the gunman	excellence
9. The (New Orleans) Times-Picayune	Fidel's Cuba (a)	excellence
10. The (New Orleans) Times-Picayune	Fidel's Cuba (b)	excellence
11. The Albuquerque Tribune	A year later	excellence
12. The Citizen (Auburn, NY)	Bianco's trial	bronze
13. The (Tri-Town) Times (Munster, IN)	It was like a razor blade	bronze
14. The Citizen (Auburn, NY)	Moscow explodes	excellence
15. The Citizen (Auburn, NY)	Winter weather	excellence
16. The Citizen (Auburn, NY)	Death in Waco	excellence
17. The News Sentinel (Fort Wayne, IN)	Tick, tick, tick ...	excellence
18. The Sunday Times (Munster, IN)	Shotgun approach	excellence
19. The Times (Munster, IN)	Jackpot!	excellence
20. The Sun (Bremerton, WA)	The rush is in the air	excellence

Winners in the 1995 Society for News Design Contest, category 03A, front page, as published in:

Matlock, C.M. (Ed.). (1996). *The best of newspaper design*. (17th ed.). Rockport, MA: Rockport Publishers.

NEWSPAPER	PRIMARY HEADLINE KEYWORDS	AWARD
1. The Atlanta Journal The Atlanta Constitution	World champs!	excellence
2. Chicago Tribune	Unabomber	excellence
3. The Citizen (Auburn, NY)	It was like Beirut	excellence
4. The Dallas Morning News	Terror	excellence
5. Detroit Free Press	Not guilty	excellence
6. The Detroit News	... Japanese quake	excellence
7. The Detroit News	Why the Wings ...	excellence
8. The Detroit News	Horror in Oklahoma	excellence
9. The Greenville News (SC)	Not guilty	excellence
10. The Greenville News (SC)	Rain leaves death...	excellence
11. The Hartford Courant (CT)	Perestroika ...	excellence
12. The Herald-News (Joliet, IL)	Legion loses its home	excellence
13. The Home News (East Brunswick, NJ)	Gridlock	excellence
14. The Home News (East Brunswick, NJ)	Sweep!	excellence
15. Jacksonville Journal-Courier (IL)	Yankee legend dies	excellence
16. Star-Banner (Ocala, FL)	Erin takes aim	excellence
17. The Press Democrat (Santa Rosa, CA)	Storm walloping state	excellence
18. The Seattle Times	Computer with wings	excellence
19. San Francisco Examiner	The city's worst slumlord	excellence
20. San Jose Mercury News	A free man	excellence
21. The Stuart News (FL)	A history of turbulence	excellence
22. The Stuart News (FL)	Brace yourself	excellence
23. The (New Orleans) Times-Picayune	One plane one bomb...	excellence

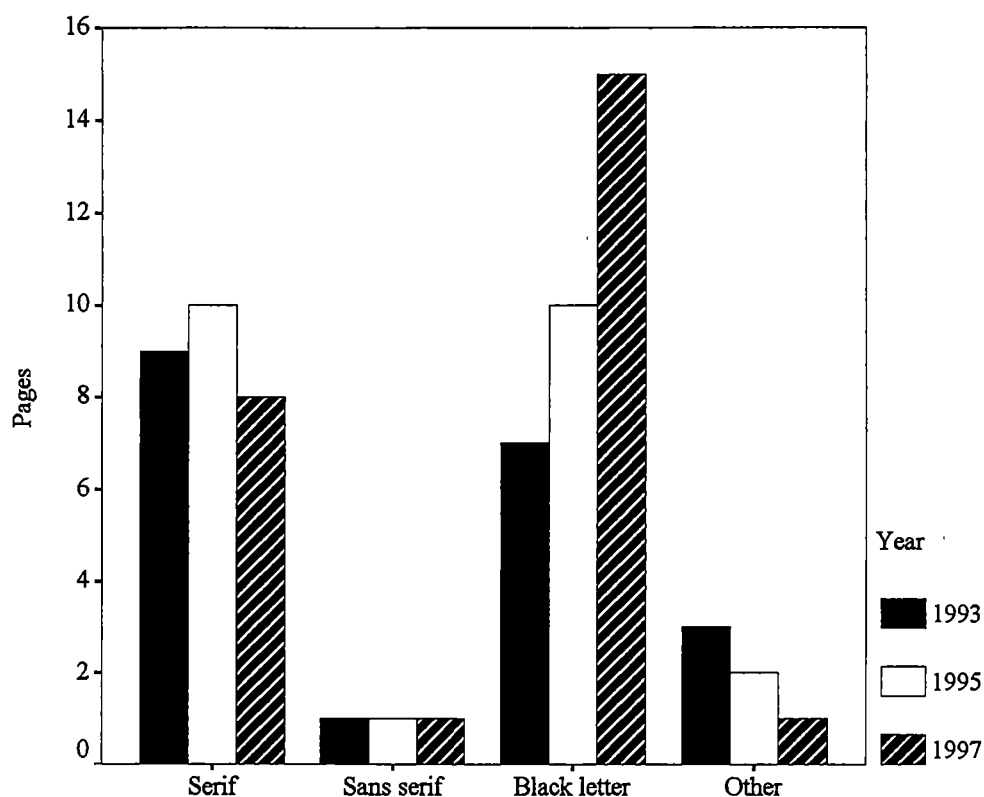
Winners in the 1997 Society for News Design Contest, category 03A, front page, as published in:

Matlock, C.M. (Ed.). (1998). *The best of newspaper design*. (19th ed.). Gloucester, MA: Rockport Publishers.

NEWSPAPER	PRIMARY HEADLINE KEYWORDS	AWARD
1. The Detroit News	29 killed as plane dives...	silver
2. Austin American-Statesman (TX)	Like a war zone	excellence
3. The Charlotte Observer (NC)	Deluge leaves city dazed	excellence
4. Detroit Free Press	Explosion of murder	excellence
5. The Detroit News	... I was going to die ...	excellence
6. The Detroit News and Free Press	We've got Stanley!	excellence
7. The Hartford Courant (CT)	After the sting	excellence
8. The Hartford Courant (CT)	Hong Kong jolts markets	excellence
9. The Miami Herald	... home-grown terrorist	excellence
10. The Miami Herald	Champions!	excellence
11. The Seattle Times	Nobody's child	excellence
12. Star Tribune (Minneapolis, MN)	How far have we come?	excellence
13. The Star-Ledger (Newark, NJ)	As jet burns ...	excellence
14. The (New Orleans) Times-Picayune	Too fast in fog	excellence
15. The (New Orleans) Times-Picayune	Stocks' global free fall ...	excellence
16. The Virginian-Pilot (Norfolk)	Death	excellence
17. The Idaho Statesman (Boise)	Traffic stop brings death ...	excellence
18. The Providence Sunday Journal (RI)	A prayer for Maria	excellence
19. Savannah Morning News (GA)	Wrong call derails train	excellence
20. Savannah Morning News (GA)	You are immortal	excellence
21. The Beacon News (Aurora, IL)	Greenwoods' guardians	excellence
22. The Beacon News (Aurora, IL)	Tragedy on Eola	excellence
23. Greeley Tribune (CO)	It's miller time	excellence
24. Jacksonville Journal-Courier (IL)	Native to the river	excellence
25. The Herald News (Aurora, IL)	Generations ...	excellence

Appendix B

Figures



(a) Bar graph of font choice

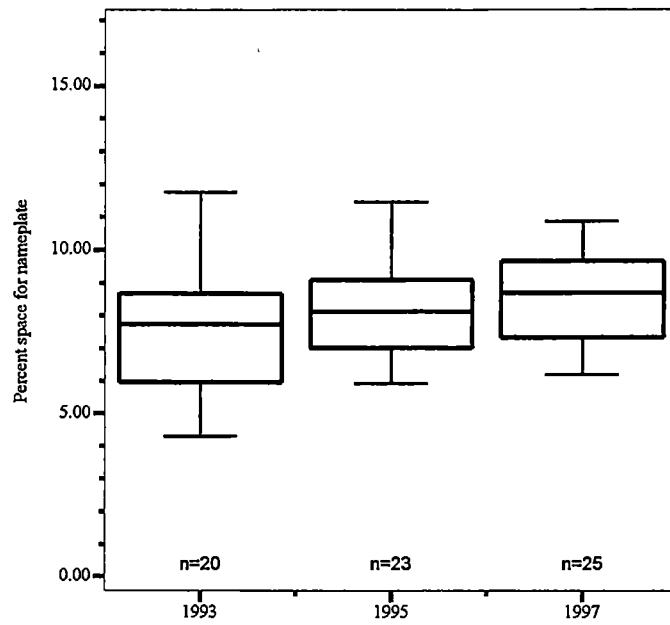
			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for nameplate	7.67	7.73	4.29	7.47	2.06
	1995	Percent space for nameplate	7.93	8.12	7.01	11.24	2.20
	1997	Percent space for nameplate	8.81	8.70	6.19	10.48	2.08

n=68; 1993=20; 1995=23; 1997=25.

	Mean	Median	Mode	Range	Std Deviation
Percent space for nameplate	8.17	8.07	7.01	16.44	2.14

(b) Statistics for space by year and all cases

Figure 1. Nameplate



(c) Boxplot for space by year

Figure 1 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of columns	5.40	5.00	5.00	1.00	.50
	1995	Number of columns	5.61	6.00	6.00	2.00	.70
	1997	Number of columns	5.58	6.00	6.00	3.00	.69

n=57; 1993=20; 1995=18; 1997=19.

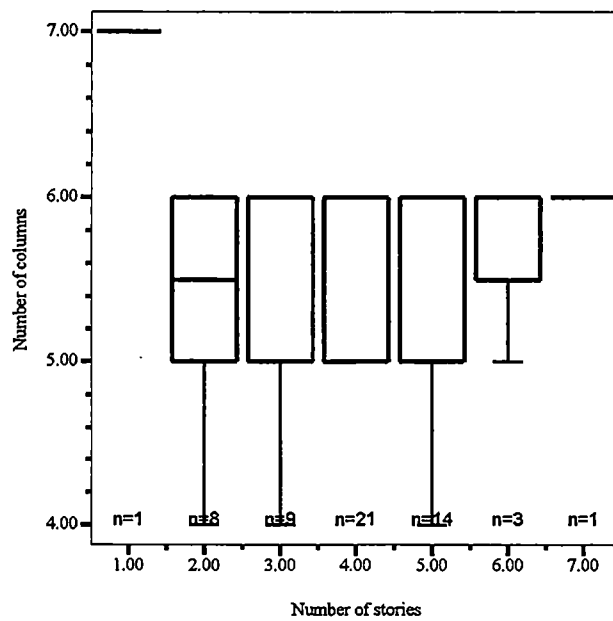
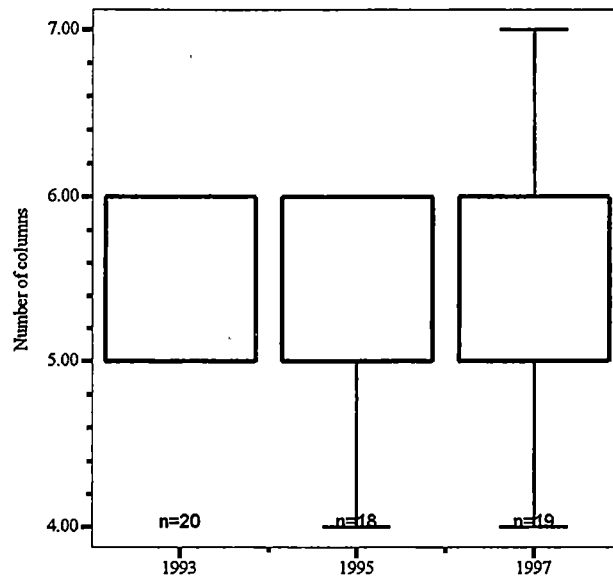
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of columns	7.00	7.00	7.00	.00	.
	2.00	Number of columns	5.38	5.50	6.00	2.00	.74
	3.00	Number of columns	5.44	6.00	6.00	2.00	.73
	4.00	Number of columns	5.62	6.00	6.00	1.00	.50
	5.00	Number of columns	5.36	5.00	5.00	2.00	.63
	6.00	Number of columns	5.67	6.00	6.00	1.00	.58
	7.00	Number of columns	6.00	6.00	6.00	.00	.

n=57; 1=1; 2=8; 3=9; 4=21; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Number of columns	5.53	6.00	6.00	3.00	.63

(a) Statistics by year, story count, and all cases

Figure 2. Columns (page grid)



(b) Boxplots by year and story count

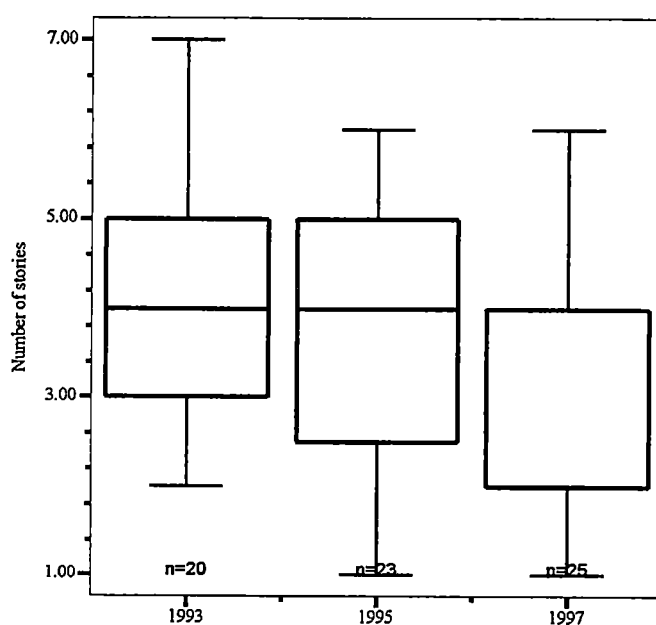
Figure 2 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of stories	4.00	4.00	4.00	5.00	1.26
	1995	Number of stories	3.57	4.00	4.00	5.00	1.53
	1997	Number of stories	3.36	4.00	4.00	5.00	1.35

n=68; 1993=20; 1995=23; 1997=25.

	Mean	Median	Mode	Range	Std Deviation
Number of stories	3.62	4.00	4.00	6.00	1.39

(a) Statistics by year and all cases



(b) Boxplot by year

Figure 3. Number of stories

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of stories that jump inside	3.40	3.00	3.00	6.00	1.50
	1995	Number of stories that jump inside	2.61	3.00	4.00	5.00	1.56
	1997	Number of stories that jump inside	2.92	3.00	3.00	5.00	1.41

n=68; 1993=20; 1995=23; 1997=25.

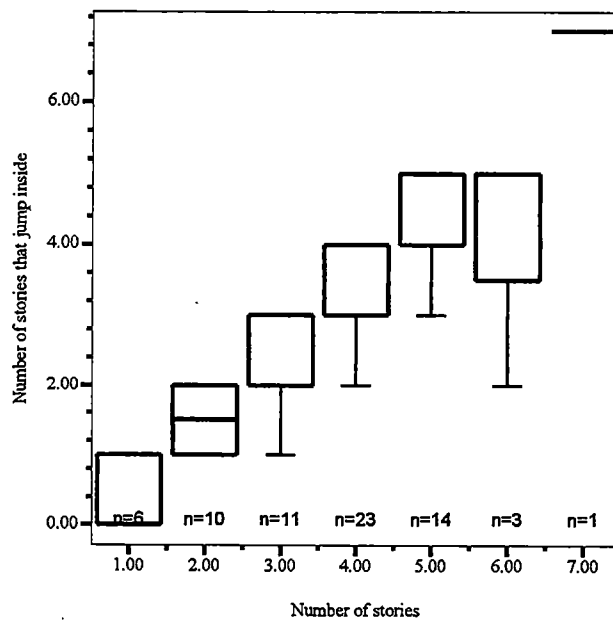
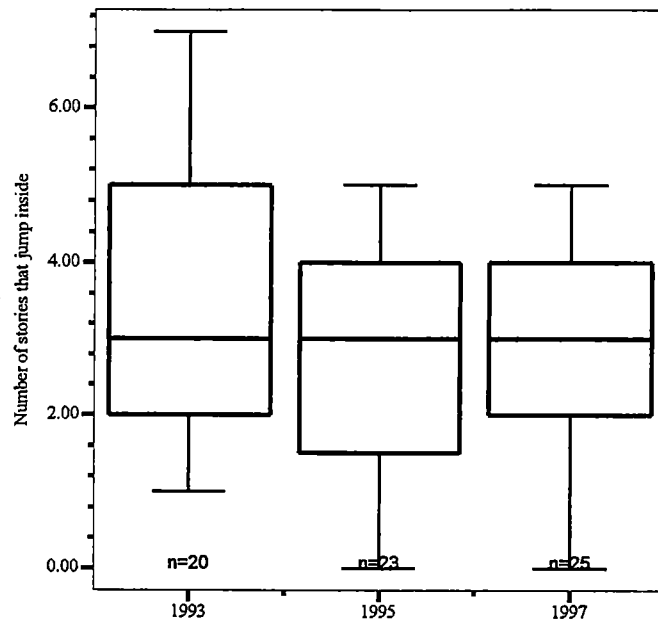
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of stories that jump inside	.33	.00	.00	1.00	.52
	2.00	Number of stories that jump inside	1.50	1.50	1.00	1.00	.53
	3.00	Number of stories that jump inside	2.55	3.00	3.00	2.00	.69
	4.00	Number of stories that jump inside	3.26	3.00	3.00	2.00	.62
	5.00	Number of stories that jump inside	4.43	5.00	5.00	3.00	.94
	6.00	Number of stories that jump inside	4.00	5.00	5.00	3.00	1.73
	7.00	Number of stories that jump inside	7.00	7.00	7.00	.00	.

n=68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Number of stories that jump inside	2.96	3.00	3.00	7.00	1.50

(a) Statistics by year, story count, and all cases

Figure 4. Number of stories that jump



(b) Boxplots by year and story count

Figure 4 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for index	1.36	1.24	.59	3.38	.88
	1995	Percent space for index	1.83	1.73	.57	4.16	.99
	1997	Percent space for index	1.40	1.20	.84	3.25	.74

n=55; 1993=17; 1995=18; 1997=20.

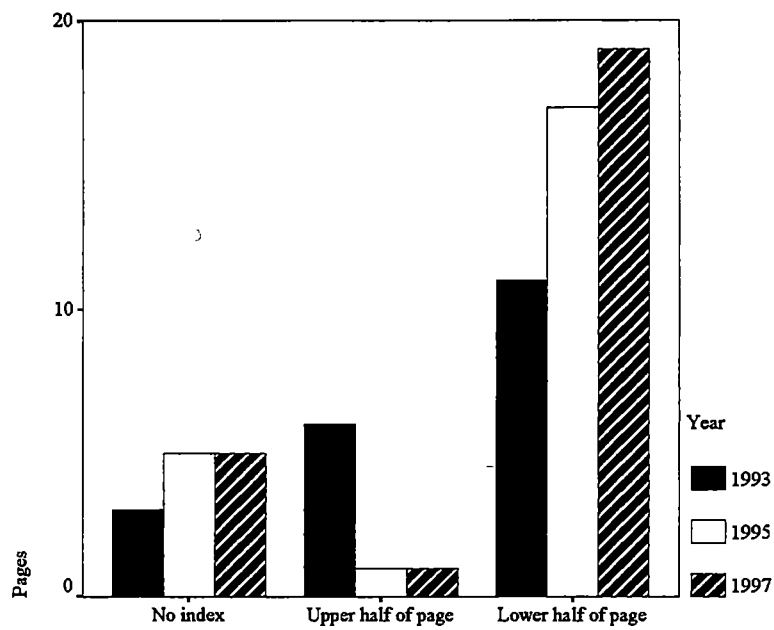
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for index	1.62	1.62	.94	1.36	.96
	2.00	Percent space for index	1.40	1.03	.64	2.35	.81
	3.00	Percent space for index	1.56	1.65	.59	2.53	.70
	4.00	Percent space for index	1.29	1.02	.84	3.47	.78
	5.00	Percent space for index	2.07	1.42	1.26	3.75	1.22
	6.00	Percent space for index	1.47	1.47	1.14	.66	.47
	7.00	Percent space for index	1.52	1.52	1.52	.00	.

n=55; 1=2; 2=7; 3=10; 4=22; 5=11; 6=2; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for index	1.53	1.27	.84	4.16	.88

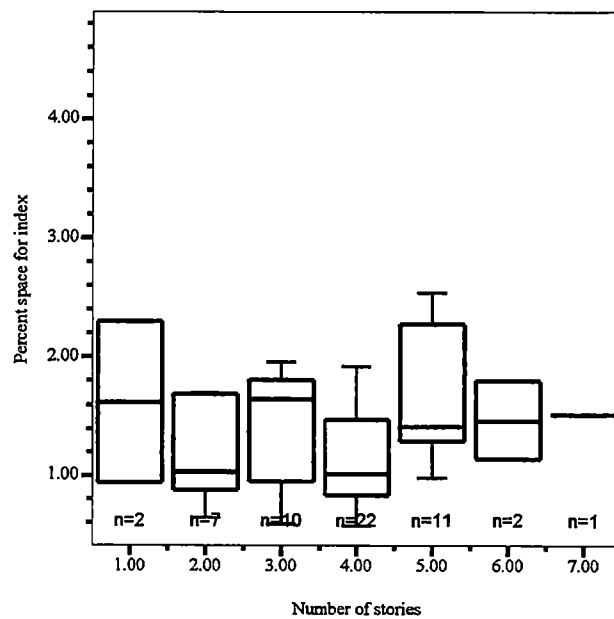
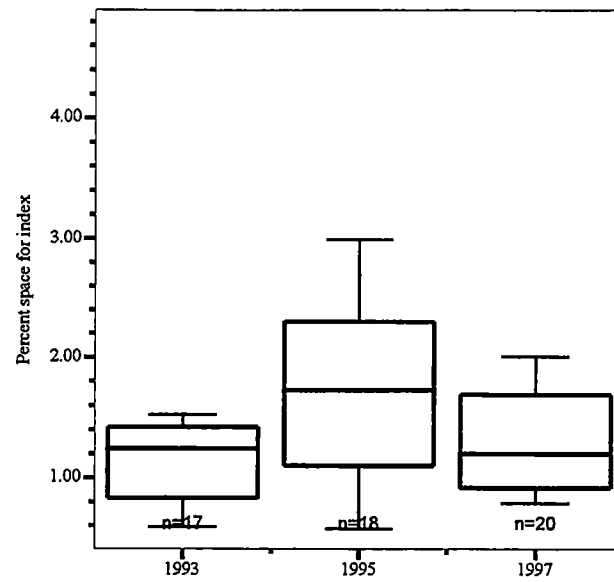
(a) Statistics by year, story count, and all cases

Figure 5. Index



(b) Bar graph of position

Figure 5 (continued)



(c) Boxplots by year and story count

Figure 5 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for weather forecast	.86	.81	.45	1.08	.29
	1995	Percent space for weather forecast	.76	.70	.64	1.79	.46
	1997	Percent space for weather forecast	.75	.70	.31	1.11	.38

n=45; 1993=10; 1995=16; 1997=19.

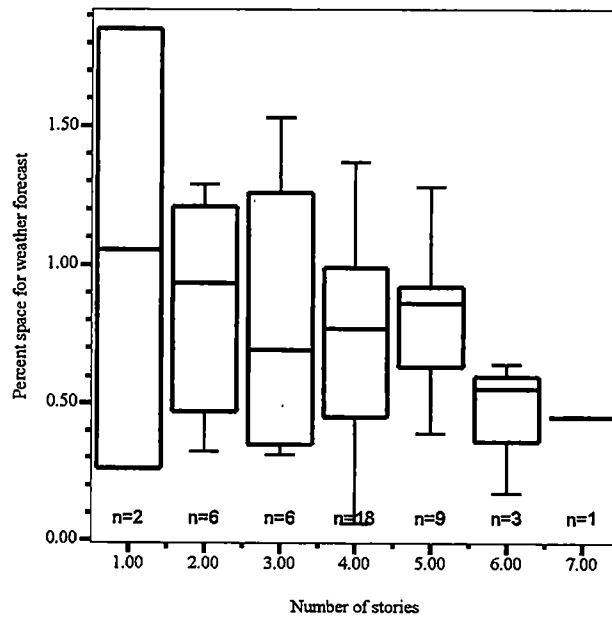
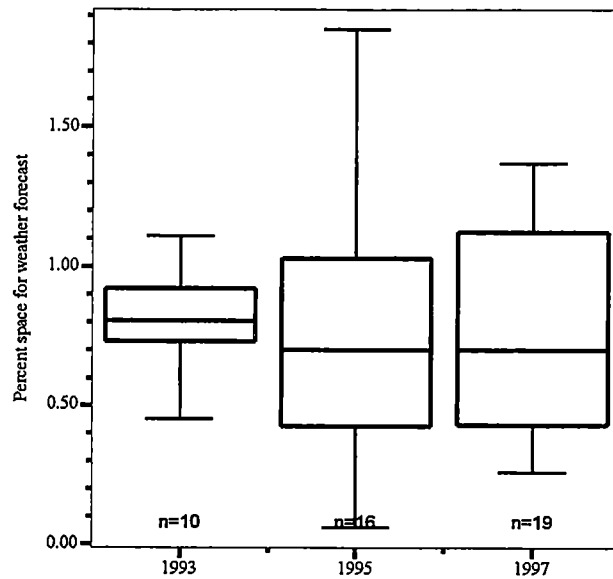
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for weather forecast	1.06	1.06	.26	1.59	1.12
	2.00	Percent space for weather forecast	.86	.94	.32	.97	.41
	3.00	Percent space for weather forecast	.80	.69	.31	1.22	.49
	4.00	Percent space for weather forecast	.77	.77	.73	1.31	.34
	5.00	Percent space for weather forecast	.80	.86	.86	.89	.28
	6.00	Percent space for weather forecast	.45	.55	.17	.47	.25
	7.00	Percent space for weather forecast	.45	.45	.45	.00	.

n=45; 1=2; 2=6; 3=6; 4=18; 5=9; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for weather forecast	.78	.74	.31	1.79	.39

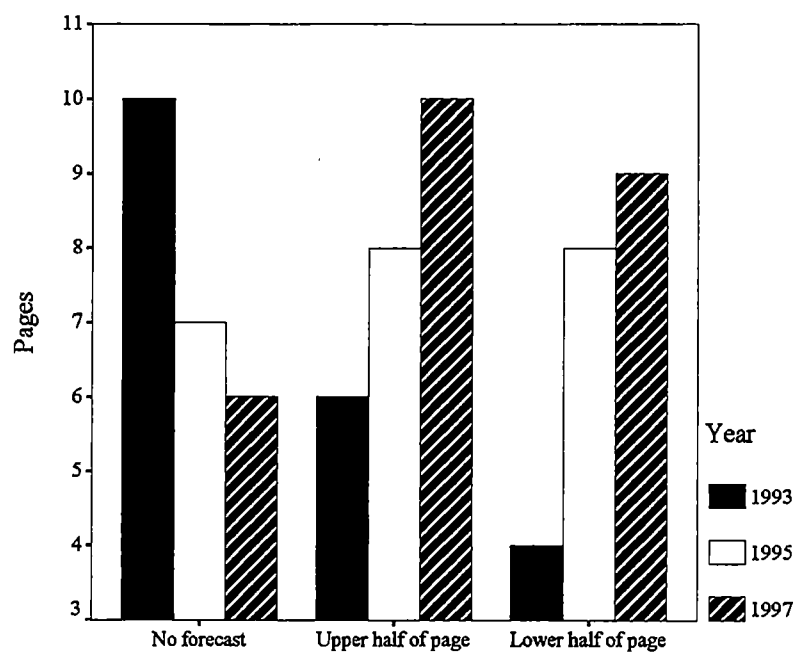
(a) Statistics by year, story count, and all cases

Figure 6. Weather forecast

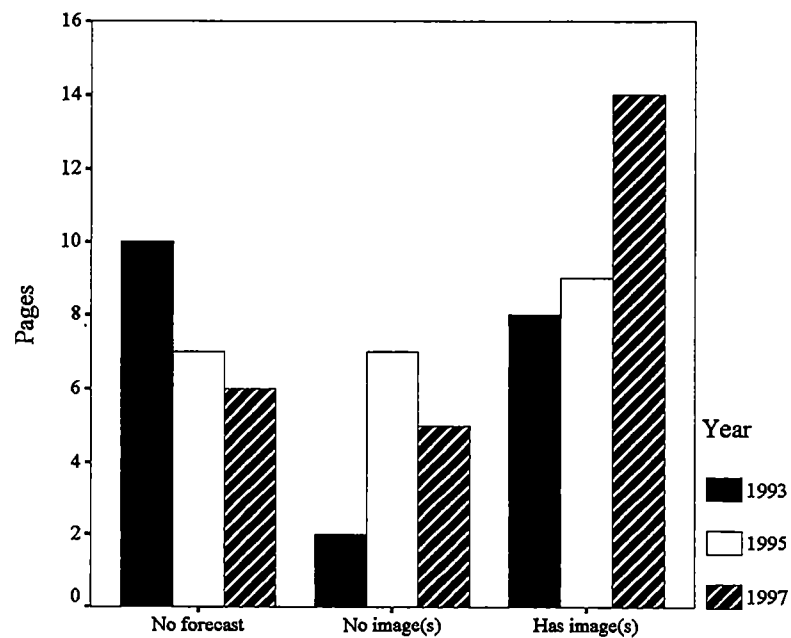


(b) Boxplots by year and story count

Figure 6 (continued)



(c) Bar graph of position



(d) Bar graph of image use

Figure 6 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of images in teasers	1.61	2.00	2.00	4.00	.98
	1995	Number of images in teasers	2.06	2.00	2.00	4.00	1.12
	1997	Number of images in teasers	2.13	2.00	2.00	3.00	.83

n=49; 1993=18; 1995=16; 1997=15.

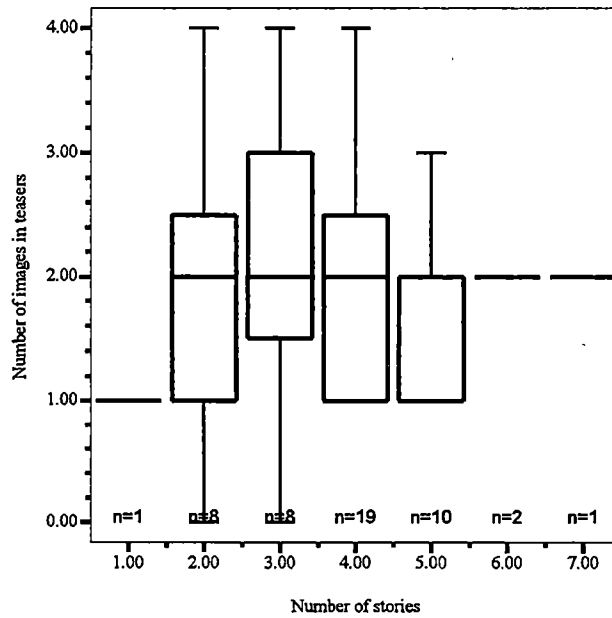
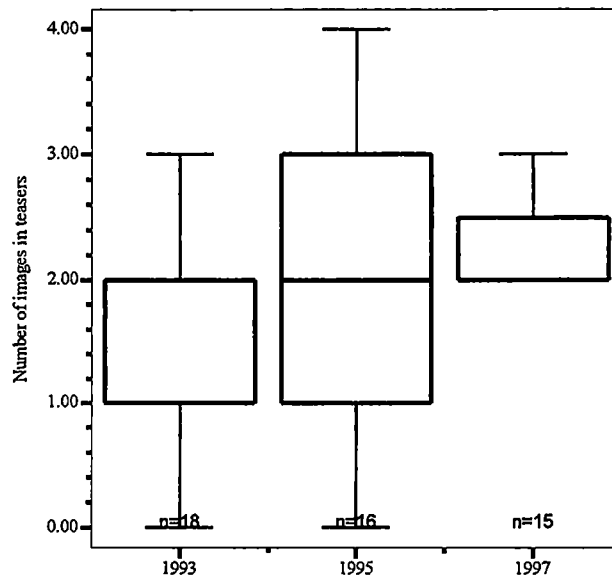
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of images in teasers	1.00	1.00	1.00	.00	.
	2.00	Number of images in teasers	1.88	2.00	2.00	4.00	1.36
	3.00	Number of images in teasers	2.13	2.00	2.00	4.00	1.25
	4.00	Number of images in teasers	2.00	2.00	1.00	3.00	1.00
	5.00	Number of images in teasers	1.70	2.00	2.00	2.00	.67
	6.00	Number of images in teasers	2.00	2.00	2.00	.00	.00
	7.00	Number of images in teasers	2.00	2.00	2.00	.00	.

n=49; 1=1; 2=8; 3=8; 4=19; 5=10; 6=2; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Number of images in teasers	1.92	2.00	2.00	4.00	1.00

(a) Statistics for images by year, story count, and all cases

Figure 7. Teasers



(b) Boxplots for images by year and story count

Figure 7 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Articles teased per page	3.22	3.00	2.00	8.00	1.83
	1995	Articles teased per page	4.11	3.50	3.00	12.00	2.76
	1997	Articles teased per page	3.38	3.00	3.00	6.00	1.86

n=57; 1993=18; 1995=18; 1997=21.

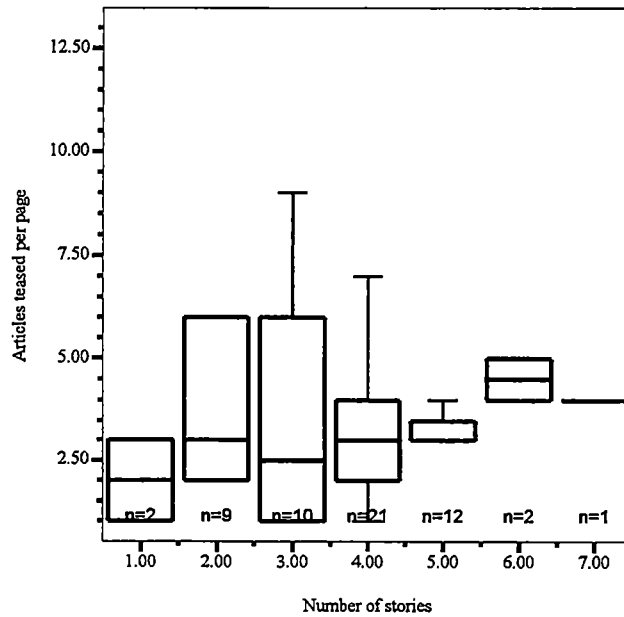
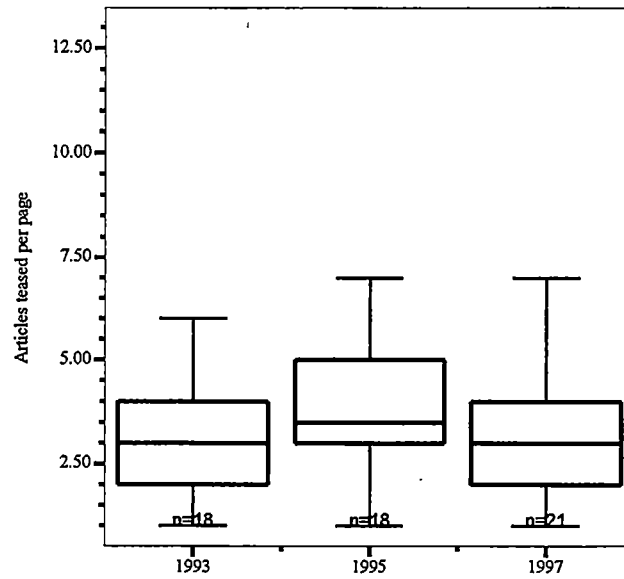
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Articles teased per page	2.00	2.00	1.00	2.00	1.41
	2.00	Articles teased per page	4.56	3.00	2.00	11.00	3.54
	3.00	Articles teased per page	3.40	2.50	1.00	8.00	2.91
	4.00	Articles teased per page	3.57	3.00	3.00	6.00	1.69
	5.00	Articles teased per page	3.00	3.00	3.00	3.00	.85
	6.00	Articles teased per page	4.50	4.50	4.00	1.00	.71
	7.00	Articles teased per page	4.00	4.00	4.00	.00	.

n=57; 1=2; 2=9; 3=10; 4=21; 5=12; 6=2; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Articles teased per page	3.56	3.00	3.00	12.00	2.17

(c) Statistics for articles by year, story count, and all cases

Figure 7 (continued)



(d) Boxplots for articles by year and story count

Figure 7 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Average lines of text for each teaser	6.52	5.00	4.00	11.67	3.35
	1995	Average lines of text for each teaser	5.72	5.37	1.00	10.50	3.38
	1997	Average lines of text for each teaser	5.54	5.67	1.00	10.00	2.77

n=57; 1993=18; 1995=18; 1997=21.

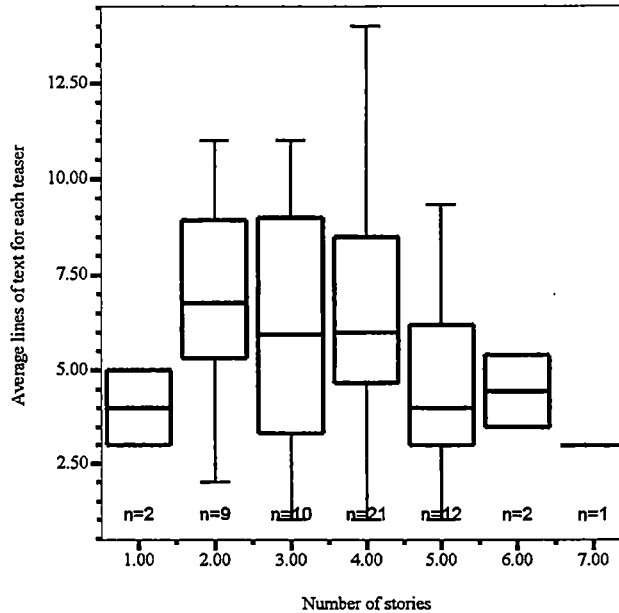
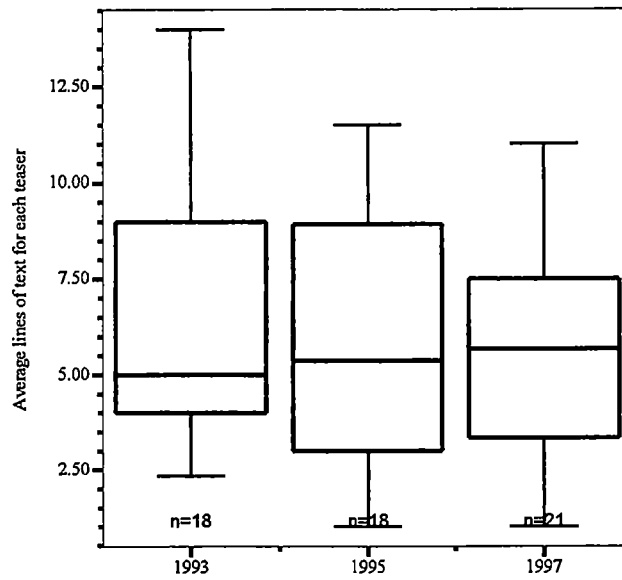
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Average lines of text for each teaser	4.00	4.00	3.00	2.00	1.41
	2.00	Average lines of text for each teaser	6.86	6.77	2.00	9.00	2.74
	3.00	Average lines of text for each teaser	5.85	5.95	1.00	10.00	3.62
	4.00	Average lines of text for each teaser	6.65	6.00	5.00	13.00	3.17
	5.00	Average lines of text for each teaser	4.76	4.00	3.00	10.50	3.18
	6.00	Average lines of text for each teaser	4.45	4.45	3.50	1.90	1.34
	7.00	Average lines of text for each teaser	3.00	3.00	3.00	.00	.

n=56; 1=2; 2=9; 3=10; 4=21; 5=12; 6=2; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Average lines of text for each teaser	5.91	5.33	3.00	13.00	3.13

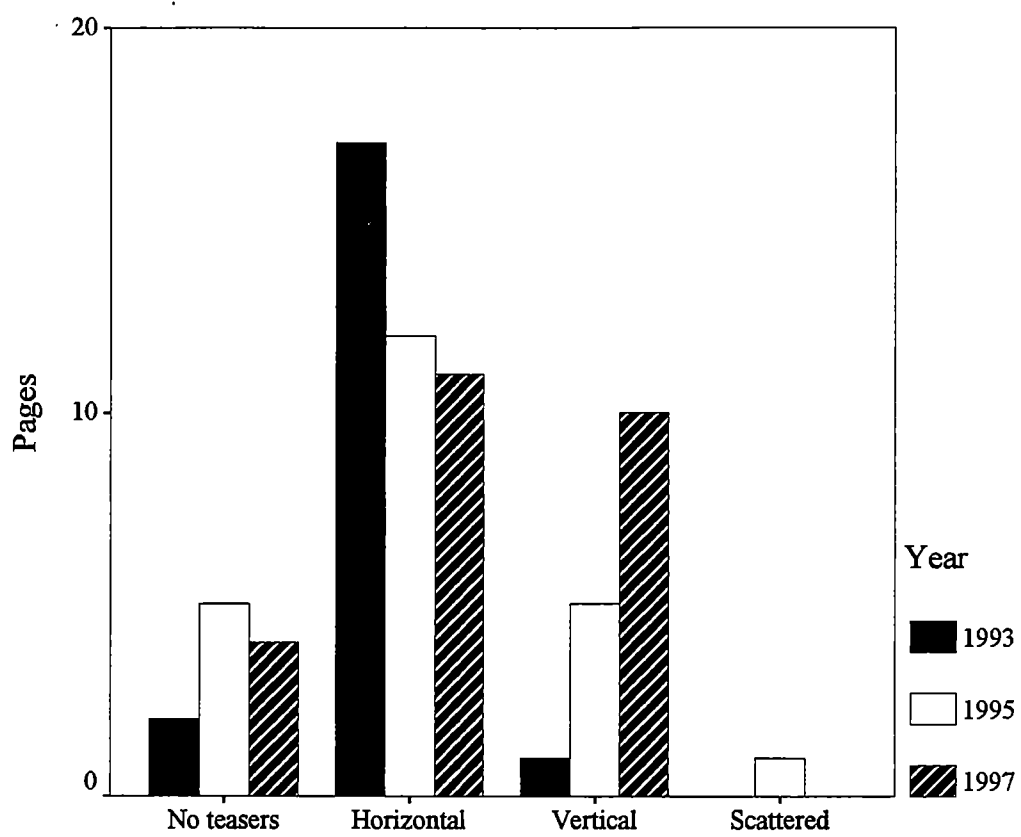
(e) Statistics for average length by year, story count, and all cases

Figure 7 (continued)



(f) Boxplots for average length by year and story count

Figure 7 (continued)



(g) Bar graph for dominant orientation

Figure 7 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for teasers	7.61	7.46	2.09	16.29	3.64
	1995	Percent space for teasers	9.43	8.39	.27	27.00	6.71
	1997	Percent space for teasers	5.67	5.13	.64	12.78	3.75

n=57; 1993=18; 1995=18; 1997=21.

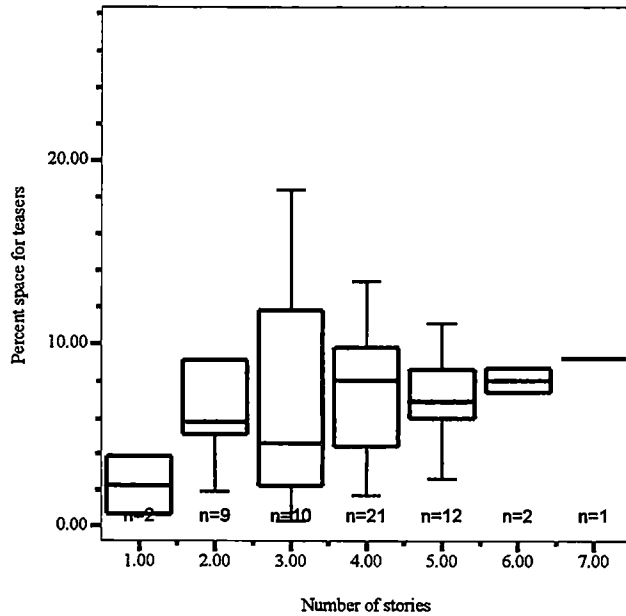
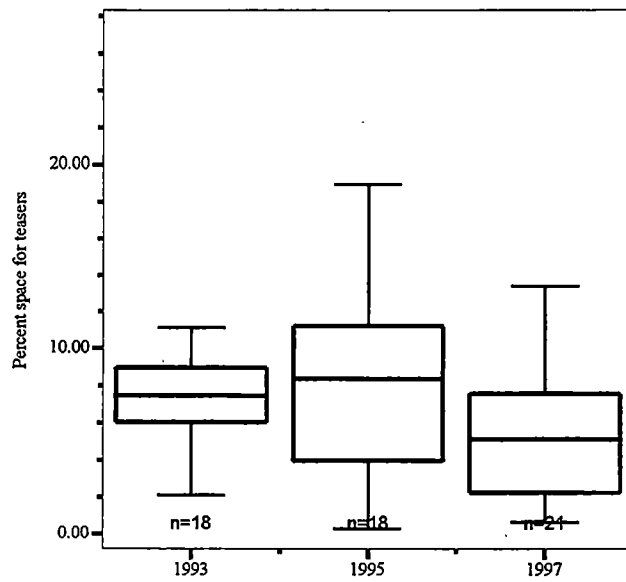
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for teasers	2.26	2.26	.67	3.18	2.25
	2.00	Percent space for teasers	8.22	5.84	1.94	17.02	5.75
	3.00	Percent space for teasers	7.12	4.61	.27	18.11	6.31
	4.00	Percent space for teasers	8.07	8.07	1.72	25.55	5.54
	5.00	Percent space for teasers	6.76	6.95	.64	10.49	2.84
	6.00	Percent space for teasers	8.07	8.07	7.43	1.28	.91
	7.00	Percent space for teasers	9.23	9.23	9.23	.00	.

n=57; 1=2; 2=9; 3=10; 4=21; 5=12; 6=2; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for teasers	7.47	6.84	.27	27.00	5.02

(h) Statistics for space by year, story count, and all cases

Figure 7 (continued)



(i) Boxplots for space by year and story count

Figure 7 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of all display copy units	5.11	3.00	3.00	15.00	4.01
	1995	Number of all display copy units	4.91	5.00	6.00	11.00	2.70
	1997	Number of all display copy units	4.46	4.00	1.00	10.00	2.77

n=66; 1993=19; 1995=23; 1997=24.

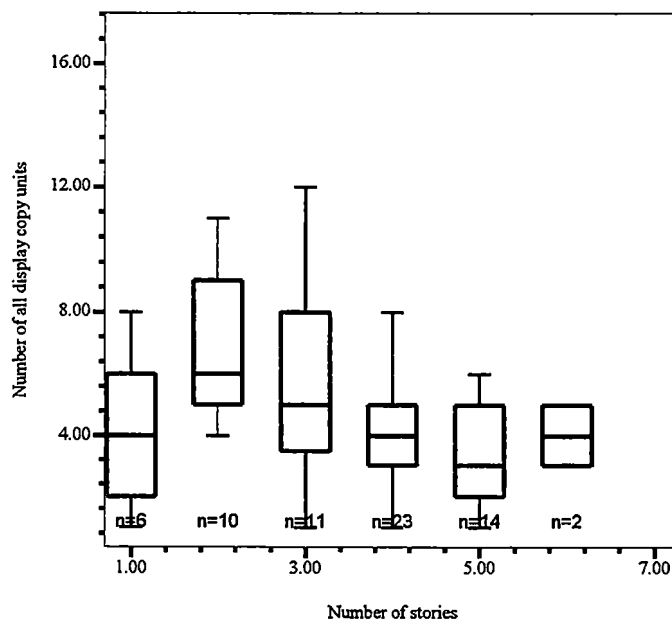
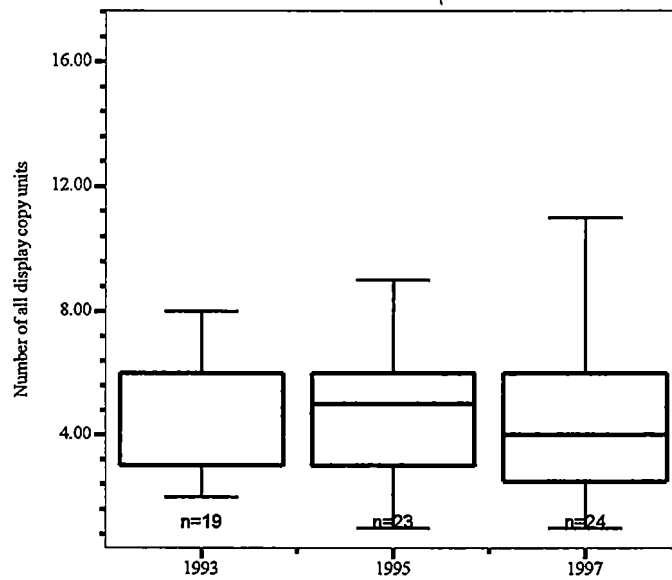
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of all display copy units	4.17	4.00	1.00	7.00	2.64
	2.00	Number of all display copy units	7.70	6.00	6.00	13.00	4.00
	3.00	Number of all display copy units	5.64	5.00	8.00	11.00	3.26
	4.00	Number of all display copy units	3.91	4.00	3.00	8.00	2.09
	5.00	Number of all display copy units	3.93	3.00	2.00	12.00	3.08
	6.00	Number of all display copy units	4.00	4.00	3.00	2.00	1.41
	7.00	Number of all display copy units	.	.	.	.	.

n=66; 1=6; 2=10; 3=11; 4=23; 5=14; 6=2; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of all display copy units	4.80	4.00	3.00	16.00	3.11

(a) Statistics for number by year, story count, and all cases

Figure 8. Display copy units



(b) Boxplots for number by year and story count

Figure 8 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all display copy units	3.75	2.31	.18	17.85	4.41
	1995	Percent space for all display copy units	3.61	1.81	.10	20.92	5.31
	1997	Percent space for all display copy units	3.16	2.21	.12	15.09	3.86

n=66; 1993=19; 1995=23; 1997=24.

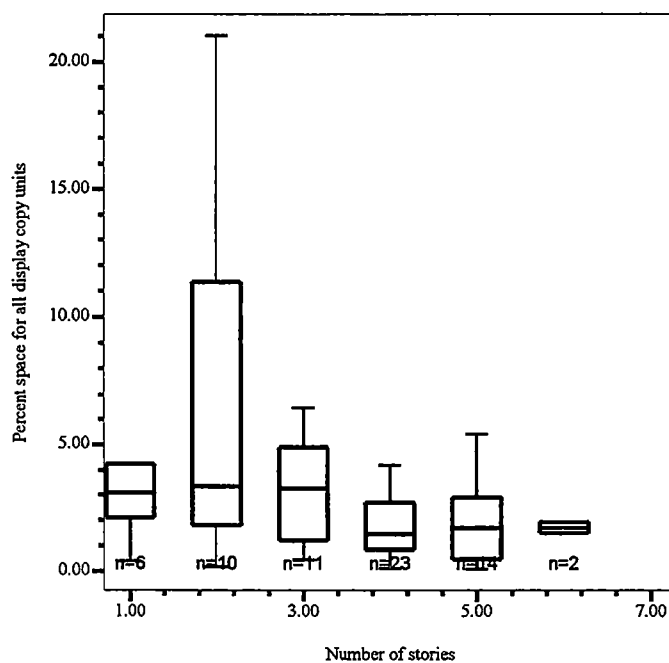
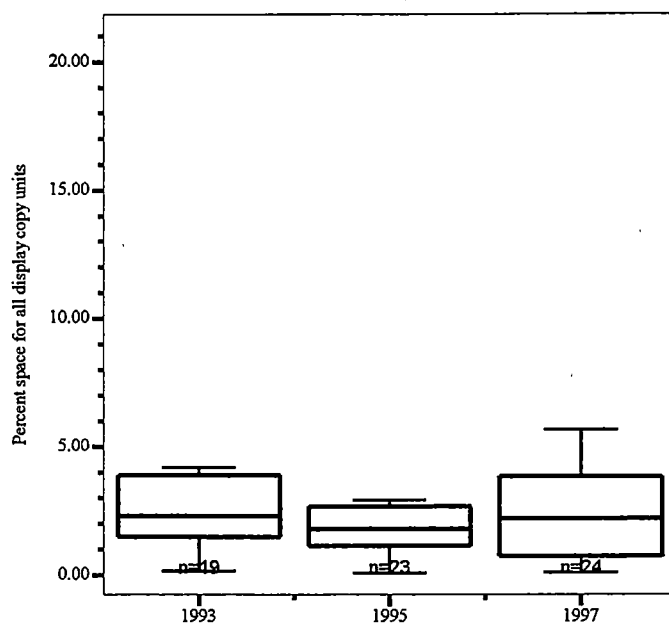
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for all display copy units	4.47	3.09	.39	13.51	4.80
	2.00	Percent space for all display copy units	6.66	3.34	.18	20.84	7.50
	3.00	Percent space for all display copy units	4.30	3.27	.45	17.58	4.95
	4.00	Percent space for all display copy units	2.39	1.45	.12	15.09	3.13
	5.00	Percent space for all display copy units	2.22	1.70	.10	8.13	2.24
	6.00	Percent space for all display copy units	1.71	1.71	1.49	.44	.31
	7.00	Percent space for all display copy units	.	.	.	.	.

n=66; 1=6; 2=10; 3=11; 4=23; 5=14; 6=2; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all display copy units	3.49	2.03	.10	20.92	4.50

(c) Statistics for space by year, story count, and all cases

Figure 8 (continued)



(d) Boxplots for space by year and story count

Figure 8 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of refers	2.86	3.00	1.00	4.00	1.41
	1995	Number of refers	3.26	4.00	1.00	6.00	2.05
	1997	Number of refers	3.28	3.00	1.00	6.00	2.11

n=51; 1993=14; 1995=19; 1997=18.

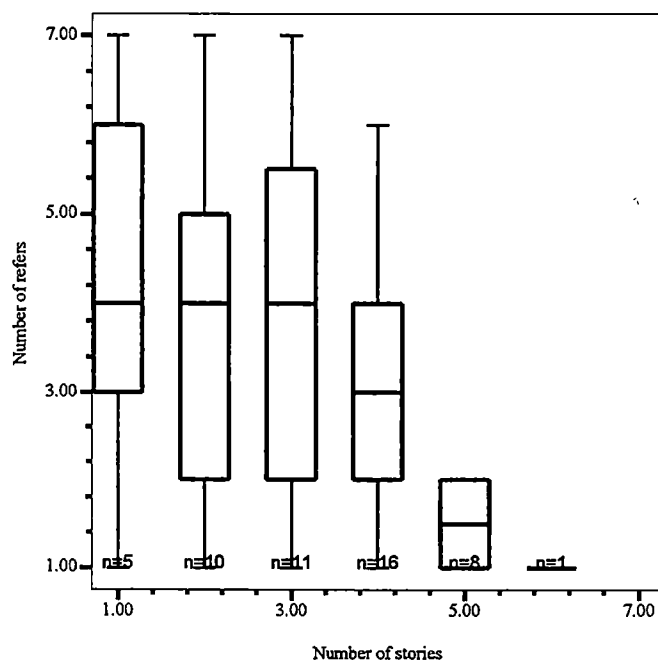
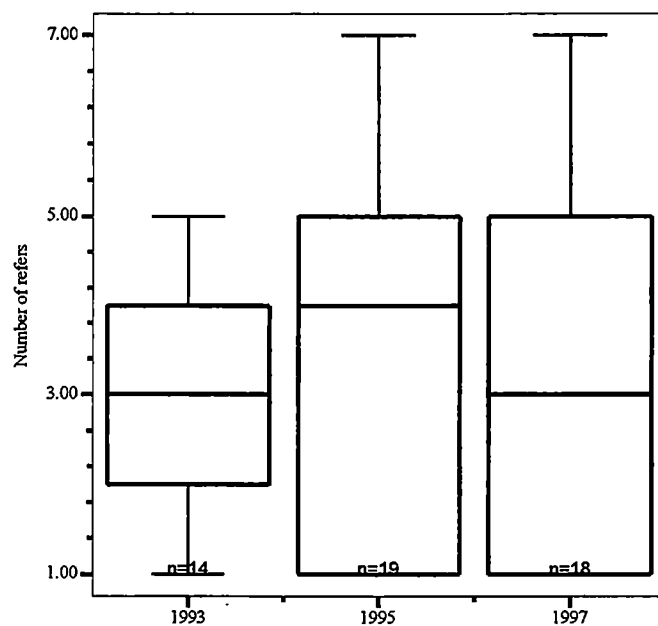
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of refers	4.20	4.00	1.00	6.00	2.39
	2.00	Number of refers	3.70	4.00	5.00	6.00	1.95
	3.00	Number of refers	3.73	4.00	1.00	6.00	2.15
	4.00	Number of refers	2.94	3.00	2.00	5.00	1.53
	5.00	Number of refers	1.75	1.50	1.00	3.00	1.04
	6.00	Number of refers	1.00	1.00	1.00	.00	.
	7.00	Number of refers	.	.	.	.	.

n=51; 1=5; 2=10; 3=11; 4=16; 5=8; 6=1; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of refers	3.16	3.00	1.00	6.00	1.89

(a) Statistics for number by year, story count, and all cases

Figure 9. Refers



(b) Boxplots for number by year and story count

Figure 9 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for refers	2.46	.77	.17	15.16	4.00
	1995	Percent space for refers	3.20	1.00	.18	20.68	5.44
	1997	Percent space for refers	2.53	1.58	.23	13.57	3.17

n=51; 1993=14; 1995=19; 1997=18.

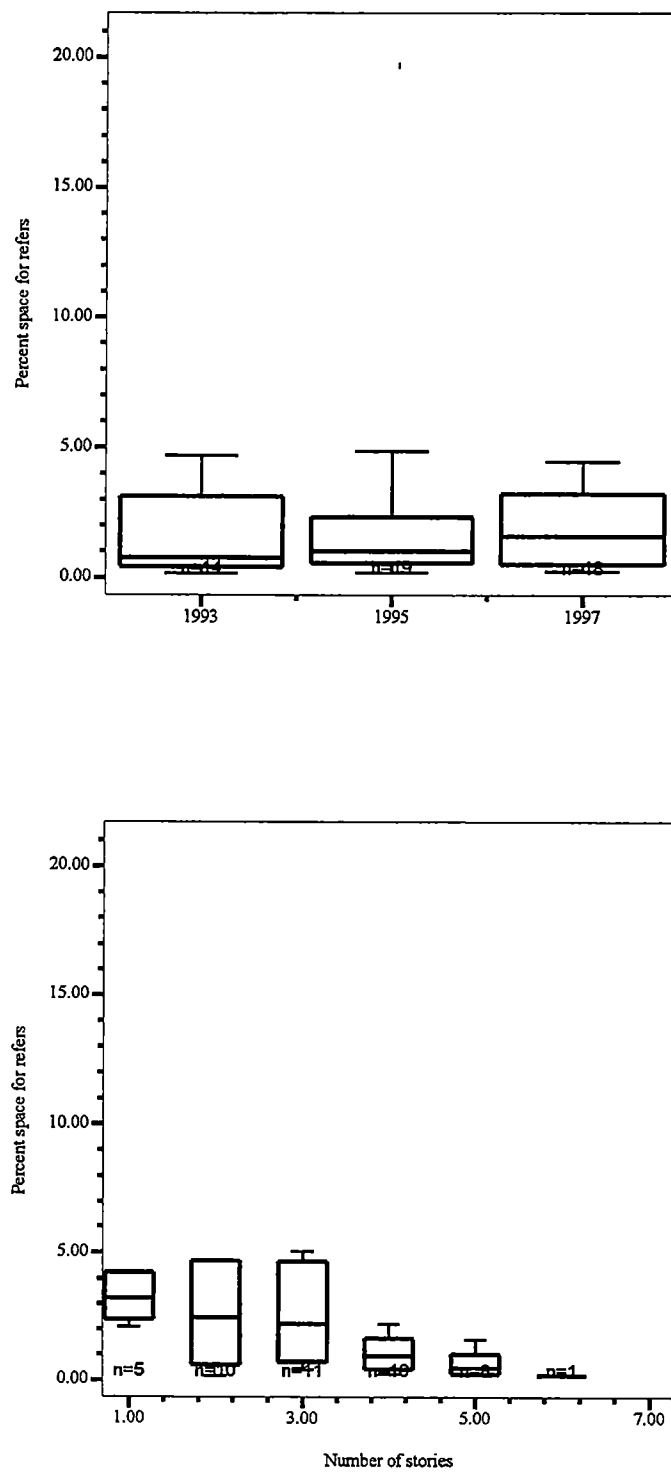
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for refers	5.16	3.22	2.11	11.69	4.90
	2.00	Percent space for refers	5.09	2.48	.17	20.69	7.03
	3.00	Percent space for refers	3.44	2.23	.42	14.91	4.34
	4.00	Percent space for refers	1.30	.97	.23	4.00	1.26
	5.00	Percent space for refers	.67	.48	.23	1.38	.52
	6.00	Percent space for refers	.18	.18	.18	.00	.
	7.00	Percent space for refers	.	.	.	.	.

n=51; 1=5; 2=10; 3=11; 4=16; 5=8; 6=1; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Percent space for refers	2.76	1.16	.23	20.69	4.28

(c) Statistics for space by year, story count, and all cases

Figure 9 (continued)



(d) Boxplots for space by year and story count

Figure 9 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of pull-quotes	1.86	1.00	1.00	4.00	1.46
	1995	Number of pull-quotes	1.67	2.00	2.00	1.00	.58
	1997	Number of pull-quotes	1.00	1.00	1.00	.00	.00

n=13; 1993=7; 1995=3; 1997=3.

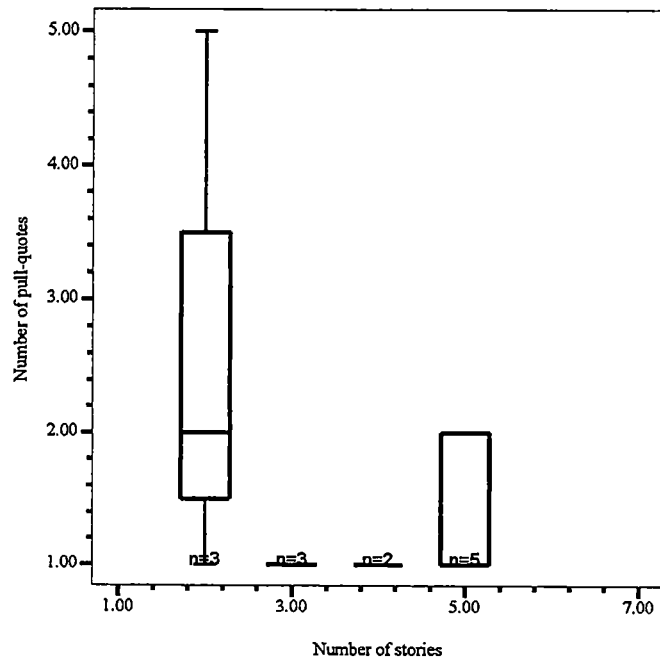
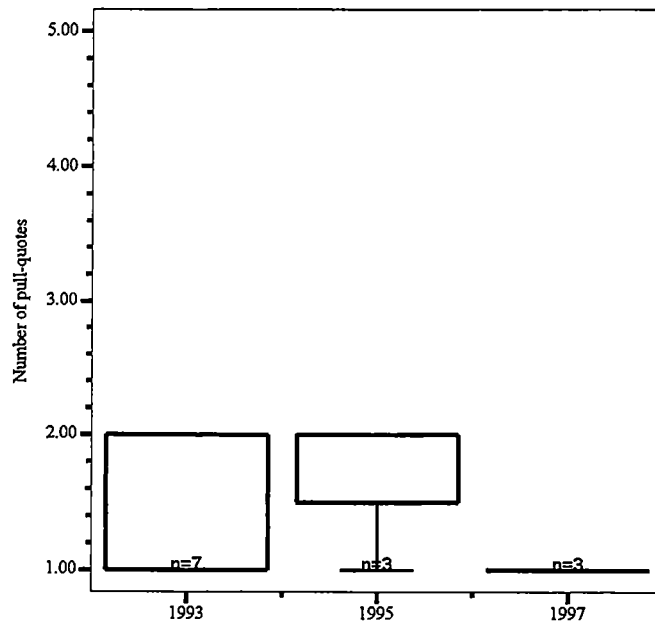
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of pull-quotes	.	.	.	.	.
	2.00	Number of pull-quotes	2.67	2.00	1.00	4.00	2.08
	3.00	Number of pull-quotes	1.00	1.00	1.00	.00	.00
	4.00	Number of pull-quotes	1.00	1.00	1.00	.00	.00
	5.00	Number of pull-quotes	1.60	2.00	2.00	1.00	.55
	6.00	Number of pull-quotes	.	.	.	.	.
	7.00	Number of pull-quotes	.	.	.	.	.

n=13; 1=0; 2=3; 3=3; 4=2; 5=5; 6=0; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of pull-quotes	1.62	1.00	1.00	4.00	1.12

(a) Statistics for number by year, story count, and all cases

Figure 10. Pull-quotes



(b) Boxplots for number by year and story count

Figure 10 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for pull-quotes	2.15	2.02	1.00	2.88	.93
	1995	Percent space for pull-quotes	2.70	3.31	.77	3.25	1.71
	1997	Percent space for pull-quotes	1.77	1.27	.85	2.35	1.25

n=13; 1993=7; 1995=3; 1997=3.

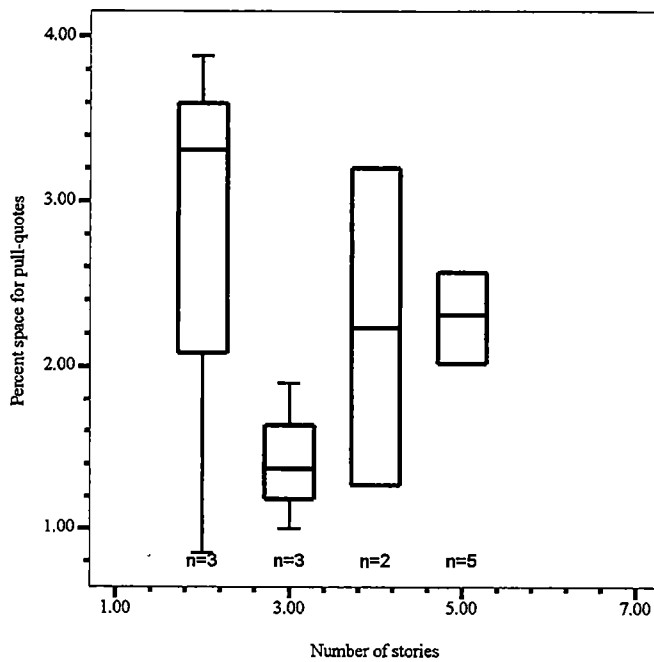
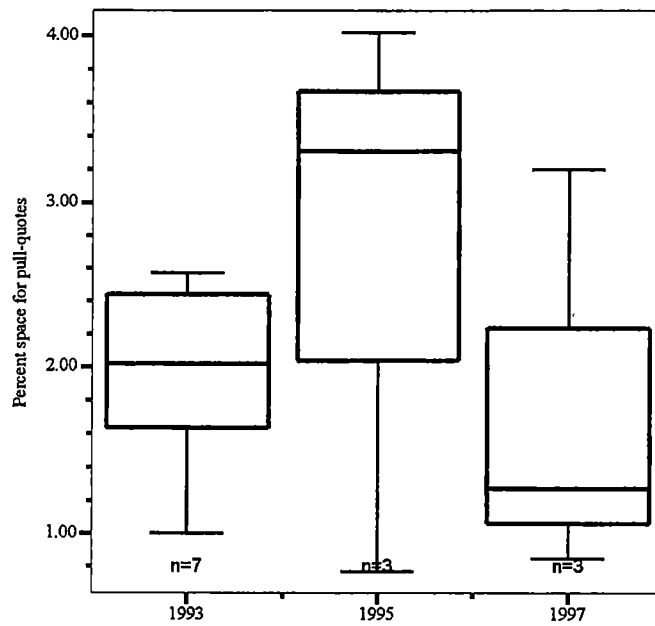
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for pull-quotes	.	.	.	.	.
	2.00	Percent space for pull-quotes	2.68	3.31	.85	3.03	1.61
	3.00	Percent space for pull-quotes	1.42	1.37	1.00	.90	.45
	4.00	Percent space for pull-quotes	2.24	2.24	1.27	1.93	1.36
	5.00	Percent space for pull-quotes	2.34	2.31	.77	3.25	1.17
	6.00	Percent space for pull-quotes	.	.	.	.	.
	7.00	Percent space for pull-quotes	.	.	.	.	.

n=13; 1=0; 2=3; 3=3; 4=2; 5=5; 6=0; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Percent space for pull-quotes	2.19	2.02	.77	3.25	1.14

(c) Statistics for space by year, story count, and all cases

Figure 10 (continued)



(d) Boxplots for space by year and story count

Figure 10 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of lift-outs	1.00	1.00	1.00	.00	.00
	1995	Number of lift-outs	1.00	1.00	1.00	.00	.00
	1997	Number of lift-outs	1.50	1.50	1.00	1.00	.71

n=7; 1993=3; 1995=2; 1997=2.

			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of lift-outs	.	.	.	.	.
	2.00	Number of lift-outs	.	.	.	.	.
	3.00	Number of lift-outs	.	.	.	.	.
	4.00	Number of lift-outs	1.20	1.00	1.00	1.00	.45
	5.00	Number of lift-outs	1.00	1.00	1.00	.00	.
	6.00	Number of lift-outs	1.00	1.00	1.00	.00	.
	7.00	Number of lift-outs	.	.	.	.	.

n=7; 1=0; 2=0; 3=0; 4=5; 6=1; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of lift-outs	1.14	1.00	1.00	1.00	.38

(a) Statistics for number by year, story count, and all cases

Graphs were omitted because variable has a limited number of cases.

Figure 11. Lift-outs

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for lift-outs	1.83	1.85	1.34	.95	.48
	1995	Percent space for lift-outs	1.39	1.39	1.14	.50	.35
	1997	Percent space for lift-outs	5.94	5.94	1.02	9.83	6.95

n=7; 1993=3; 1995=2; 1997=2.

			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for lift-outs	.	.	.	.	.
	2.00	Percent space for lift-outs	.	.	.	.	.
	3.00	Percent space for lift-outs	.	.	.	.	.
	4.00	Percent space for lift-outs	3.49	1.85	1.14	9.71	4.14
	5.00	Percent space for lift-outs	1.02	1.02	1.02	.00	.
	6.00	Percent space for lift-outs	1.64	1.64	1.64	.00	.
	7.00	Percent space for lift-outs	.	.	.	.	.

n=7; 1=0; 2=0; 3=0; 4=5; 6=1; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Percent space for lift-outs	2.88	1.64	1.02	9.83	3.54

(b) Statistics for space by year, story count, and all cases

Graphs were omitted because variable has a limited number of cases.

Figure 11 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of intertext headlines	4.83	5.00	5.00	5.00	2.04
	1995	Number of intertext headlines	3.86	4.00	4.00	6.00	1.95
	1997	Number of intertext headlines	3.33	4.00	4.00	4.00	1.22

n=22; 1993=6; 1995=7; 1997=9.

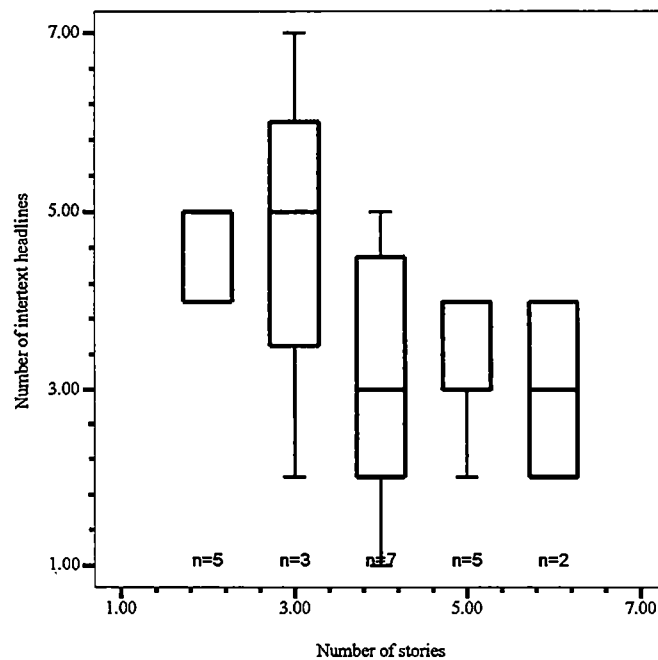
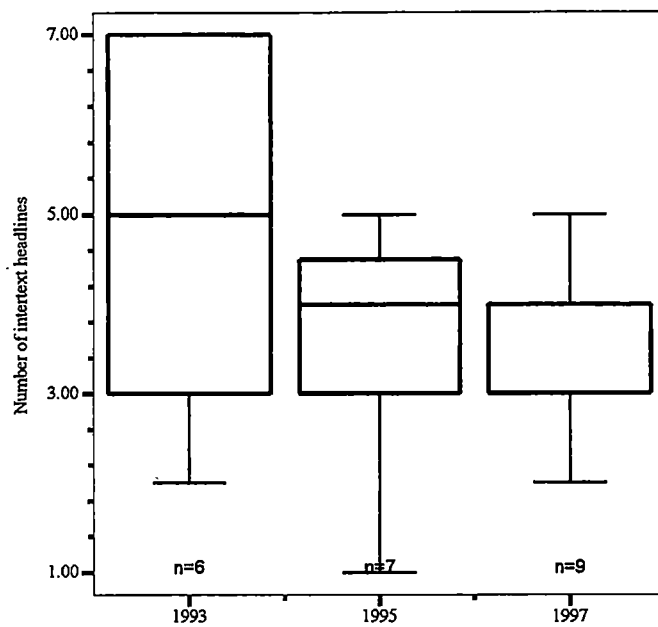
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of intertext headlines	.	.	.	.	.
	2.00	Number of intertext headlines	4.80	4.00	4.00	3.00	1.30
	3.00	Number of intertext headlines	4.67	5.00	2.00	5.00	2.52
	4.00	Number of intertext headlines	3.14	3.00	1.00	4.00	1.68
	5.00	Number of intertext headlines	4.00	4.00	4.00	5.00	1.87
	6.00	Number of intertext headlines	3.00	3.00	2.00	2.00	1.41
	7.00	Number of intertext headlines	.	.	.	.	.

n=22; 1=0; 2=5; 3=3; 4=7; 5=5; 6=2; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of intertext headlines	3.91	4.00	4.00	6.00	1.74

(a) Statistics for number by year, story count, and all cases

Figure 12. Intertext headlines



(b) Boxplots for number by year and story count

Figure 12 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for intertext headlines	2.21	1.95	.65	3.74	1.27
	1995	Percent space for intertext headlines	1.08	1.31	.29	1.28	.54
	1997	Percent space for intertext headlines	1.29	.80	.12	2.51	.99

n=22; 1993=6; 1995=7; 1997=9.

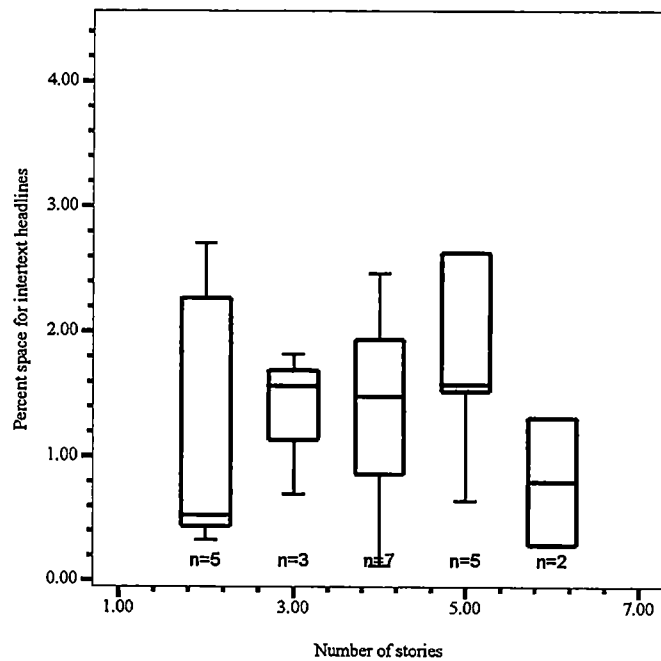
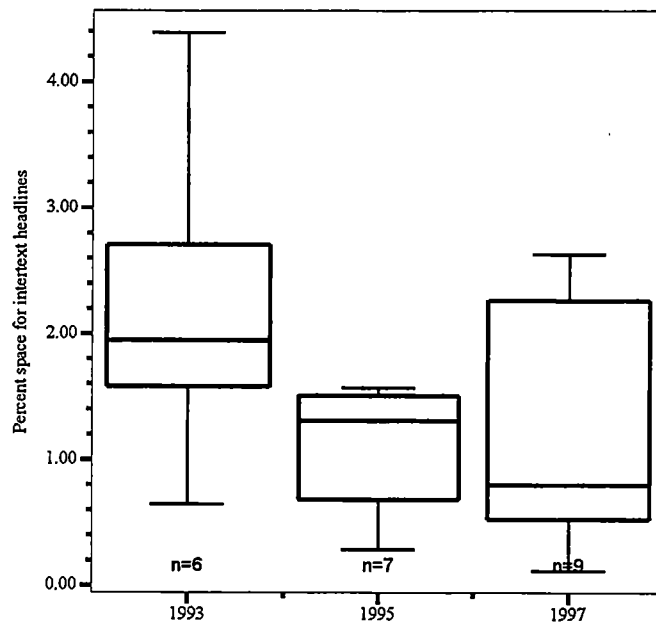
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for intertext headlines	.	.	.	.	.
	2.00	Percent space for intertext headlines	1.26	.53	.33	2.38	1.14
	3.00	Percent space for intertext headlines	1.36	1.57	.70	1.12	.59
	4.00	Percent space for intertext headlines	1.38	1.49	.12	2.35	.82
	5.00	Percent space for intertext headlines	2.16	1.58	.65	3.74	1.43
	6.00	Percent space for intertext headlines	.80	.80	.29	1.02	.72
	7.00	Percent space for intertext headlines	.	.	.	.	.

n=22; 1=0; 2=5; 3=3; 4=7; 5=5; 6=2; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Percent space for intertext headlines	1.47	1.51	.12	4.27	1.03

(c) Statistics for space by year, story count, and all cases

Figure 12 (continued)



(d) Boxplots for space by year and story count

Figure 12 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of initial capital letters	1.09	1.00	1.00	1.00	.30
	1995	Number of initial capital letters	1.70	1.00	1.00	3.00	1.06
	1997	Number of initial capital letters	1.00	1.00	1.00	.00	.00

n=33; 1993=11; 1995=10; 1997=12.

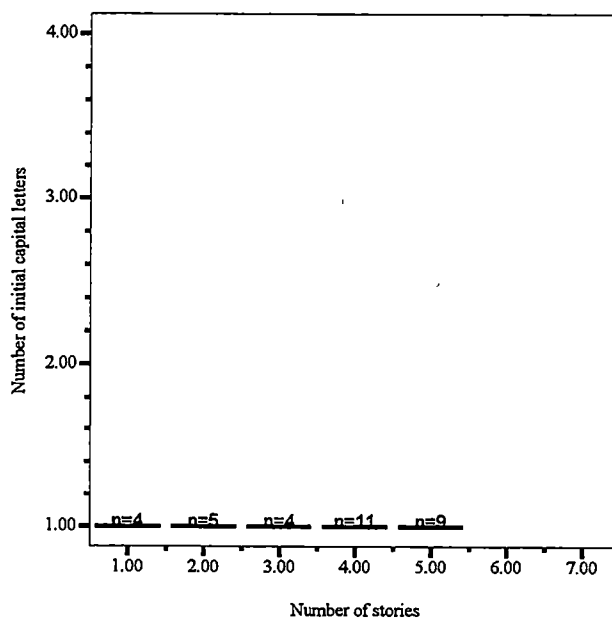
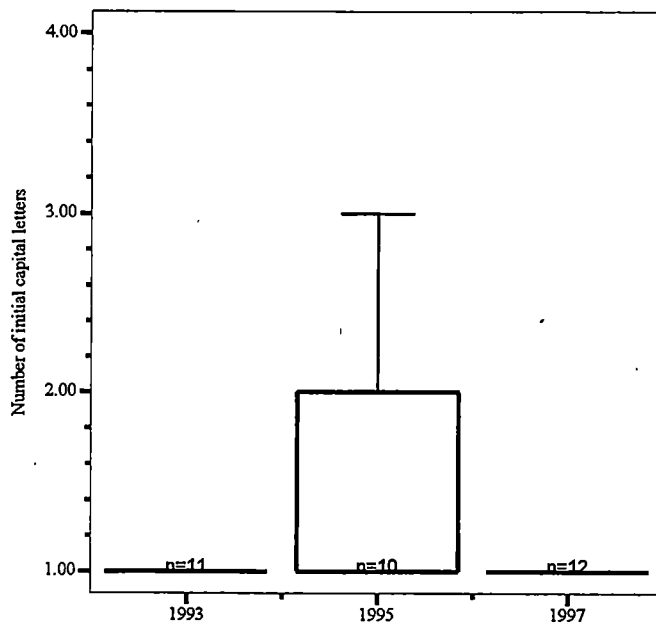
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of initial capital letters	1.00	1.00	1.00	.00	.00
	2.00	Number of initial capital letters	1.60	1.00	1.00	3.00	1.34
	3.00	Number of initial capital letters	1.00	1.00	1.00	.00	.00
	4.00	Number of initial capital letters	1.18	1.00	1.00	1.00	.40
	5.00	Number of initial capital letters	1.33	1.00	1.00	2.00	.71
	6.00	Number of initial capital letters	.	.	.	.	.
	7.00	Number of initial capital letters	.	.	.	.	.

n=33; 1=4; 2=5; 3=4; 4=11; 5=9; 6=0; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of initial capital letters	1.24	1.00	1.00	3.00	.66

(a) Statistics for number by year, story count, and all cases

Figure 13. Initial capital letters



(b) Boxplots for number by year and story count

Figure 13 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for initial capital letters	.28	.20	.01	.81	.29
	1995	Percent space for initial capital letters	.37	.31	.04	1.05	.31
	1997	Percent space for initial capital letters	.12	.10	.09	.38	.11

n=33; 1993=11; 1995=10; 1997=12.

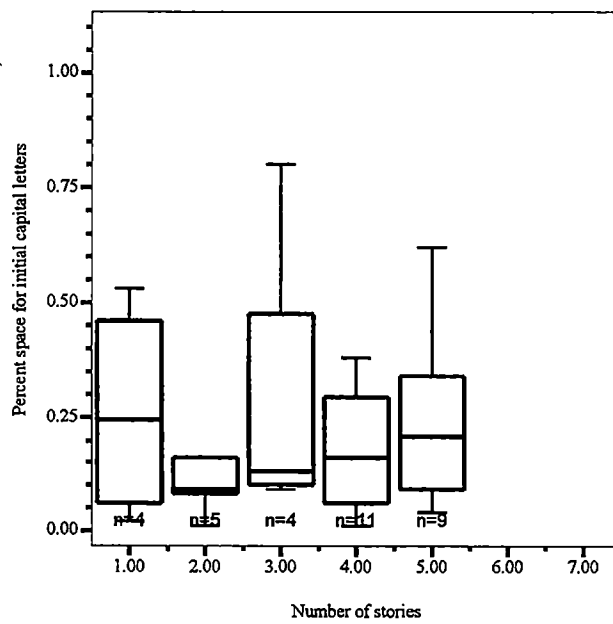
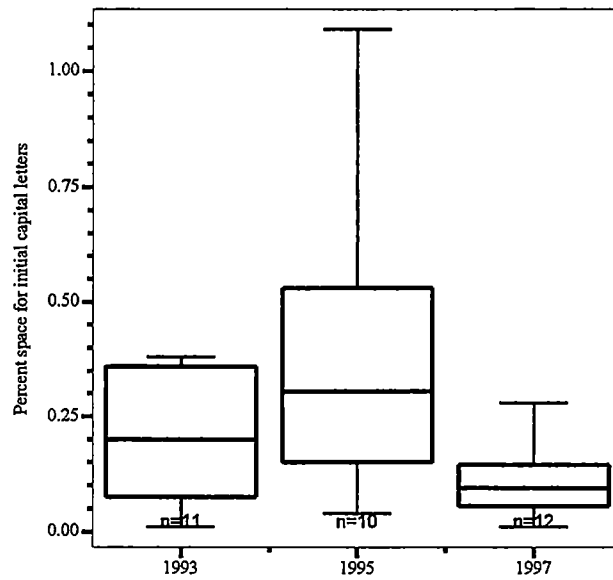
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for initial capital letters	.26	.25	.02	.51	.24
	2.00	Percent space for initial capital letters	.29	.09	.01	1.08	.45
	3.00	Percent space for initial capital letters	.29	.13	.09	.71	.34
	4.00	Percent space for initial capital letters	.22	.16	.01	.81	.23
	5.00	Percent space for initial capital letters	.24	.21	.04	.58	.19
	6.00	Percent space for initial capital letters	.	.	.	.	.
	7.00	Percent space for initial capital letters	.	.	.	.	.

n=33; 1=4; 2=5; 3=4; 4=11; 5=9; 6=0; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Percent space for initial capital letters	.25	.15	.09	1.08	.26

(c) Statistics for space by year, story count, and all cases

Figure 13 (continued)



(d) Boxplots for space by year and story count

Figure 13 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for primary package	59.40	56.56	35.93	46.24	12.80
	1995	Percent space for primary package	62.76	59.55	30.43	69.57	21.62
	1997	Percent space for primary package	59.95	56.86	27.32	62.88	17.32

n = 68; 1993=20; 1995=23; 1997=25.

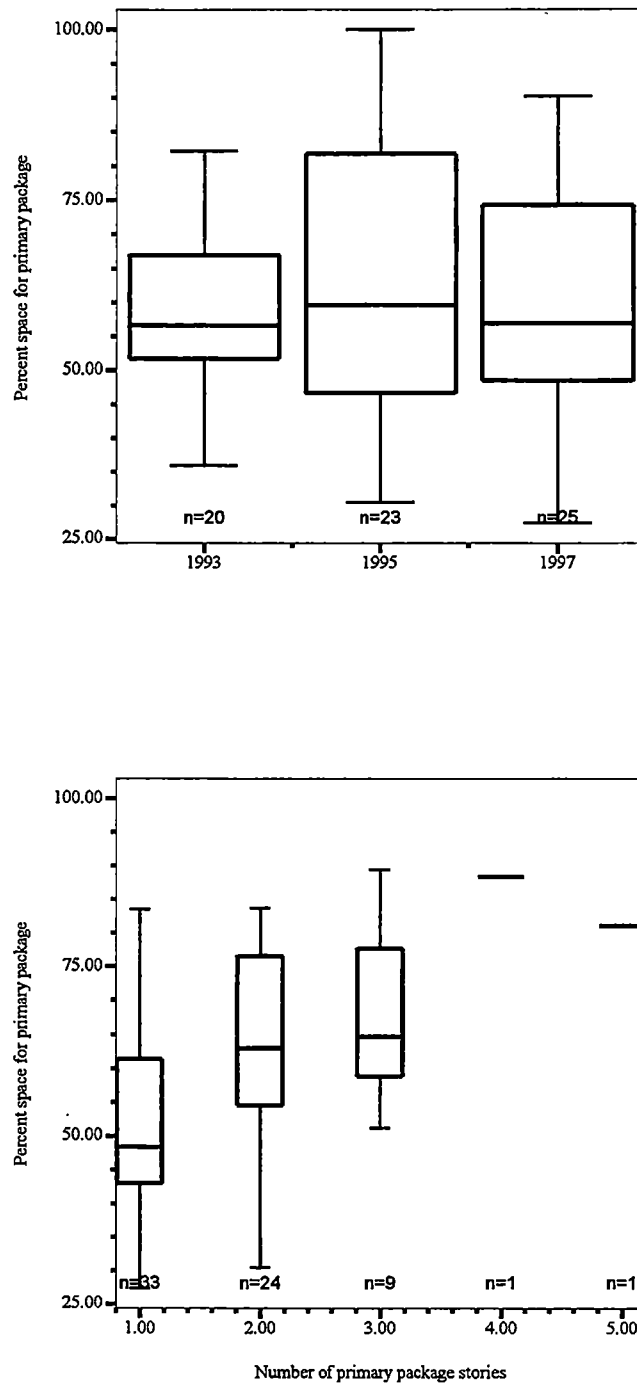
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Percent space for primary package	54.65	48.38	27.32	72.68	19.42
	2.00	Percent space for primary package	64.39	62.99	30.43	53.31	13.15
	3.00	Percent space for primary package	67.98	64.65	51.21	38.30	13.72
	4.00	Percent space for primary package	88.31	88.31	88.31	.00	.
	5.00	Percent space for primary package	81.10	81.10	81.10	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for primary package	60.74	57.35	27.32	72.68	17.59

(a) Statistics for space by year, story count, and all cases

Figure 14. Primary package space



(b) Boxplots for space by year and story count

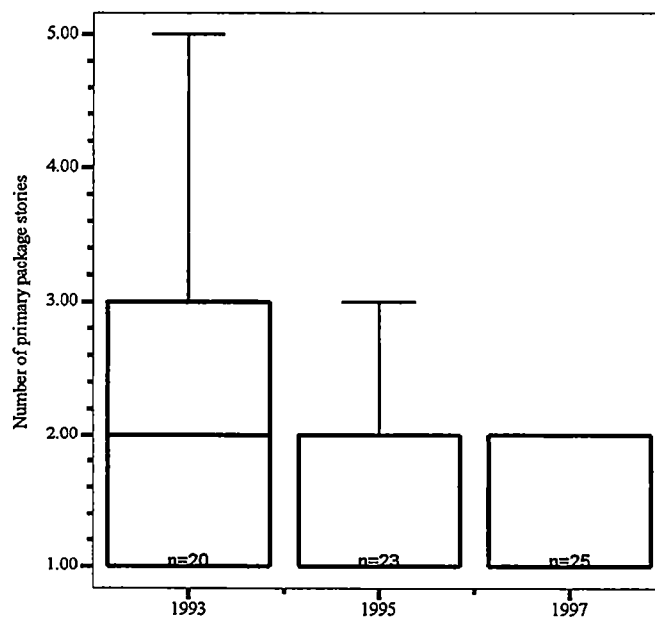
Figure 14 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of primary package stories	2.05	2.00	1.00	4.00	1.05
	1995	Number of primary package stories	1.78	2.00	1.00	3.00	.90
	1997	Number of primary package stories	1.40	1.00	1.00	1.00	.50

n = 68; 1993=20; 1995=23; 1997=25.

	Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.72	2.00	1.00	4.00	.86

(a) Statistics for number of stories by year and all cases



(b) Boxplot by year

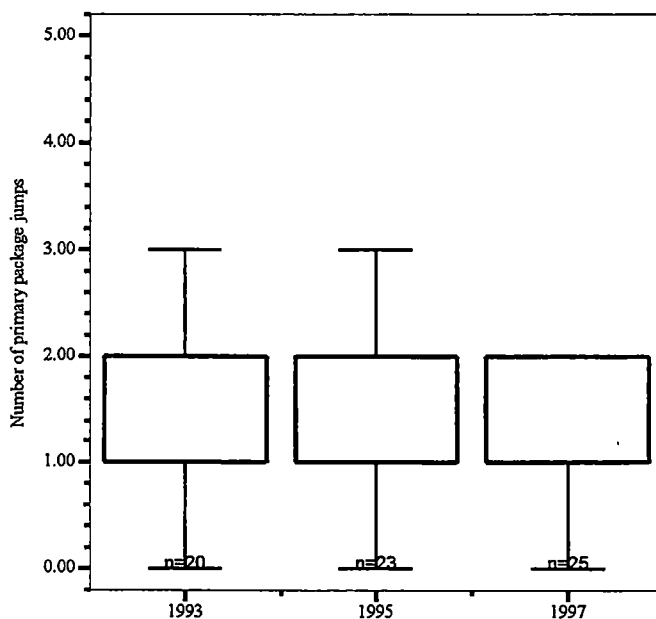
Figure 15. Primary package stories

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of primary package jumps	1.75	2.00	2.00	5.00	1.12
	1995	Number of primary package jumps	1.35	1.00	1.00	4.00	1.03
	1997	Number of primary package jumps	1.24	1.00	1.00	2.00	.60

n = 68; 1993=20; 1995=23; 1997=25.

	Mean	Median	Mode	Range	Std Deviation
Number of primary package jumps	1.43	1.00	1.00	5.00	.94

(c) Statistics for number of jumps by year and all cases



(d) Boxplot by year

Figure 15 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of lines in main headline	1.40	1.00	1.00	2.00	.60
	1995	Number of lines in main headline	1.57	1.00	1.00	4.00	.95
	1997	Number of lines in main headline	1.80	1.00	1.00	6.00	1.35

n = 68; 1993=20; 1995=23; 1997=25.

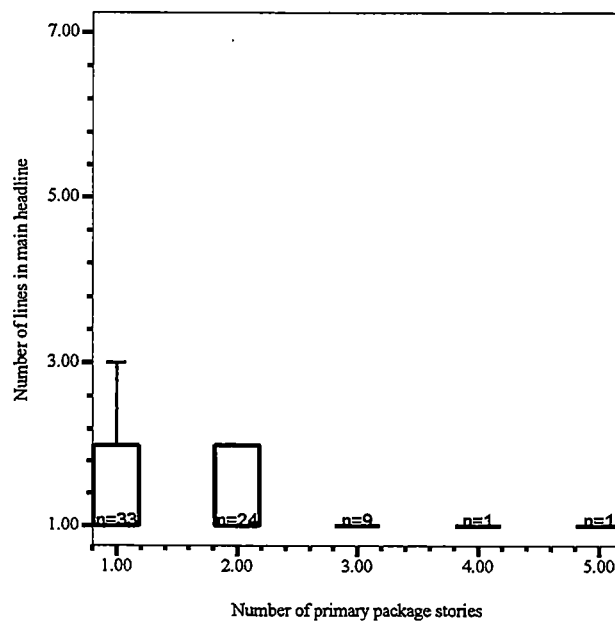
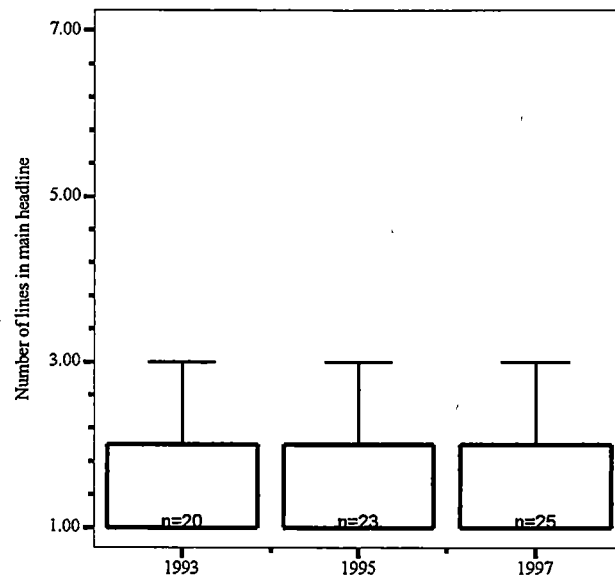
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Number of lines in main headline	1.70	1.00	1.00	4.00	1.02
	2.00	Number of lines in main headline	1.67	1.00	1.00	6.00	1.24
	3.00	Number of lines in main headline	1.22	1.00	1.00	1.00	.44
	4.00	Number of lines in main headline	1.00	1.00	1.00	.00	.
	5.00	Number of lines in main headline	1.00	1.00	1.00	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Number of lines in main headline	1.60	1.00	1.00	6.00	1.04

(a) Statistics for number of lines by year, story count, and all cases

Figure 16. Primary package main headline



(b) Boxplots by year and story count

Figure 16 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of letters, spaces in main headline	20.75	20.50	12.00	25.00	7.35
	1995	Number of letters, spaces in main headline	21.26	19.00	10.00	64.00	14.08
	1997	Number of letters, spaces in main headline	25.80	19.00	15.00	59.00	15.09

n = 68; 1993=20; 1995=23; 1997=25.

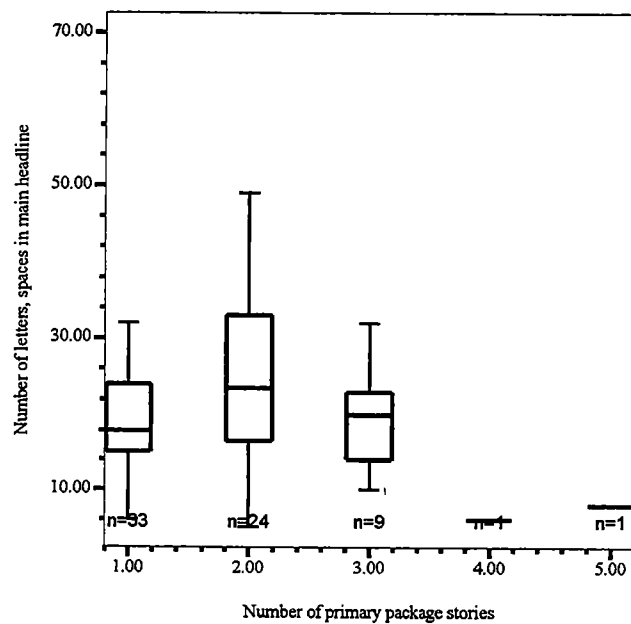
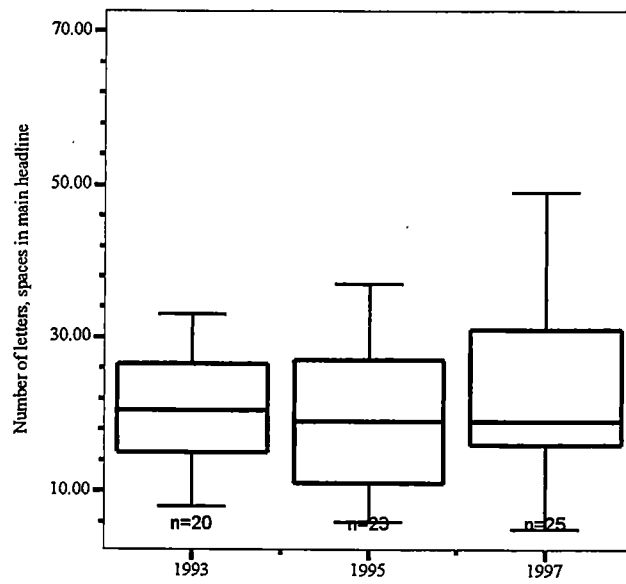
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Number of letters, spaces in main headline	21.88	18.00	18.00	64.00	13.28
	2.00	Number of letters, spaces in main headline	26.33	23.50	14.00	59.00	13.67
	3.00	Number of letters, spaces in main headline	20.11	20.00	20.00	22.00	6.99
	4.00	Number of letters, spaces in main headline	6.00	6.00	6.00	.00	.
	5.00	Number of letters, spaces in main headline	8.00	8.00	8.00	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Number of letters, spaces in main headline	22.78	20.00	18.00	65.00	12.94

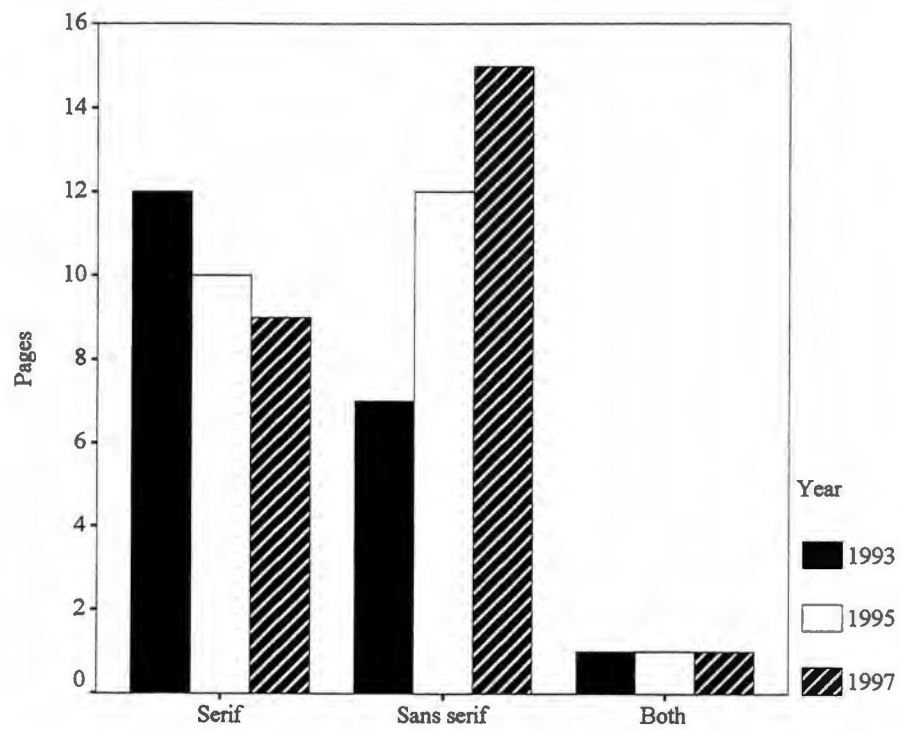
(c) Statistics for letters and spaces by year, story count, and all cases

Figure 16 (continued)



(d) Boxplots for letters and spaces by year and story count

Figure 16 (continued)



(e) Bar graph for font choice

Figure 16 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for main headline	5.08	4.89	1.17	9.88	2.41
	1995	Percent space for main headline	5.83	4.49	1.46	13.76	3.34
	1997	Percent space for main headline	5.71	5.03	.86	14.35	3.65

n = 68; 1993=20; 1995=23; 1997=25.

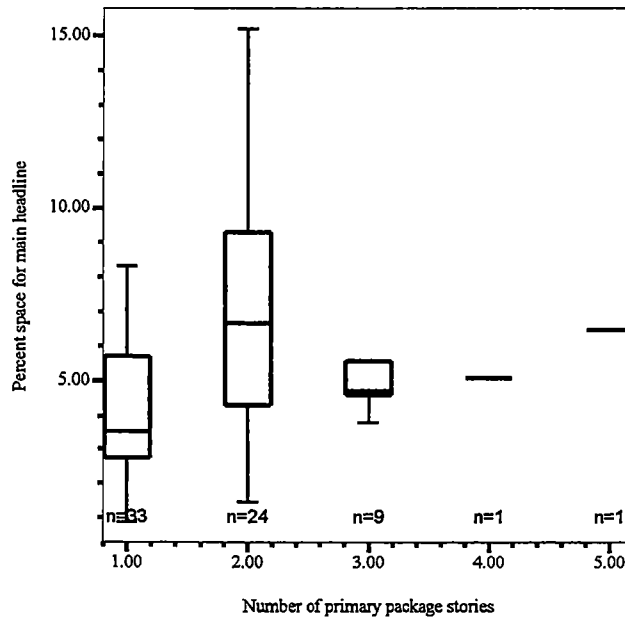
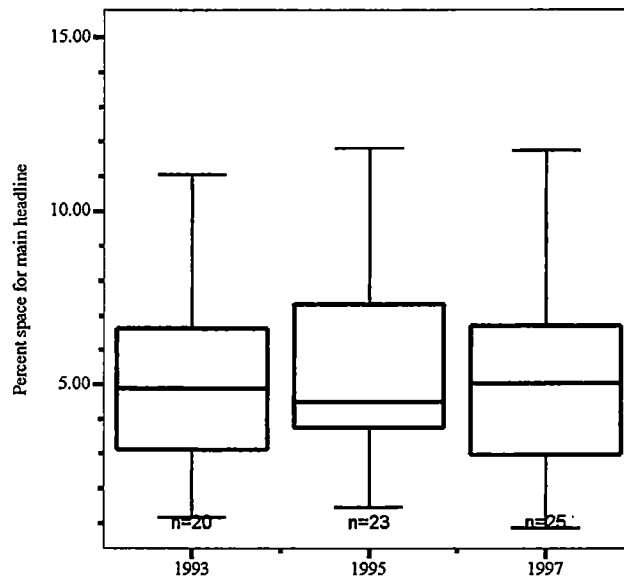
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Percent space for main headline	4.57	3.53	.86	14.36	3.15
	2.00	Percent space for main headline	7.04	6.67	1.46	13.75	3.40
	3.00	Percent space for main headline	5.24	4.73	3.82	3.80	1.31
	4.00	Percent space for main headline	5.10	5.10	5.10	.00	.
	5.00	Percent space for main headline	6.48	6.48	6.48	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for main headline	5.56	4.72	.86	14.36	3.19

(f) Statistics for space by year, story count, and all cases

Figure 16 (continued)



(g) Boxplots for space by year and story count

Figure 16 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of primary package text blocks	6.20	5.50	5.00	13.00	3.68
	1995	Number of primary package text blocks	4.57	4.00	3.00	9.00	2.11
	1997	Number of primary package text blocks	3.96	4.00	4.00	7.00	1.86

n = 68; 1993=20; 1995=23; 1997=25.

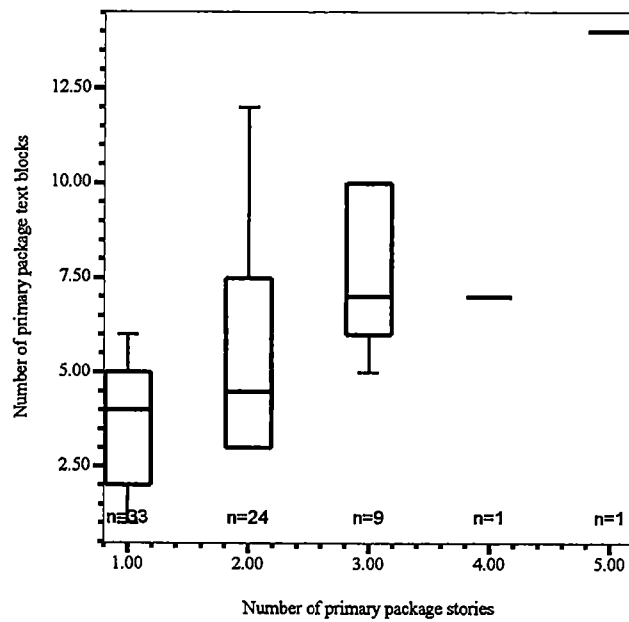
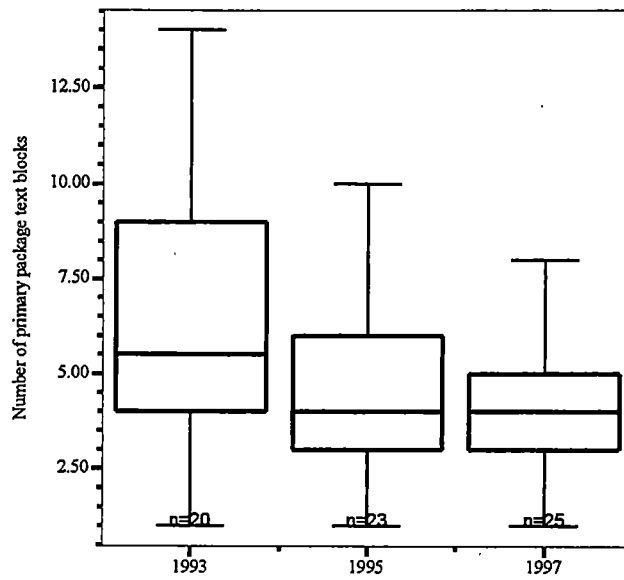
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Number of primary package text blocks	3.39	4.00	5.00	5.00	1.58
	2.00	Number of primary package text blocks	5.33	4.50	3.00	9.00	2.63
	3.00	Number of primary package text blocks	7.44	7.00	6.00	5.00	2.01
	4.00	Number of primary package text blocks	7.00	7.00	7.00	.00	.
	5.00	Number of primary package text blocks	14.00	14.00	14.00	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Number of primary package text blocks	4.82	4.00	3.00	13.00	2.72

(a) Statistics for number by year, story count, and all cases

Figure 17. Primary package text



(b) Boxplots for number by year and story count

Figure 17 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for primary package text	11.58	10.91	3.01	19.78	5.52
	1995	Percent space for primary package text	11.65	10.29	9.95	27.09	5.93
	1997	Percent space for primary package text	8.16	8.81	.67	12.78	3.13

n = 68; 1993=20; 1995=23; 1997=25.

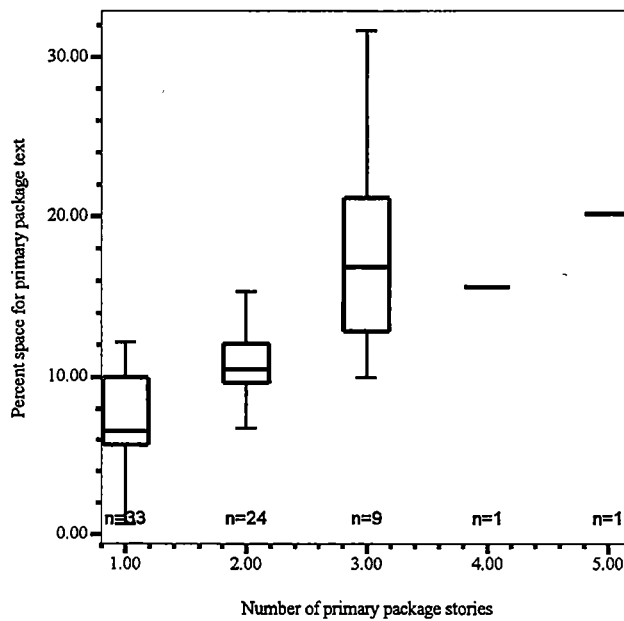
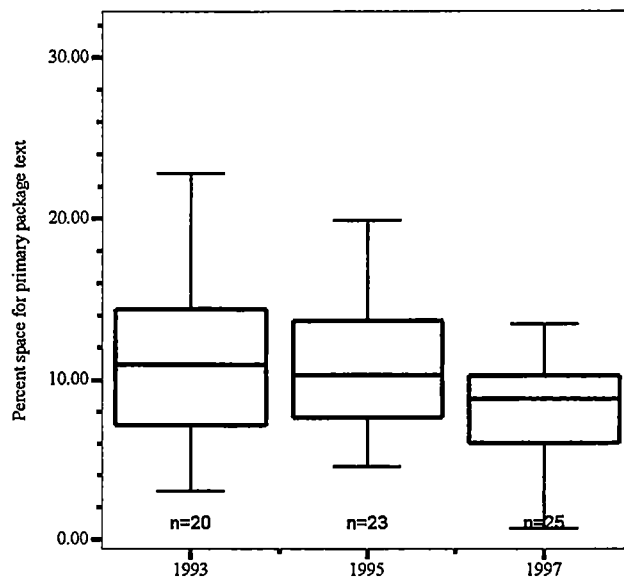
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Percent space for primary package text	7.44	6.60	.67	17.32	3.27
	2.00	Percent space for primary package text	10.92	10.50	6.81	10.63	2.47
	3.00	Percent space for primary package text	17.83	16.88	9.95	21.70	6.88
	4.00	Percent space for primary package text	15.65	15.65	15.65	.00	.
	5.00	Percent space for primary package text	20.19	20.19	20.19	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for primary package text	10.35	9.95	9.95	30.98	5.15

(c) Statistics for space by year, story count, and all cases

Figure 17 (continued)



(d) Boxplots for space by year and story count

Figure 17 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of primary package images	3.95	3.50	5.00	8.00	2.11
	1995	Number of primary package images	3.26	3.00	4.00	7.00	1.84
	1997	Number of primary package images	3.72	3.00	2.00	9.00	2.42

n = 68; 1993=20; 1995=23; 1997=25.

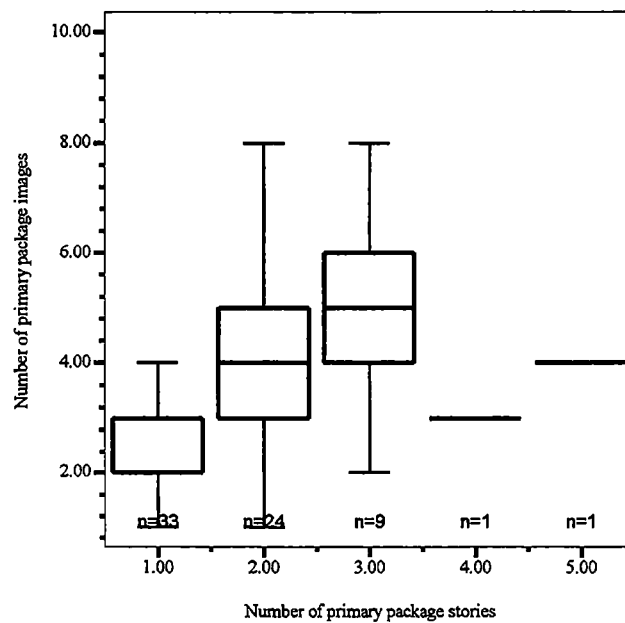
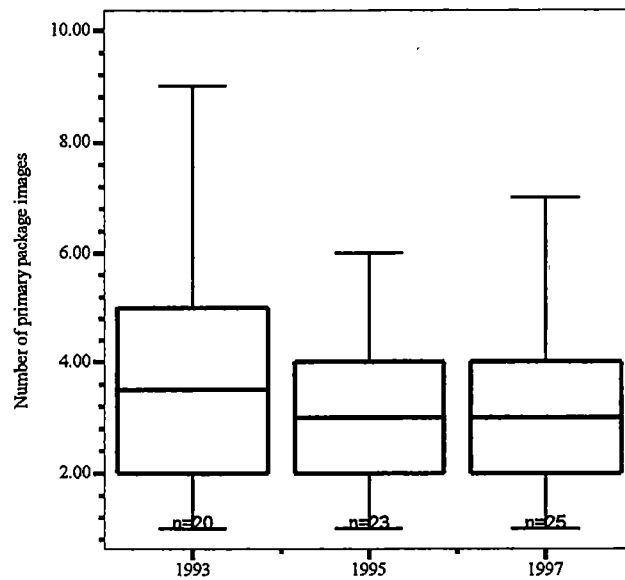
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Number of primary package images	2.91	2.00	2.00	9.00	2.10
	2.00	Number of primary package images	4.13	4.00	3.00	8.00	2.05
	3.00	Number of primary package images	5.00	5.00	5.00	6.00	1.87
	4.00	Number of primary package images	3.00	3.00	3.00	.00	
	5.00	Number of primary package images	4.00	4.00	4.00	.00	

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Number of primary package images	3.63	3.00	2.00	9.00	2.14

(a) Statistics for image number by year, story count, and all cases

Figure 18. Primary package images



(b) Boxplots for image number by year and story count

Figure 18 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for largest image	21.25	20.92	5.82	29.95	7.61
	1995	Percent space for largest image	28.60	24.84	8.48	68.21	15.27
	1997	Percent space for largest image	26.10	24.07	9.09	64.70	13.89

n = 68; 1993=20; 1995=23; 1997=25.

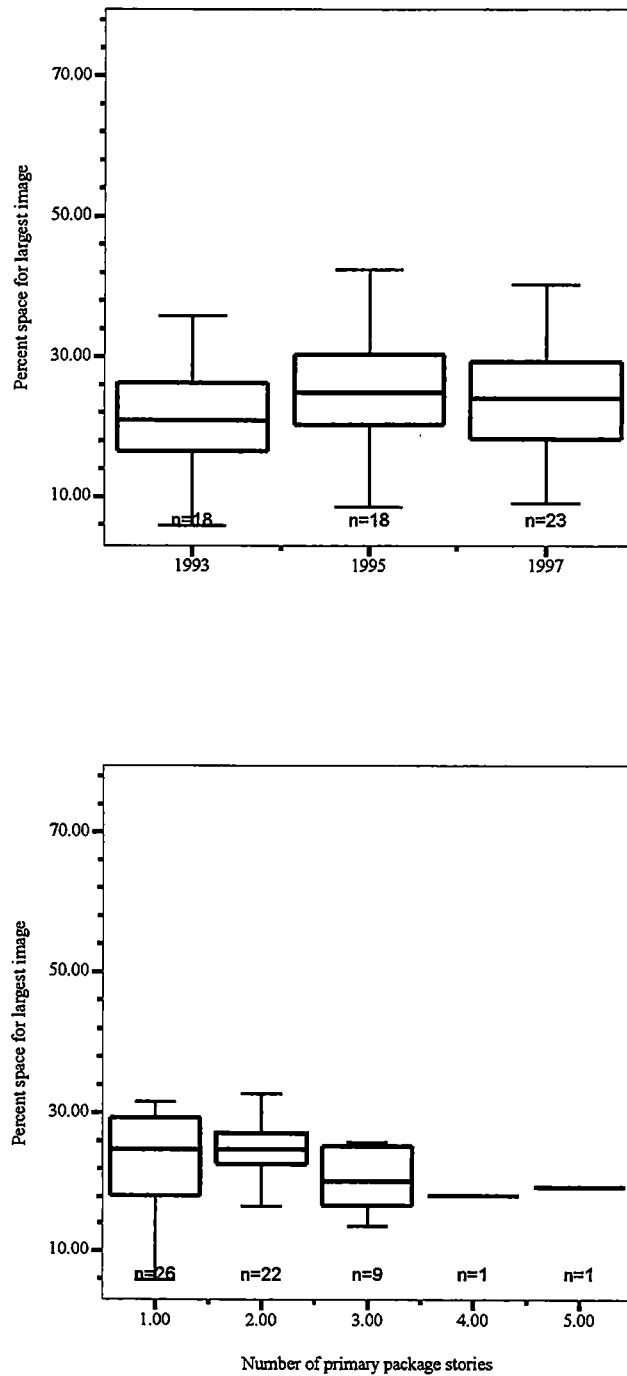
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Percent space for largest image	27.50	24.79	5.82	70.87	17.67
	2.00	Percent space for largest image	24.66	24.82	23.70	31.79	6.96
	3.00	Percent space for largest image	22.48	20.28	13.57	28.88	8.53
	4.00	Percent space for largest image	18.17	18.17	18.17	.00	.
	5.00	Percent space for largest image	19.47	19.47	19.47	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for largest image	25.38	24.07	18.17	70.87	12.93

(c) Statistics for largest image space by year, story count, and all cases

Figure 18 (continued)



(d) Boxplots for largest image space by year and story count

Figure 18 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for smallest image	1.49	.82	.36	5.16	1.47
	1995	Percent space for smallest image	1.74	1.12	.10	5.68	1.74
	1997	Percent space for smallest image	2.44	1.40	.08	10.54	2.87

n = 68; 1993=20; 1995=23; 1997=25.

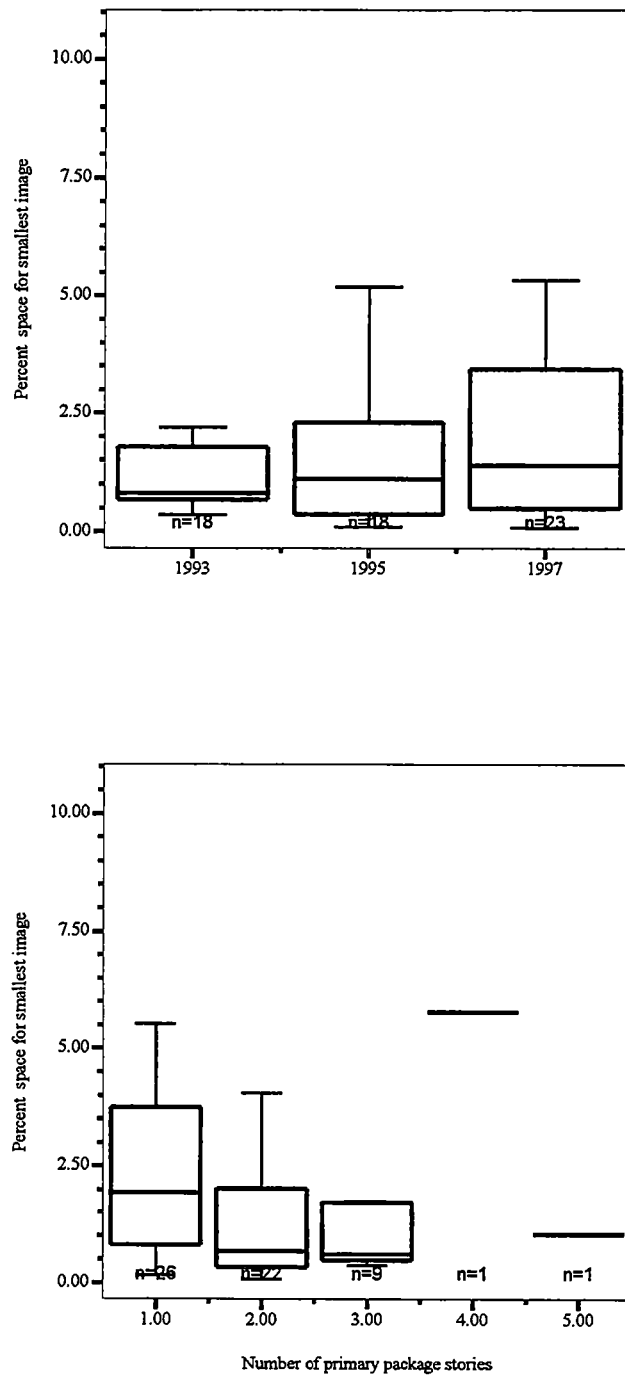
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Percent space for smallest image	2.51	1.94	.17	10.45	2.32
	2.00	Percent space for smallest image	1.40	.68	.68	9.61	2.11
	3.00	Percent space for smallest image	1.28	.61	.37	4.52	1.46
	4.00	Percent space for smallest image	5.78	5.78	5.78	.00	.
	5.00	Percent space for smallest image	1.04	1.04	1.04	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for smallest image	1.94	1.04	.17	10.54	2.20

(e) Statistics for smallest image space by year, story count, and all cases

Figure 18 (continued)



(f) Boxplots for smallest image space by year and story count

Figure 18 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all images	27.35	25.03	14.04	36.80	8.98
	1995	Percent space for all images	35.79	30.95	9.59	90.41	20.34
	1997	Percent space for all images	35.53	34.24	13.97	61.72	13.85

n = 68; 1993=20; 1995=23; 1997=25.

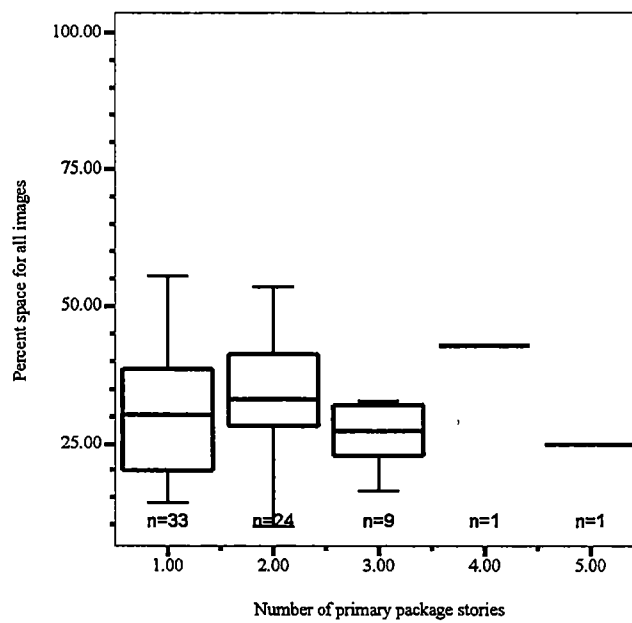
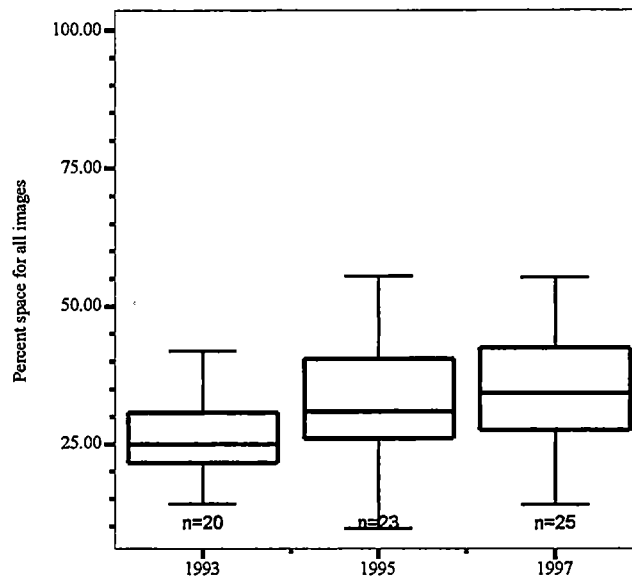
			Mean	Median	Mode	Range	Std Deviation
Number of primary package stories	1.00	Percent space for all images	34.04	30.39	13.97	86.03	20.01
	2.00	Percent space for all images	33.86	33.13	9.59	43.93	10.10
	3.00	Percent space for all images	28.29	27.40	16.19	30.83	8.94
	4.00	Percent space for all images	42.85	42.85	42.85	.00	.
	5.00	Percent space for all images	25.01	25.01	25.01	.00	.

n = 68; 1=33; 2=24; 3=9; 4=1; 5=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all images	33.21	30.60	9.59	90.41	15.55

(g) Statistics for image space by year, story count, and all cases

Figure 18 (continued)



(h) Boxplots for image space by year and story count

Figure 18 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all stories	73.02	73.71	59.22	27.06	6.77
	1995	Percent space for all stories	76.12	73.48	52.99	47.01	12.19
	1997	Percent space for all stories	75.75	74.24	62.65	27.55	7.87

n = 68; 1993=20; 1995=23; 1997=25.

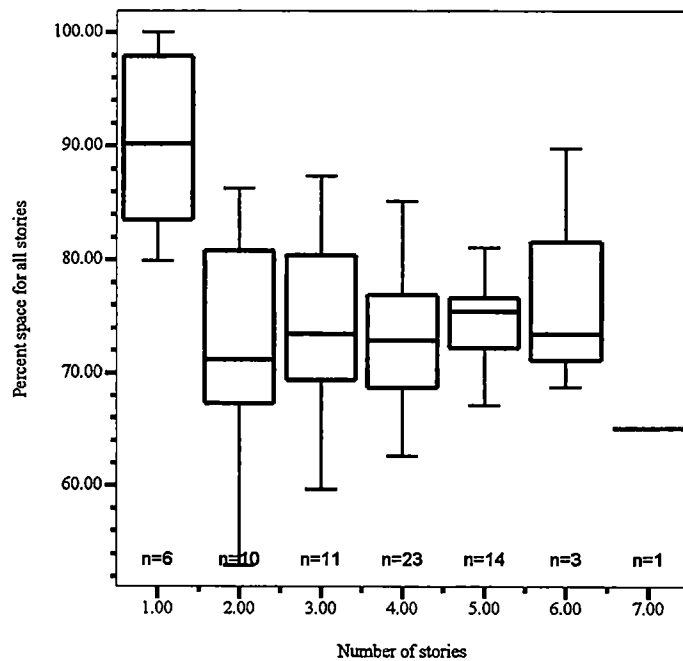
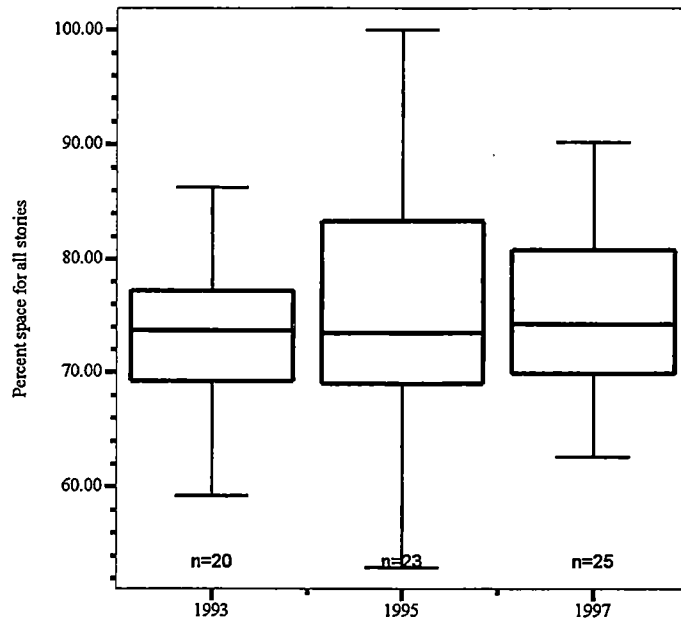
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for all stories	90.28	90.18	79.91	20.09	7.82
	2.00	Percent space for all stories	71.96	71.18	52.99	33.29	10.74
	3.00	Percent space for all stories	74.43	73.48	59.71	27.64	8.58
	4.00	Percent space for all stories	73.07	72.88	53.15	40.87	8.32
	5.00	Percent space for all stories	74.81	75.43	67.09	14.00	3.92
	6.00	Percent space for all stories	77.35	73.47	68.82	20.95	11.00
	7.00	Percent space for all stories	65.09	65.09	65.09	.00	

n = 68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all stories	75.07	73.86	52.99	47.01	9.26

(a) Statistics by year, story count, and for all cases

Figure 19. Percent space for stories on all pages



(b) Boxplots by year and story count

Figure 19 (continued)

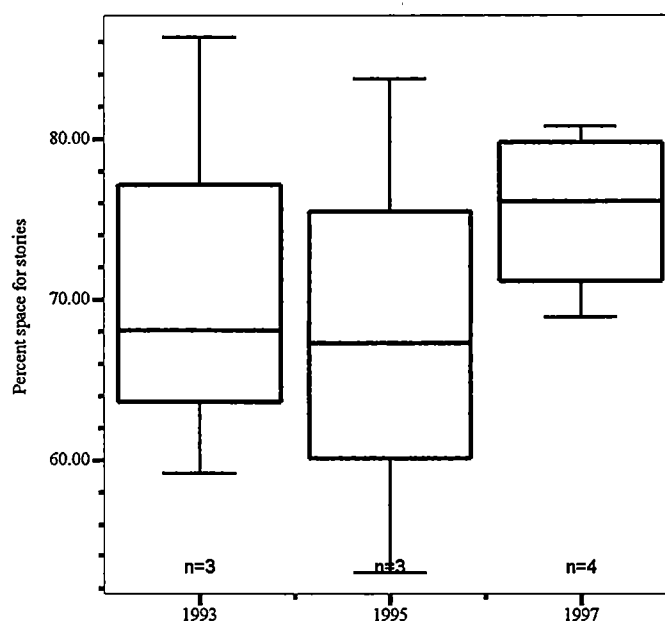
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for stories	71.20	68.09	59.22	27.06	13.79
	1995	Percent space for stories	68.00	67.28	52.99	30.74	15.38
	1997	Percent space for stories	75.50	76.12	68.95	11.84	5.36

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for stories	71.96	71.18	52.99	33.29	10.74

(a) Statistics by year and for all cases



(b) Boxplot by year

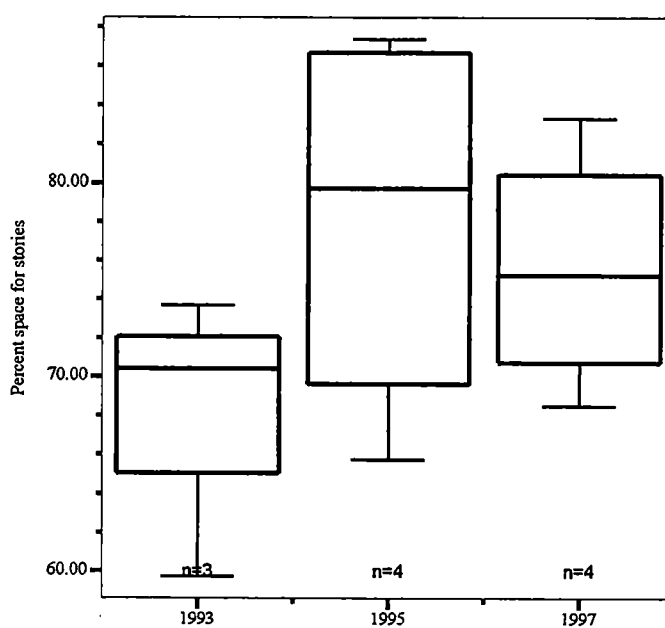
Figure 20. Percent space for stories on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for stories	67.93	70.39	59.71	13.98	7.31
	1995	Percent space for stories	78.15	79.74	65.76	21.59	10.35
	1997	Percent space for stories	75.58	75.26	68.50	14.81	6.34

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for stories	74.43	73.48	59.71	27.64	8.58

(a) Statistics by year and for all cases



(b) Boxplot by year

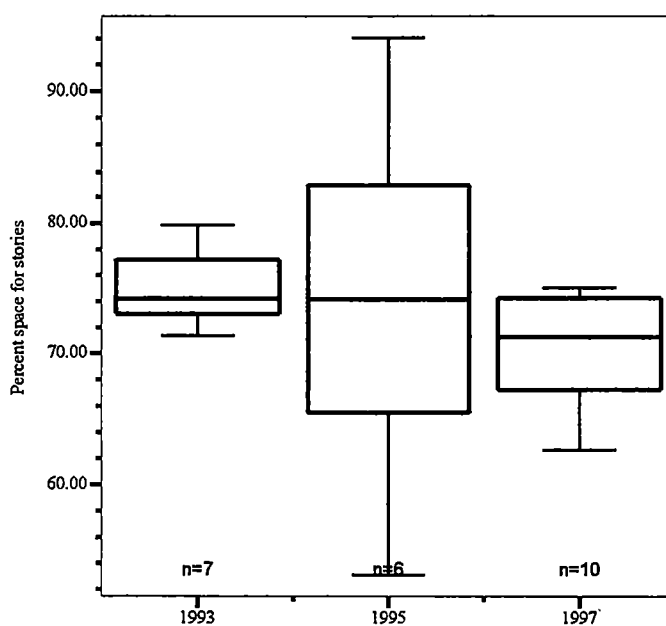
Figure 21. Percent space for stories on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for stories	75.13	74.18	71.36	8.48	3.08
	1995	Percent space for stories	73.97	74.14	53.15	40.87	14.20
	1997	Percent space for stories	71.08	71.25	62.65	22.49	6.54

n = 23; 1993=7; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Percent space for stories	73.07	72.88	53.15	40.87	8.32

(a) Statistics by year and for all cases



(b) Boxplot by year

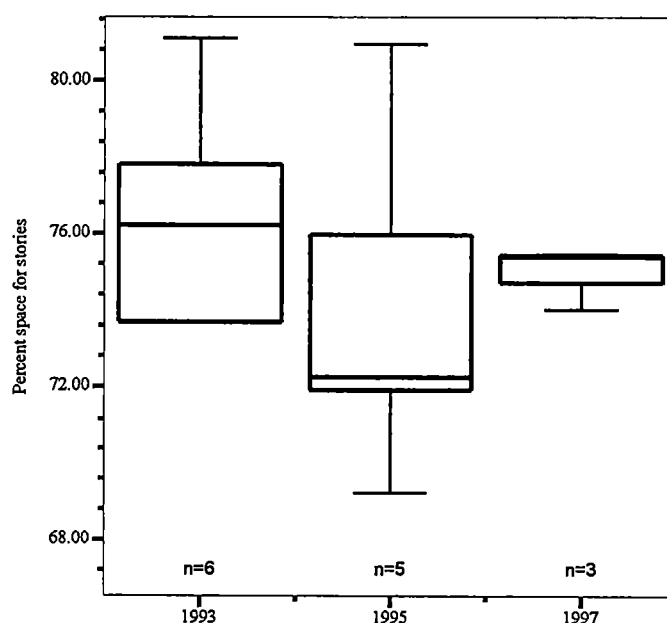
Figure 22. Percent space for stories on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for stories	75.35	76.21	67.09	14.00	4.73
	1995	Percent space for stories	74.07	72.25	69.24	11.71	4.53
	1997	Percent space for stories	74.95	75.39	74.00	1.46	.82

n = 14; 1993=6; 1995=5; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for stories	74.81	75.43	67.09	14.00	3.92

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 23. Percent space for stories on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all headlines	9.27	8.82	4.91	10.73	2.83
	1995	Percent space for all headlines	9.16	8.70	4.51	10.71	2.32
	1997	Percent space for all headlines	8.87	8.48	3.61	11.69	2.77

n = 68; 1993=20; 1995=23; 1997=25.

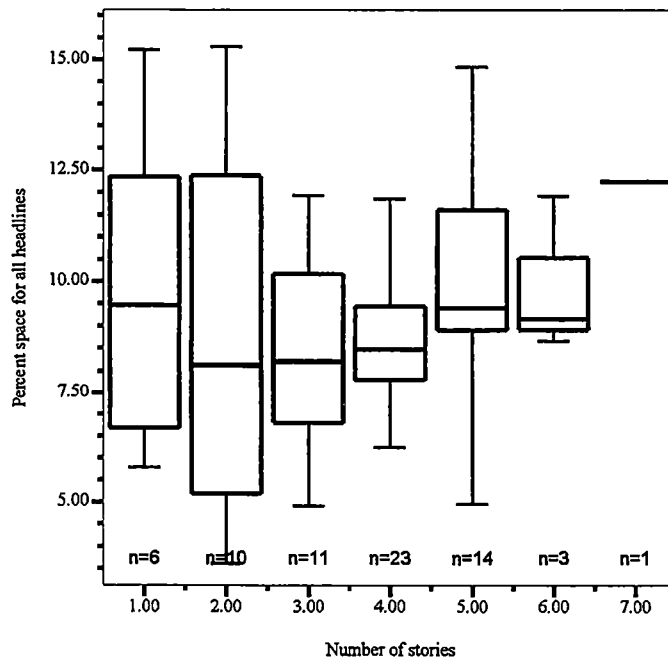
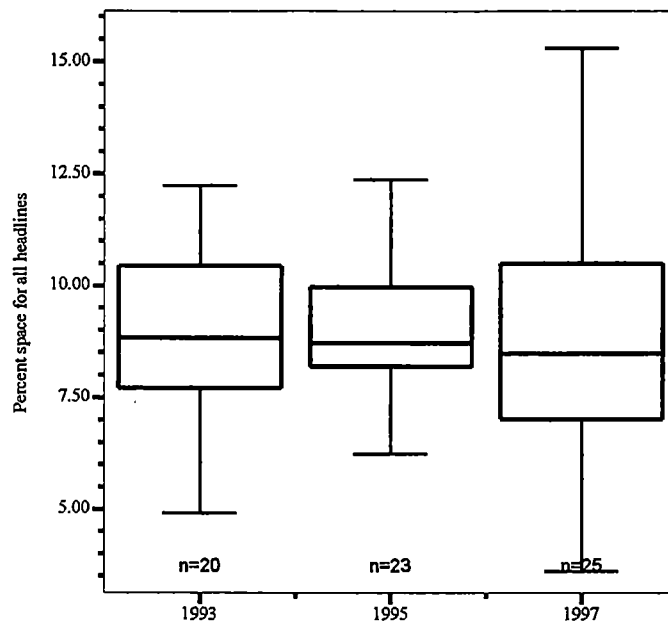
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for all headlines	9.83	9.46	5.79	9.43	3.59
	2.00	Percent space for all headlines	8.65	8.13	3.61	11.69	3.82
	3.00	Percent space for all headlines	8.81	8.21	4.91	10.73	3.05
	4.00	Percent space for all headlines	8.52	8.48	5.24	6.61	1.58
	5.00	Percent space for all headlines	9.84	9.40	4.95	9.89	2.35
	6.00	Percent space for all headlines	9.91	9.16	8.67	3.24	1.75
	7.00	Percent space for all headlines	12.25	12.25	12.25	.00	.

n = 68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all headlines	9.09	8.68	3.61	12.03	2.61

(a) Statistics by year, story count, and for all cases

Figure 24. Percent space for headlines on all pages



(b) Boxplots by year and story count

Figure 24 (continued)

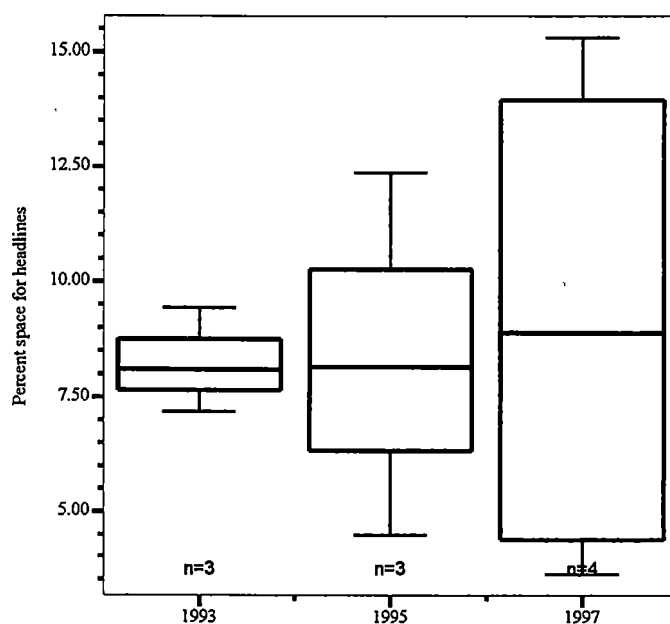
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for headlines	8.24	8.10	7.19	2.24	1.13
	1995	Percent space for headlines	8.35	8.16	4.51	7.86	3.93
	1997	Percent space for headlines	9.18	8.90	3.61	11.69	5.66

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for headlines	8.65	8.13	3.61	11.69	3.82

(a) Statistics by year and for all cases



(b) Boxplot by year

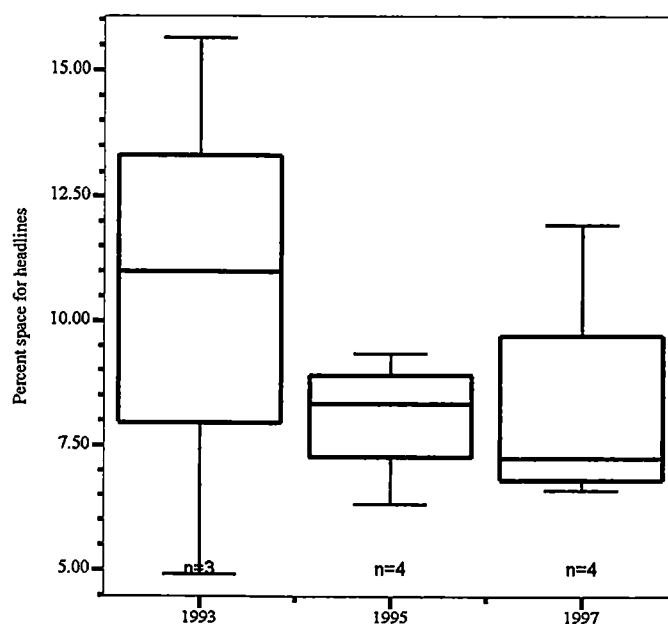
Figure 25. Percent space for headlines on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for headlines	10.51	10.99	4.91	10.73	5.38
	1995	Percent space for headlines	8.08	8.34	6.31	3.03	1.28
	1997	Percent space for headlines	8.25	7.25	6.59	5.34	2.48

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for headlines	8.81	8.21	4.91	10.73	3.05

(a) Statistics by year and for all cases



(b) Boxplot by year

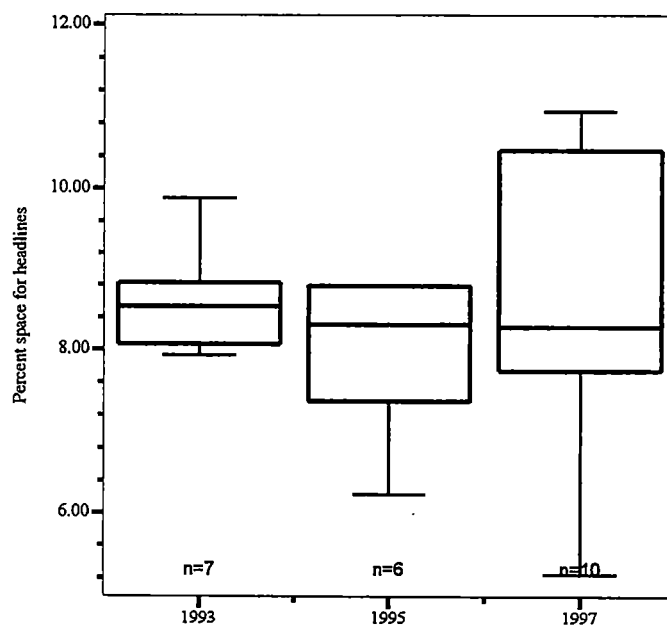
Figure 26. Percent space for headlines on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for headlines	8.35	8.53	6.28	3.60	1.11
	1995	Percent space for headlines	8.48	8.31	6.23	5.62	1.89
	1997	Percent space for headlines	8.66	8.28	5.24	5.71	1.80

n = 23; 1993=7; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Percent space for headlines	8.52	8.48	5.24	6.61	1.58

(a) Statistics by year and for all cases



(b) Boxplot by year

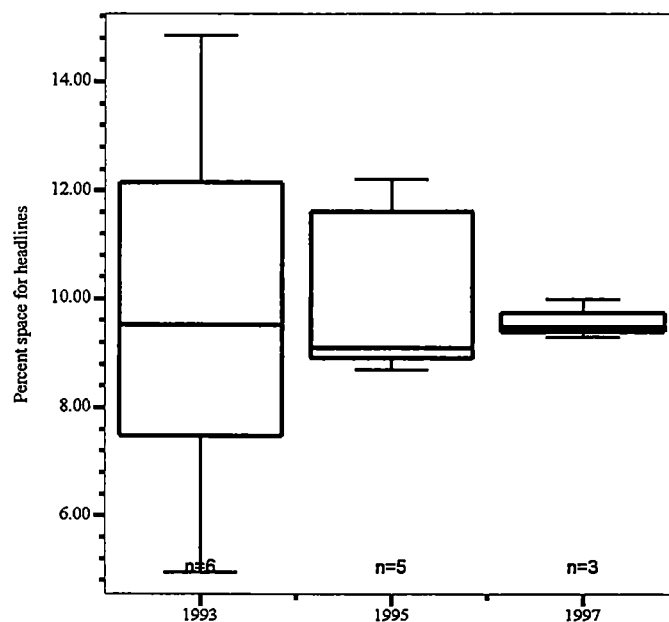
Figure 27. Percent space for headlines on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for headlines	9.74	9.52	4.95	9.89	3.47
	1995	Percent space for headlines	10.11	9.11	8.70	3.51	1.66
	1997	Percent space for headlines	9.60	9.49	9.31	.69	.36

n = 14; 1993=6; 1995=5; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for headlines	9.84	9.40	4.95	9.89	2.35

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 28. Percent space for headlines on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of all deckheads/overlines	2.56	2.00	2.00	5.00	1.34
	1995	Number of all deckheads/overlines	2.15	2.00	1.00	5.00	1.23
	1997	Number of all deckheads/overlines	2.00	2.00	2.00	3.00	.90

n = 61; 1993=18; 1995=20; 1997=23.

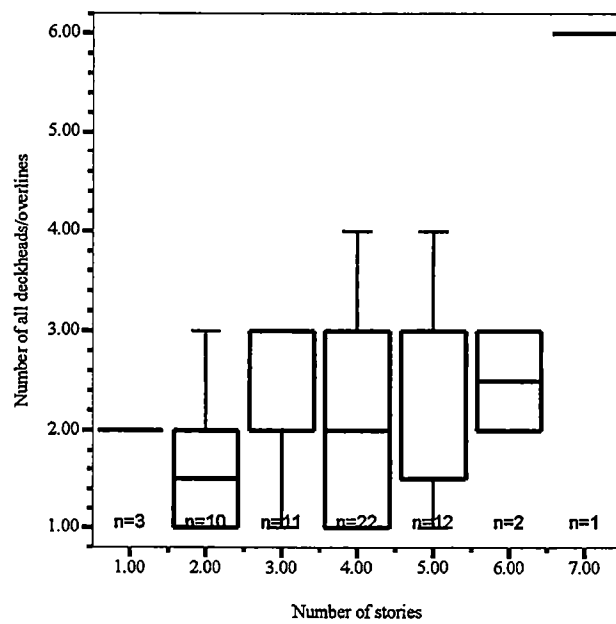
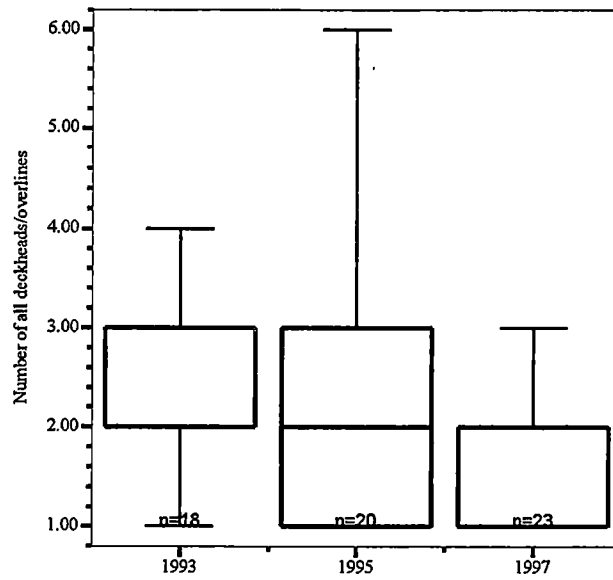
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of all deckheads/overlines	2.00	2.00	2.00	.00	.00
	2.00	Number of all deckheads/overlines	1.60	1.50	1.00	2.00	.70
	3.00	Number of all deckheads/overlines	2.45	2.00	2.00	5.00	1.37
	4.00	Number of all deckheads/overlines	2.05	2.00	1.00	3.00	1.05
	5.00	Number of all deckheads/overlines	2.50	3.00	3.00	3.00	1.09
	6.00	Number of all deckheads/overlines	2.50	2.50	2.00	1.00	.71
	7.00	Number of all deckheads/overlines	6.00	6.00	6.00	.00	.

n = 61; 1=3; 2=10; 3=11; 4=22; 5=12; 6=2; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Number of all deckheads/overlines	2.21	2.00	2.00	5.00	1.16

(a) Statistics by year, story count, and for all cases

Figure 29. Number of deckheads/overlines on all pages



(b) Boxplots by year and story count

Figure 29 (continued)

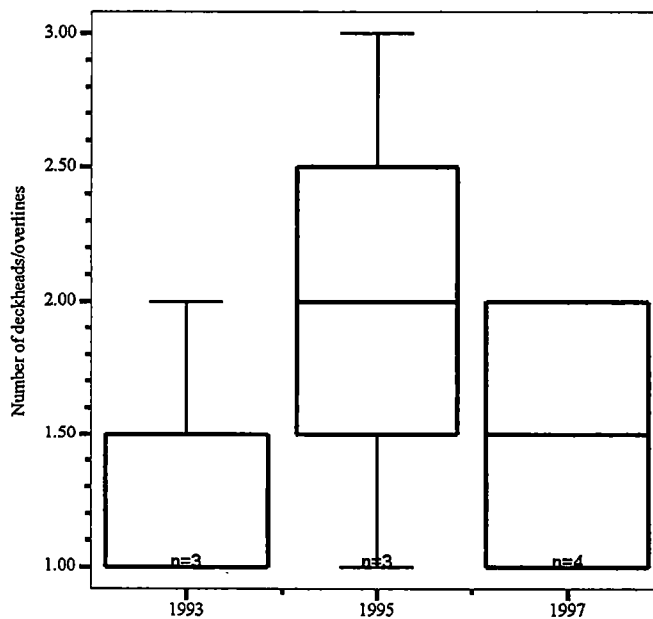
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of deckheads/overlines	1.33	1.00	1.00	1.00	.58
	1995	Number of deckheads/overlines	2.00	2.00	1.00	2.00	1.00
	1997	Number of deckheads/overlines	1.50	1.50	1.00	1.00	.58

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of deckheads/overlines	1.60	1.50	1.00	2.00	.70

(a) Statistics by year and for all cases



(b) Boxplot by year

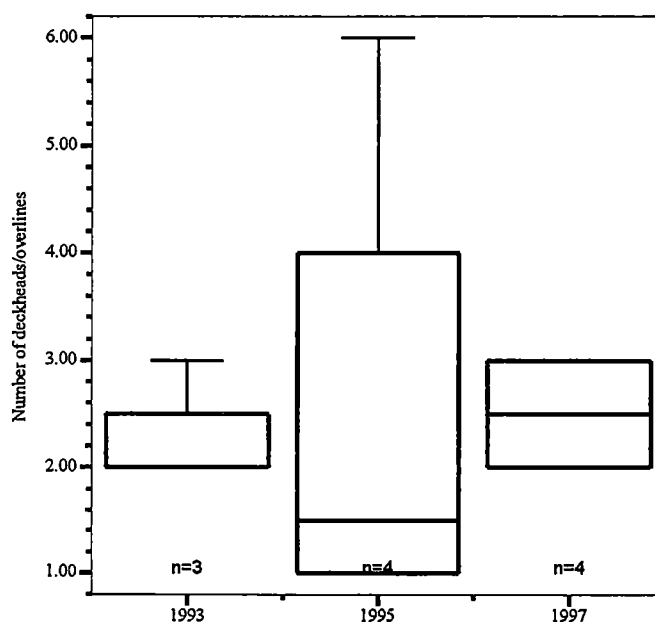
Figure 30. Number of deckheads/overlines on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of deckheads/overlines	2.33	2.00	2.00	1.00	.58
	1995	Number of deckheads/overlines	2.50	1.50	1.00	5.00	2.38
	1997	Number of deckheads/overlines	2.50	2.50	2.00	1.00	.58

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of deckheads/overlines	2.45	2.00	2.00	5.00	1.37

(a) Statistics by year and for all cases



(b) Boxplot by year

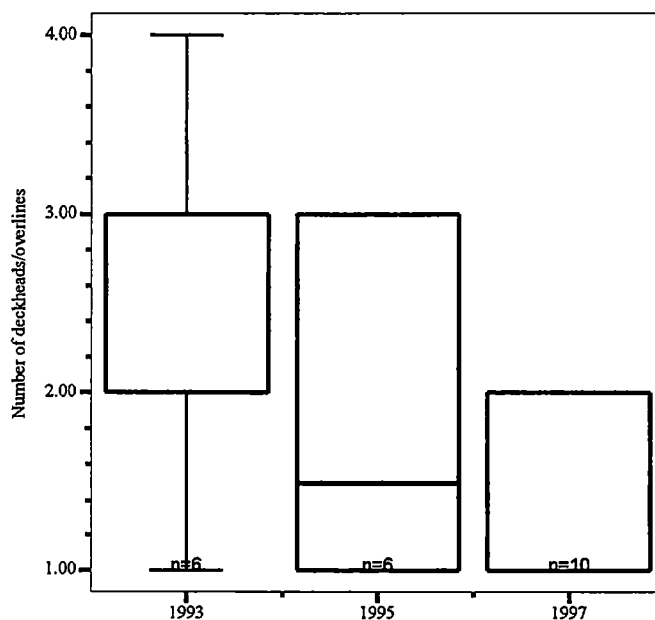
Figure 31. Number of deckheads/overlines on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of deckheads/overlines	2.33	2.00	2.00	3.00	1.03
	1995	Number of deckheads/overlines	1.83	1.50	1.00	2.00	.98
	1997	Number of deckheads/overlines	2.00	2.00	1.00	3.00	1.15

n = 22; 1993=6; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Number of deckheads/overlines	2.05	2.00	1.00	3.00	1.05

(a) Statistics by year and for all cases



(b) Boxplot by year

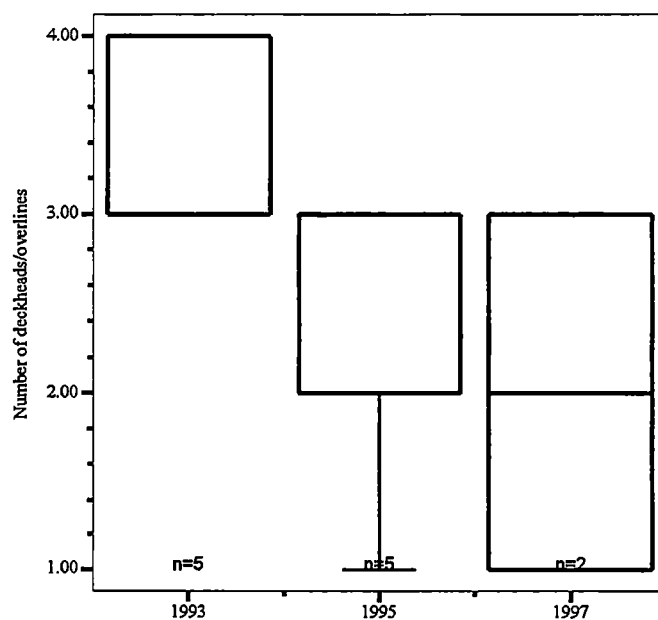
Figure 32. Number of deckheads/overlines on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of deckheads/overlines	3.00	3.00	3.00	3.00	1.22
	1995	Number of deckheads/overlines	2.20	2.00	2.00	2.00	.84
	1997	Number of deckheads/overlines	2.00	2.00	1.00	2.00	1.41

n = 12; 1993=5; 1995=5; 1997=2.

	Mean	Median	Mode	Range	Std Deviation
Number of deckheads/overlines	2.50	3.00	3.00	3.00	1.09

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 33. Number of deckheads/overlines on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for deckheads/overlines	2.61	2.32	.14	5.54	1.39
	1995	Percent space for deckheads/overlines	2.13	1.54	.68	5.84	1.60
	1997	Percent space for deckheads/overlines	2.63	2.06	.46	10.90	2.52

n = 61; 1993=18; 1995=20; 1997=23.

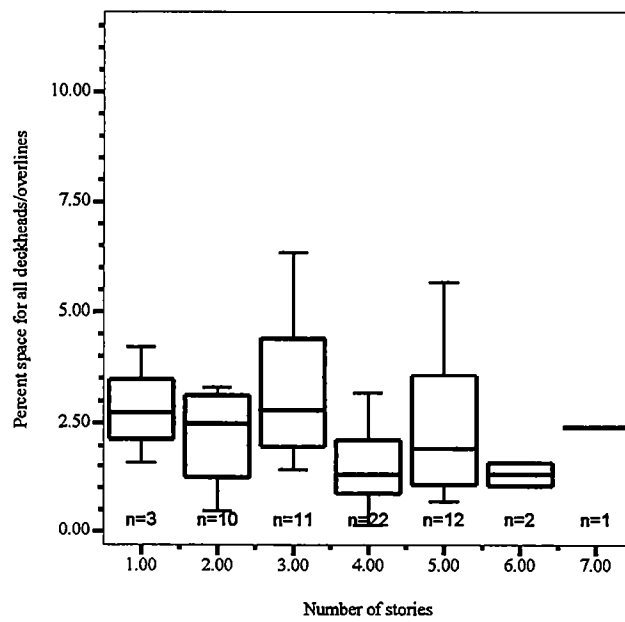
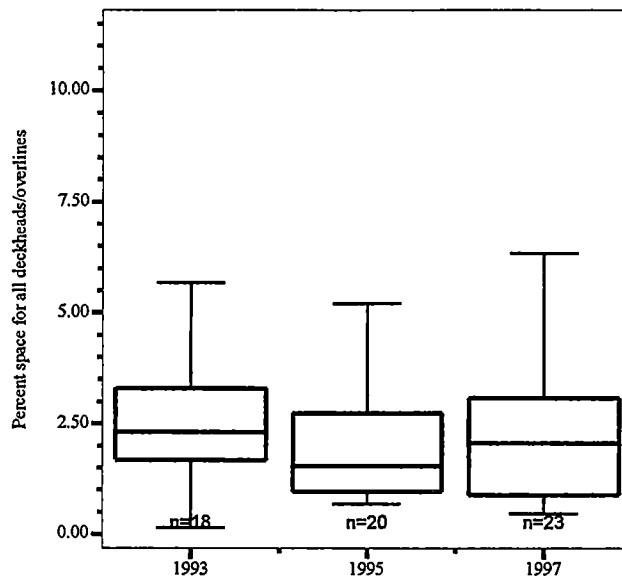
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for deckheads/overlines	2.84	2.74	1.57	2.64	1.32
	2.00	Percent space for deckheads/overlines	2.43	2.49	.46	5.55	1.62
	3.00	Percent space for deckheads/overlines	3.17	2.79	1.41	4.93	1.57
	4.00	Percent space for deckheads/overlines	1.89	1.32	.14	6.38	1.58
	5.00	Percent space for deckheads/overlines	2.98	1.93	.68	10.68	3.03
	6.00	Percent space for deckheads/overlines	1.31	1.31	1.05	.52	.37
	7.00	Percent space for deckheads/overlines	2.42	2.42	2.42	.00	.

n = 61; 1=3; 2=10; 3=11; 4=22; 5=12; 6=2; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for deckheads/overlines	2.46	1.88	.68	11.22	1.93

(a) Statistics by year, story count, and for all cases

Figure 34. Percent space for deckheads/overlines on all pages



(b) Boxplots by year and story count

Figure 34 (continued)

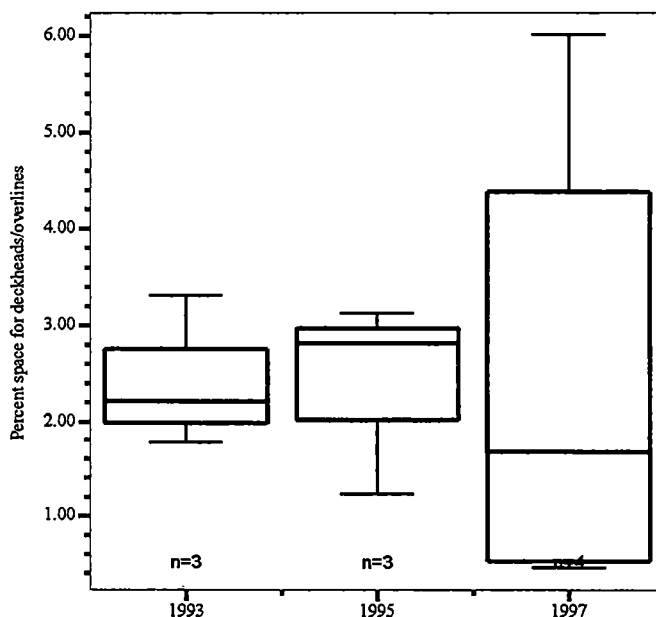
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for deckheads/overlines	2.43	2.21	1.77	1.54	.79
	1995	Percent space for deckheads/overlines	2.39	2.82	1.23	1.90	1.02
	1997	Percent space for deckheads/overlines	2.46	1.67	.46	5.55	2.59

n =10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for deckheads/overlines	2.43	2.49	.46	5.55	1.62

(a) Statistics by year and for all cases



(b) Boxplot by year

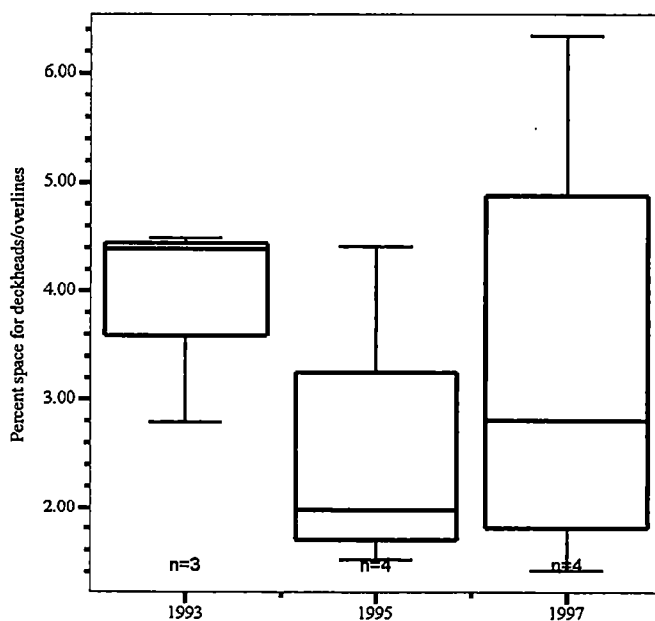
Figure 35. Percent space for deckheads/overlines on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for deckheads/overlines	3.89	4.39	2.79	1.70	.95
	1995	Percent space for deckheads/overlines	2.47	1.99	1.51	2.90	1.31
	1997	Percent space for deckheads/overlines	3.34	2.81	1.41	4.93	2.16

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for deckheads/overlines	3.17	2.79	1.41	4.93	1.57

(a) Statistics by year and for all cases



(b) Boxplot by year

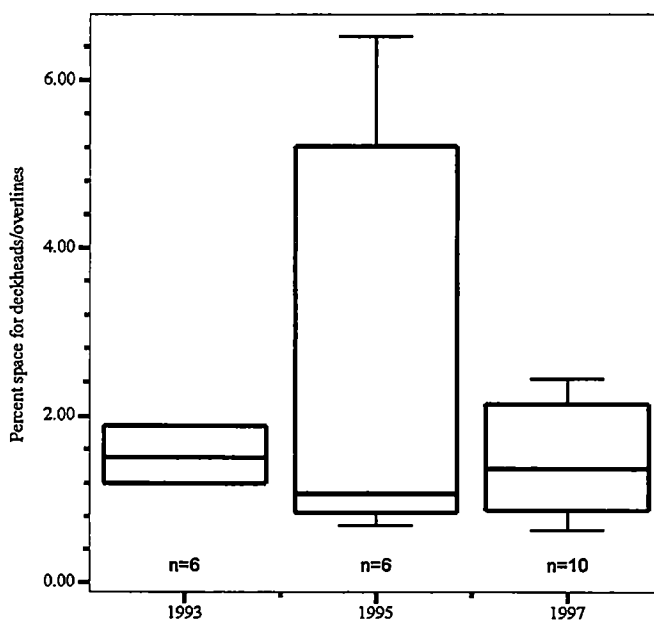
Figure 36. Percent space for deckheads/overlines on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for deckheads/overlines	1.57	1.51	.14	3.04	.99
	1995	Percent space for deckheads/overlines	2.57	1.09	.68	5.84	2.59
	1997	Percent space for deckheads/overlines	1.67	1.38	.62	3.48	1.07

n = 22; 1993=6; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Percent space for deckheads/overlines	1.89	1.32	.14	6.38	1.58

(a) Statistics by year and for all cases



(b) Boxplot by year

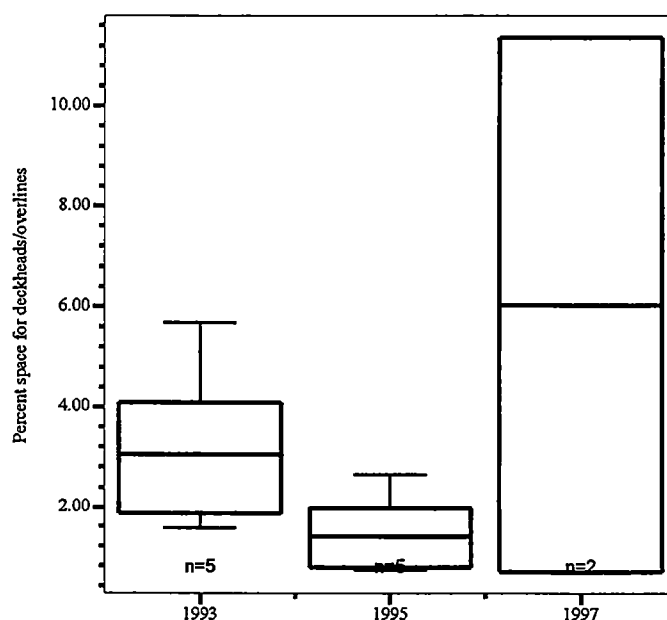
Figure 37. Percent space for deckheads/overlines on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for deckheads/overlines	3.25	3.05	1.56	4.12	1.69
	1995	Percent space for deckheads/overlines	1.50	1.39	.72	1.93	.82
	1997	Percent space for deckheads/overlines	6.02	6.02	.68	10.68	7.55

n = 12; 1993=5; 1995=5; 1997=2.

	Mean	Median	Mode	Range	Std Deviation
Percent space for deckheads/overlines	2.98	1.93	.68	10.68	3.03

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 38. Percent space for deckheads/overlines on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of all text blocks	9.85	9.00	8.00	12.00	3.54
	1995	Number of all text blocks	7.61	8.00	6.00	14.00	3.34
	1997	Number of all text blocks	8.56	9.00	8.00	14.00	3.25

n = 68; 1993=20; 1995=23; 1997=25.

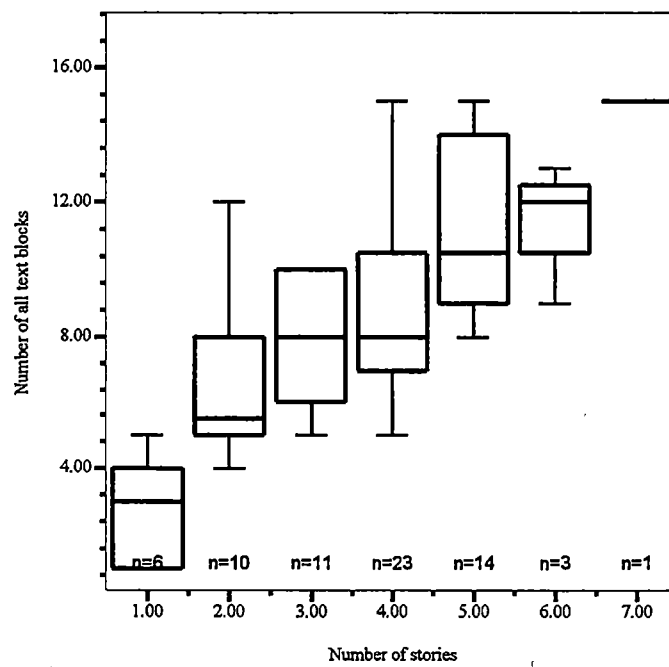
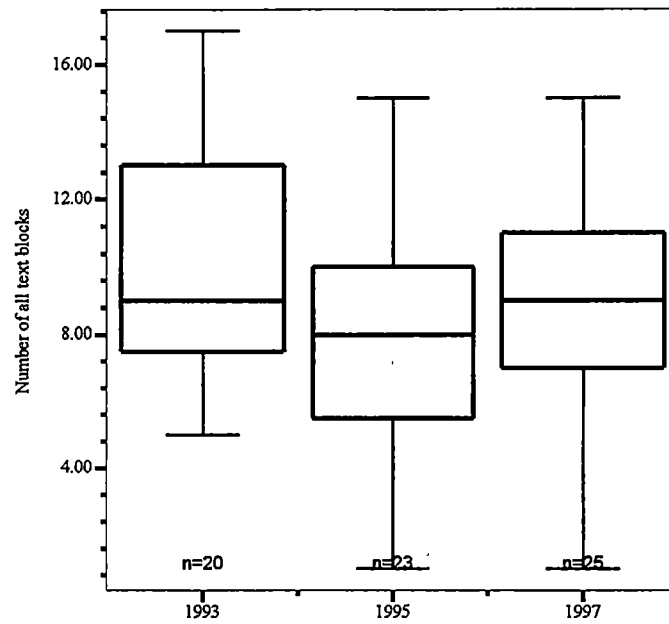
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of all text blocks	2.83	3.00	1.00	4.00	1.60
	2.00	Number of all text blocks	6.70	5.50	5.00	8.00	3.02
	3.00	Number of all text blocks	8.64	8.00	6.00	12.00	3.32
	4.00	Number of all text blocks	8.87	8.00	8.00	10.00	2.38
	5.00	Number of all text blocks	11.00	10.50	10.00	7.00	2.35
	6.00	Number of all text blocks	11.33	12.00	9.00	4.00	2.08
	7.00	Number of all text blocks	15.00	15.00	15.00	.00	.

n = 68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Number of all text blocks	8.62	8.50	8.00	16.00	3.44

(a) Statistics by year, story count, and for all cases

Figure 39. Number of text blocks on all pages



(b) Boxplots by year and story count

Figure 39 (continued)

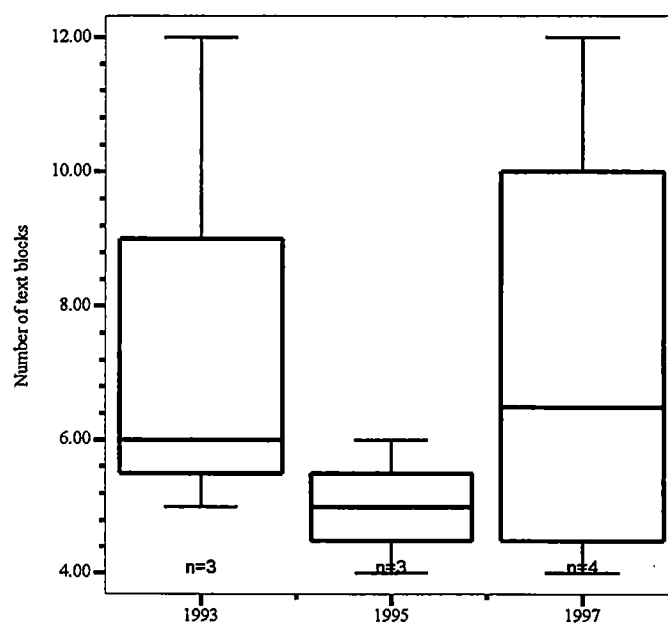
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of text blocks	7.67	6.00	5.00	7.00	3.79
	1995	Number of text blocks	5.00	5.00	4.00	2.00	1.00
	1997	Number of text blocks	7.25	6.50	4.00	8.00	3.59

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of text blocks	6.70	5.50	5.00	8.00	3.02

(a) Statistics by year and for all cases



(b) Boxplot by year

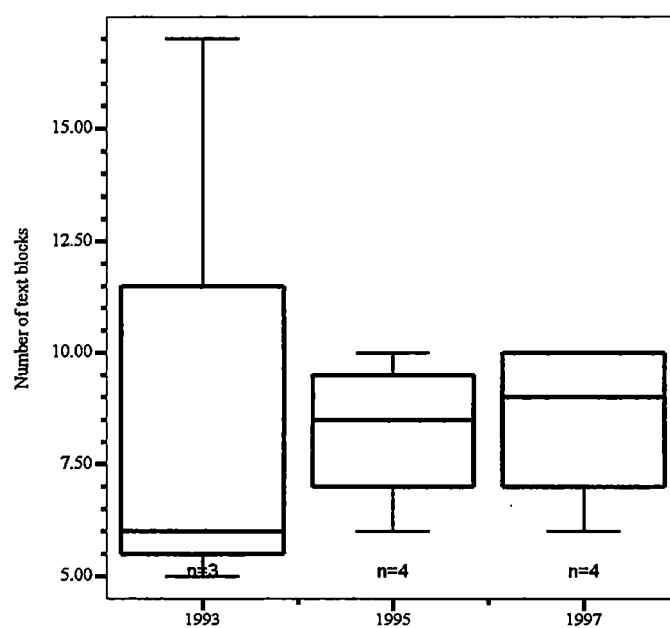
Figure 40. Number of text blocks on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of text blocks	9.33	6.00	5.00	12.00	6.66
	1995	Number of text blocks	8.25	8.50	6.00	4.00	1.71
	1997	Number of text blocks	8.50	9.00	10.00	4.00	1.91

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of text blocks	8.64	8.00	6.00	12.00	3.32

(a) Statistics by year and for all cases



(b) Boxplot by year

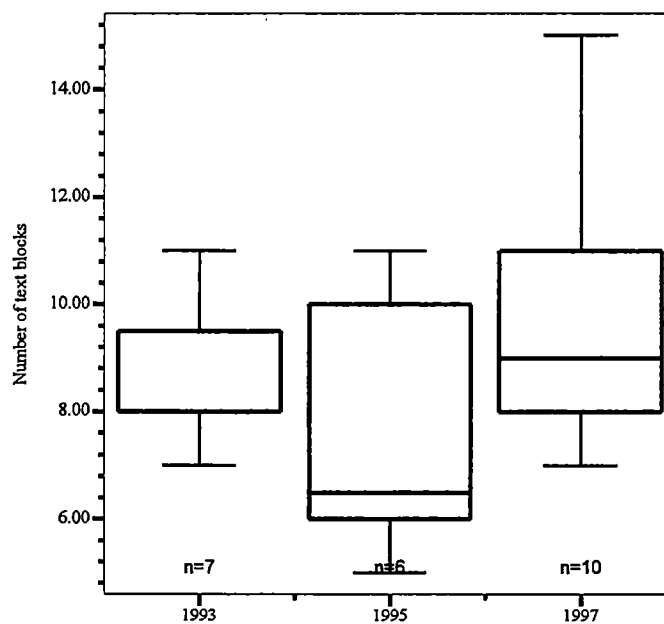
Figure 41. Number of text blocks on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of text blocks	8.71	8.00	8.00	4.00	1.60
	1995	Number of text blocks	7.50	6.50	6.00	6.00	2.43
	1997	Number of text blocks	9.80	9.00	9.00	8.00	2.57

n = 23; 1993=7; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Number of text blocks	8.87	8.00	8.00	10.00	2.38

(a) Statistics by year and for all cases



(b) Boxplot by year

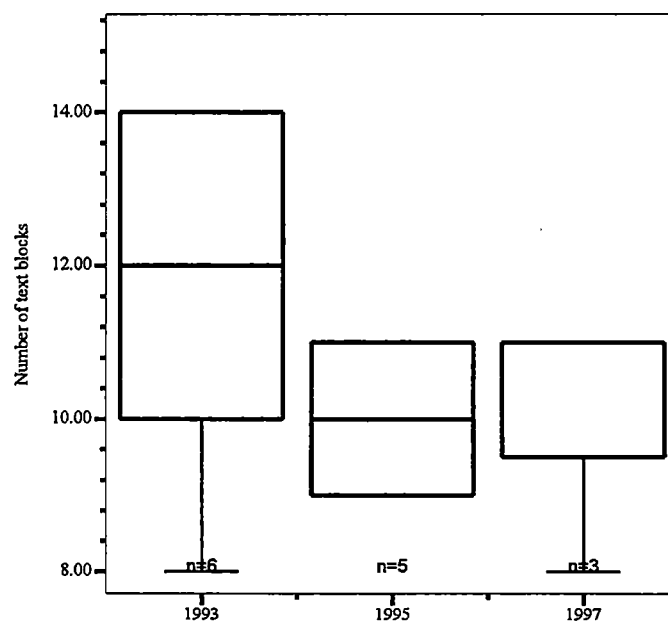
Figure 42. Number of text blocks on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of text blocks	11.67	12.00	14.00	6.00	2.66
	1995	Number of text blocks	10.80	10.00	9.00	6.00	2.49
	1997	Number of text blocks	10.00	11.00	11.00	3.00	1.73

n = 14; 1993=6; 1995=5; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Number of text blocks	11.00	10.50	10.00	7.00	2.35

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 43. Number of text blocks on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all text blocks	21.43	20.22	9.55	27.12	6.51
	1995	Percent space for all text blocks	19.16	19.40	7.23	24.43	7.22
	1997	Percent space for all text blocks	17.56	17.01	.67	32.07	7.52

n = 68; 1993=20; 1995=23; 1997=25.

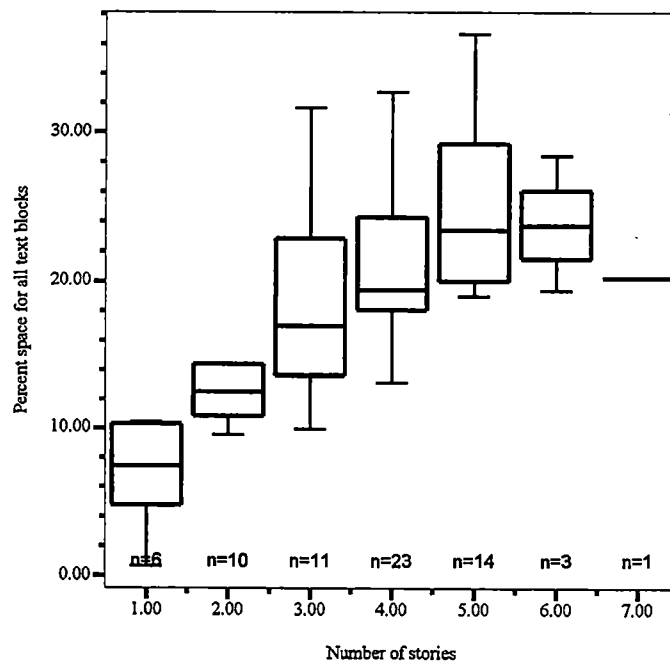
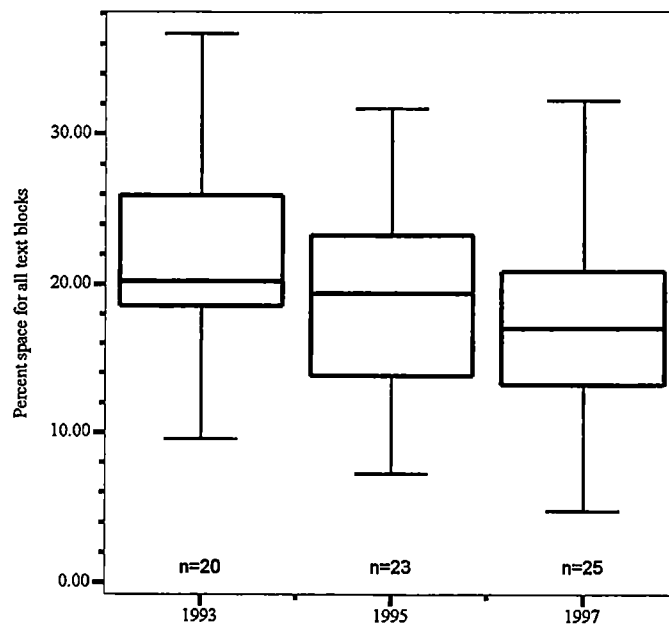
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for all text blocks	6.84	7.44	.67	9.77	3.69
	2.00	Percent space for all text blocks	14.02	12.57	9.55	13.30	4.44
	3.00	Percent space for all text blocks	18.44	17.01	9.95	21.71	6.50
	4.00	Percent space for all text blocks	21.09	19.42	13.20	19.54	5.20
	5.00	Percent space for all text blocks	24.80	23.46	18.99	17.68	5.50
	6.00	Percent space for all text blocks	23.84	23.74	19.39	9.01	4.51
	7.00	Percent space for all text blocks	20.26	20.26	20.26	.00	.

n = 68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all text blocks	19.24	19.41	.67	36.00	7.20

(a) Statistics by year, story count, and for all cases

Figure 44. Percent space for text blocks on all pages



(b) Boxplots by year and story count

Figure 44 (continued)

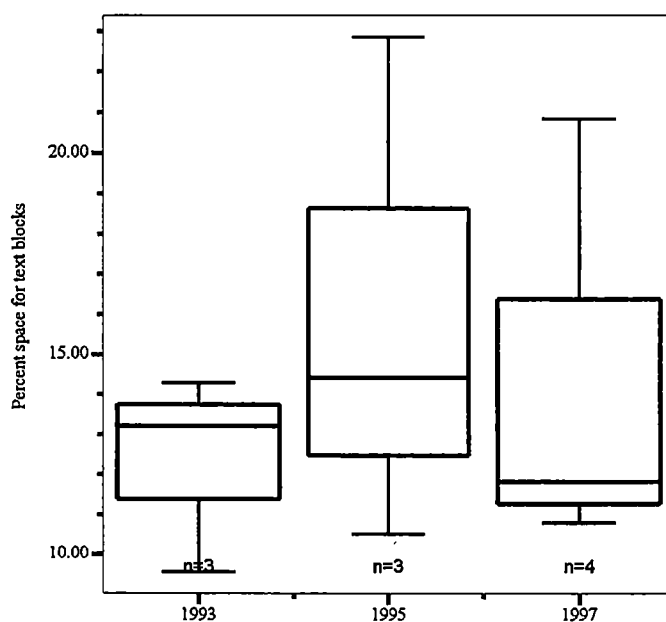
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for text blocks	12.35	13.21	9.55	4.74	2.48
	1995	Percent space for text blocks	15.93	14.42	10.53	12.32	6.30
	1997	Percent space for text blocks	13.83	11.83	10.81	10.03	4.70

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for text blocks	14.02	12.57	9.55	13.30	4.44

(a) Statistics by year and for all cases



(b) Boxplot by year

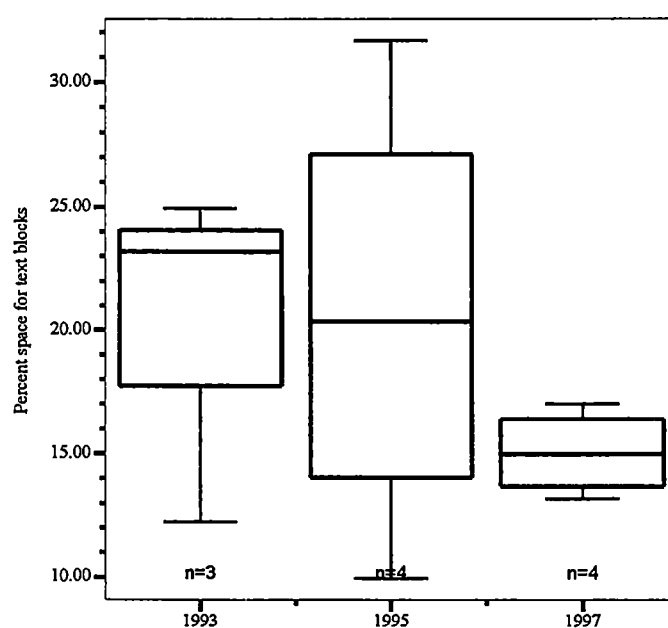
Figure 45. Percent space for text blocks on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for text blocks	20.12	23.19	12.23	12.70	6.89
	1995	Percent space for text blocks	20.58	20.36	9.95	21.71	9.05
	1997	Percent space for text blocks	15.03	14.97	13.18	3.83	1.69

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for text blocks	18.44	17.01	9.95	21.71	6.50

(a) Statistics by year and for all cases



(b) Boxplot by year

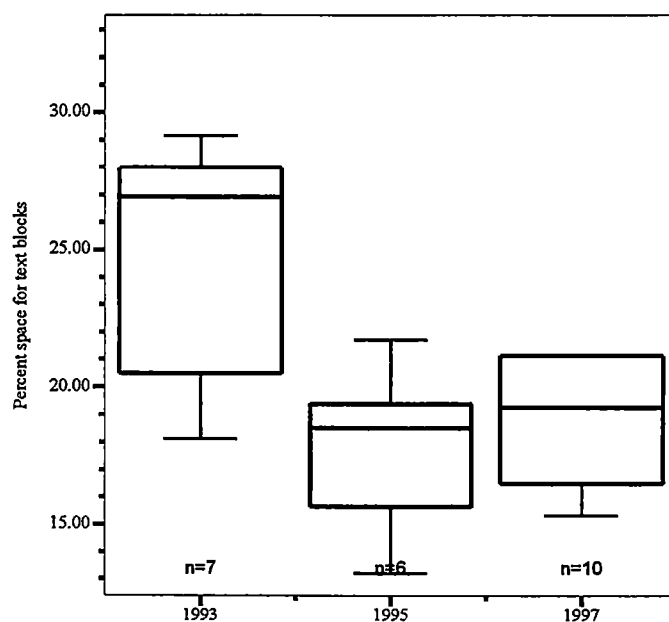
Figure 46. Percent space for text blocks on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for text blocks	24.45	26.93	18.12	11.03	4.57
	1995	Percent space for text blocks	17.84	18.52	13.20	8.51	3.00
	1997	Percent space for text blocks	20.70	19.27	15.34	17.40	5.58

n = 23; 1993=7; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Percent space for text blocks	21.09	19.42	13.20	19.54	5.20

(a) Statistics by year and for all cases



(b) Boxplot by year

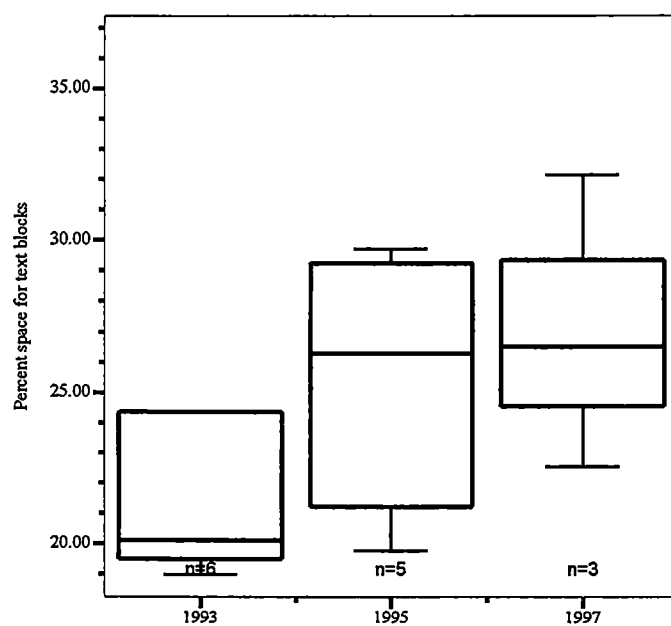
Figure 47. Percent space for text blocks on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for text blocks	23.29	20.10	18.99	17.68	6.83
	1995	Percent space for text blocks	25.24	26.29	19.76	9.94	4.56
	1997	Percent space for text blocks	27.08	26.53	22.55	9.61	4.83

n = 14; 1993=6; 1995=5; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for text blocks	24.80	23.46	18.99	17.68	5.50

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 48. Percent space for text blocks on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of all images	5.20	5.00	3.00	11.00	2.61
	1995	Number of all images	3.96	4.00	4.00	7.00	1.89
	1997	Number of all images	4.68	3.00	3.00	8.00	2.70

n = 68; 1993=20; 1995=23; 1997=25.

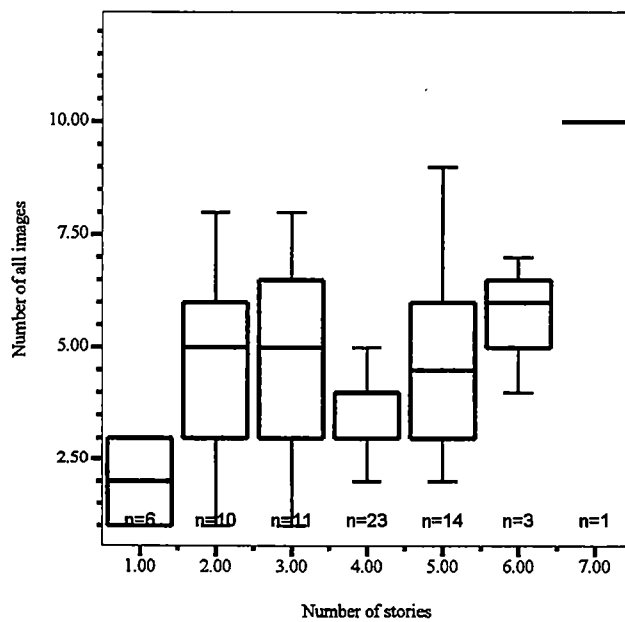
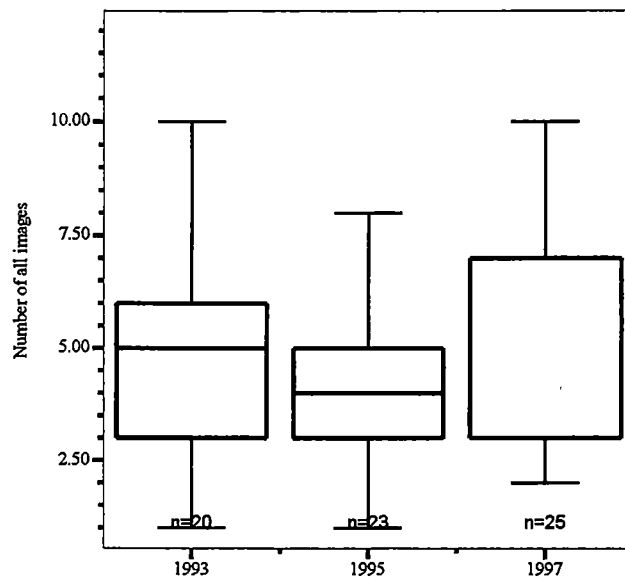
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of all images	3.17	2.00	1.00	9.00	3.43
	2.00	Number of all images	4.90	5.00	3.00	7.00	2.23
	3.00	Number of all images	5.09	5.00	3.00	11.00	3.11
	4.00	Number of all images	3.96	3.00	3.00	8.00	1.94
	5.00	Number of all images	4.93	4.50	3.00	7.00	2.06
	6.00	Number of all images	5.67	6.00	4.00	3.00	1.53
	7.00	Number of all images	10.00	10.00	10.00	.00	.

n = 68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Number of all images	4.59	4.00	3.00	11.00	2.44

(a) Statistics by year, story count, and for all cases

Figure 49. Number of all images on all pages



(b) Boxplots by year and story count

Figure 49 (continued)

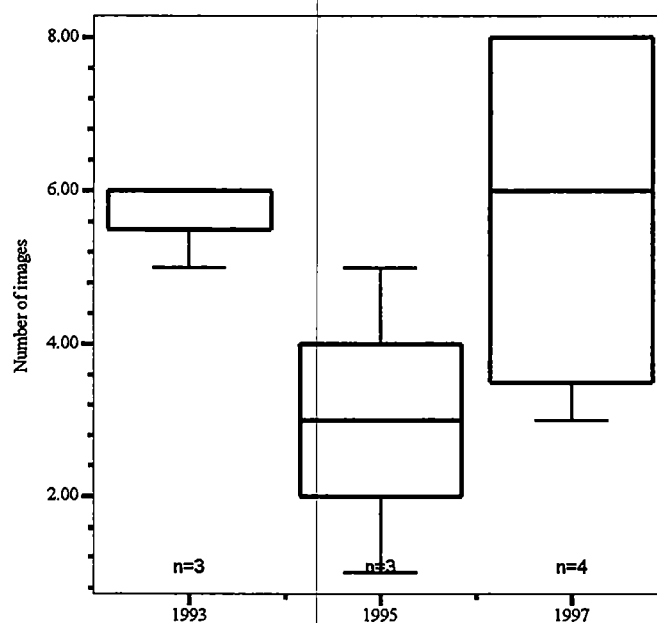
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of images	5.67	6.00	6.00	1.00	.58
	1995	Number of images	3.00	3.00	1.00	4.00	2.00
	1997	Number of images	5.75	6.00	8.00	5.00	2.63

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of images	4.90	5.00	3.00	7.00	2.23

(a) Statistics by year and for all cases



(b) Boxplot by year

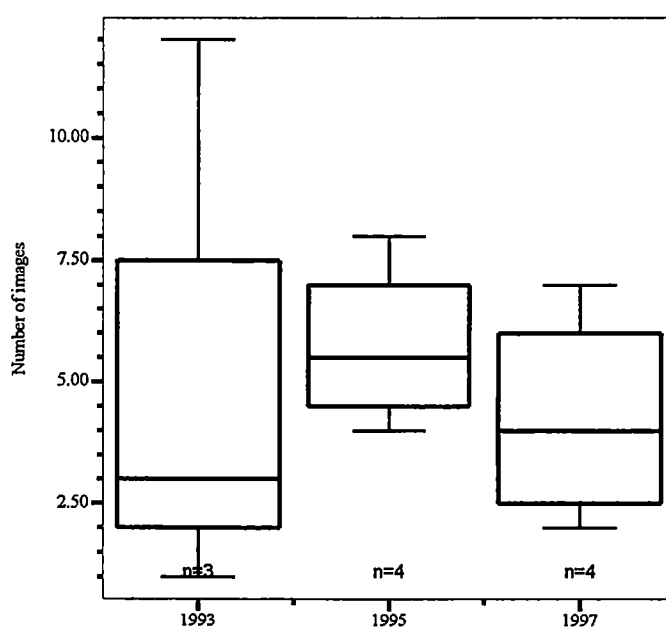
Figure 50. Number of all images on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of images	5.33	3.00	1.00	11.00	5.86
	1995	Number of images	5.75	5.50	4.00	4.00	1.71
	1997	Number of images	4.25	4.00	2.00	5.00	2.22

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of images	5.09	5.00	3.00	11.00	3.11

(a) Statistics by year and for all cases



(b) Boxplot by year

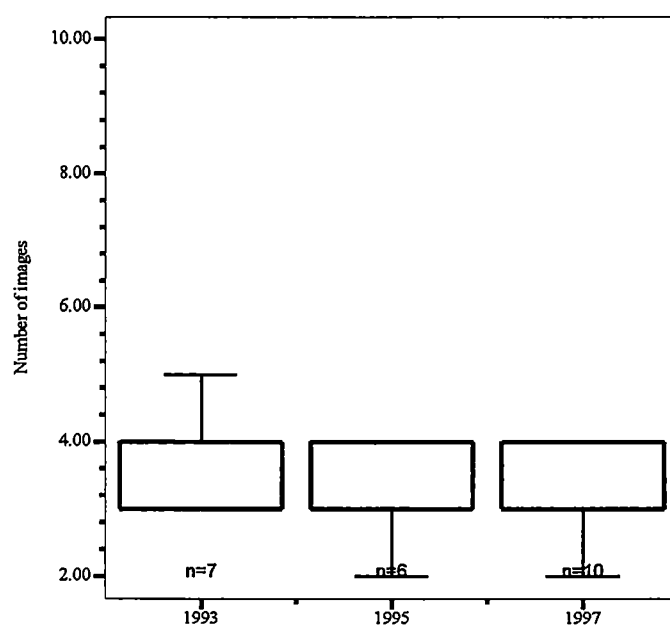
Figure 51. Number of all images on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of images	3.71	3.00	3.00	3.00	1.25
	1995	Number of images	3.83	4.00	4.00	4.00	1.33
	1997	Number of images	4.20	3.00	3.00	8.00	2.66

n = 23; 1993=7; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Number of images	3.96	3.00	3.00	8.00	1.94

(a) Statistics by year and for all cases



(b) Boxplot by year

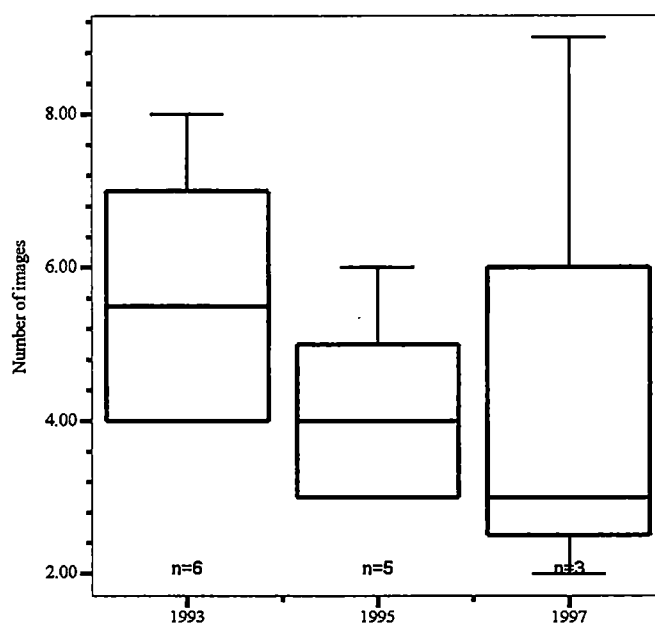
Figure 52. Number of all images on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of images	5.67	5.50	4.00	4.00	1.63
	1995	Number of images	4.20	4.00	3.00	3.00	1.30
	1997	Number of images	4.67	3.00	2.00	7.00	3.79

n = 14; 1993=6; 1995=5; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Number of images	4.93	4.50	3.00	7.00	2.06

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 53. Number of all images on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of all photographs	3.95	3.00	2.00	10.00	2.70
	1995	Number of all photographs	2.91	3.00	1.00	6.00	1.59
	1997	Number of all photographs	3.60	3.00	2.00	7.00	2.25

n = 68; 1993=20; 1995=23; 1997=25.

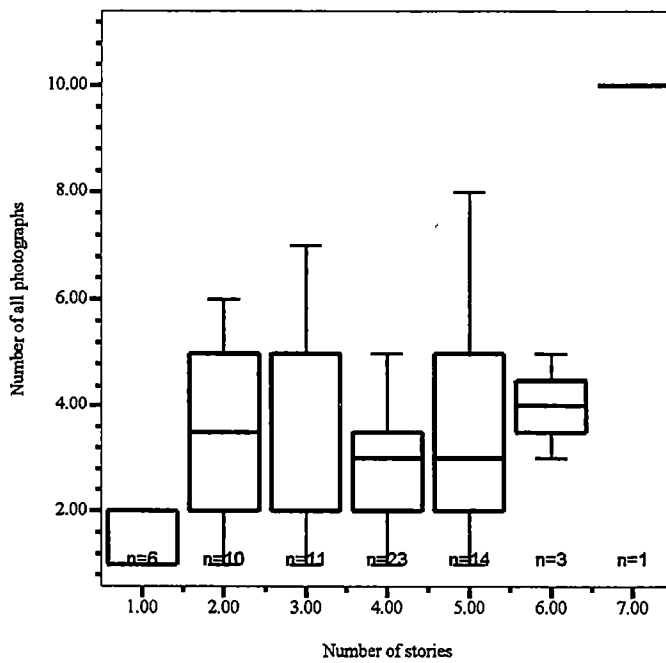
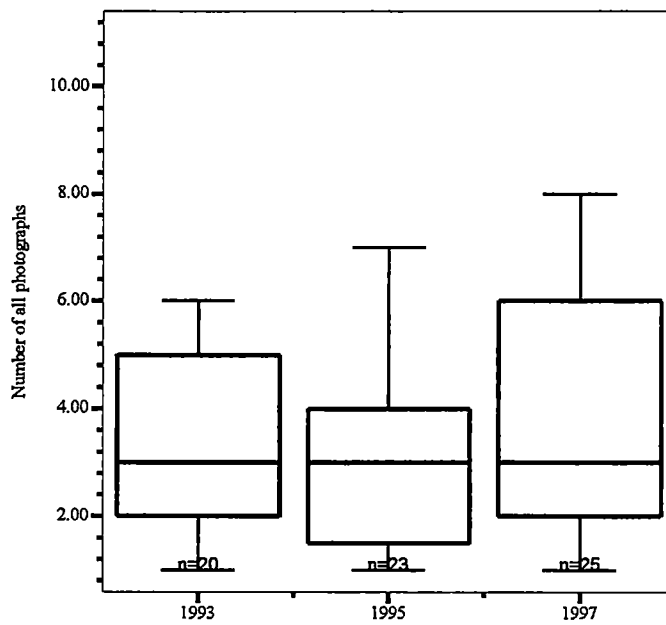
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of all photographs	2.67	2.00	2.00	7.00	2.66
	2.00	Number of all photographs	3.60	3.50	2.00	5.00	1.71
	3.00	Number of all photographs	3.73	2.00	2.00	10.00	3.10
	4.00	Number of all photographs	3.09	3.00	3.00	7.00	1.68
	5.00	Number of all photographs	3.57	3.00	2.00	7.00	2.06
	6.00	Number of all photographs	4.00	4.00	3.00	2.00	1.00
	7.00	Number of all photographs	10.00	10.00	10.00	.00	.

n = 68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Number of all photographs	3.47	3.00	2.00	10.00	2.22

(a) Statistics by year, story count, and for all cases

Figure 54. Number of photographs on all pages



(b) Boxplots by year and story count

Figure 54 (continued)

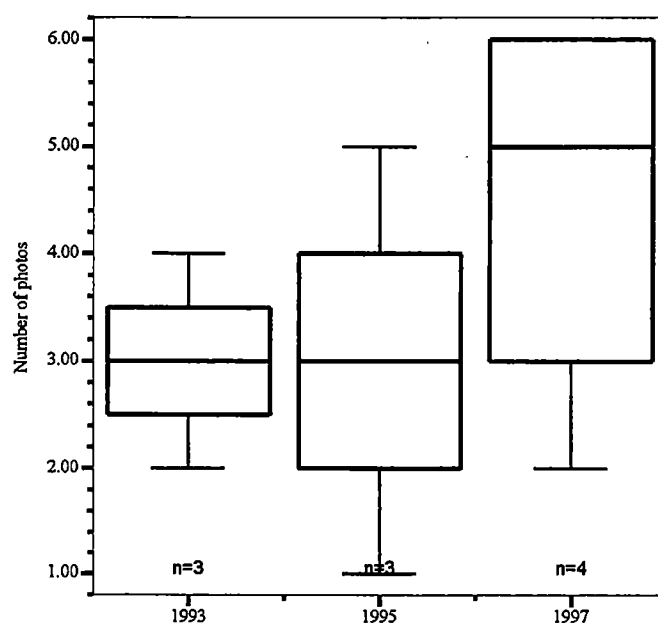
Note: Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of photos	3.00	3.00	2.00	2.00	1.00
	1995	Number of photos	3.00	3.00	1.00	4.00	2.00
	1997	Number of photos	4.50	5.00	6.00	4.00	1.91

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of photos	3.60	3.50	2.00	5.00	1.71

(a) Statistics by year and for all cases



(b) Boxplot by year

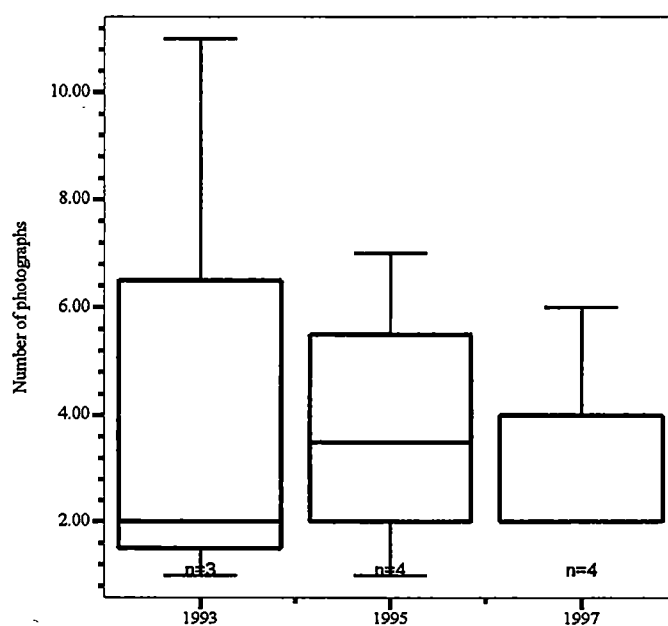
Figure 55. Number of photographs on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of photographs	4.67	2.00	1.00	10.00	5.51
	1995	Number of photographs	3.75	3.50	1.00	6.00	2.50
	1997	Number of photographs	3.00	2.00	2.00	4.00	2.00

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Number of photographs	3.73	2.00	2.00	10.00	3.10

(a) Statistics by year and for all cases



(b) Boxplot by year

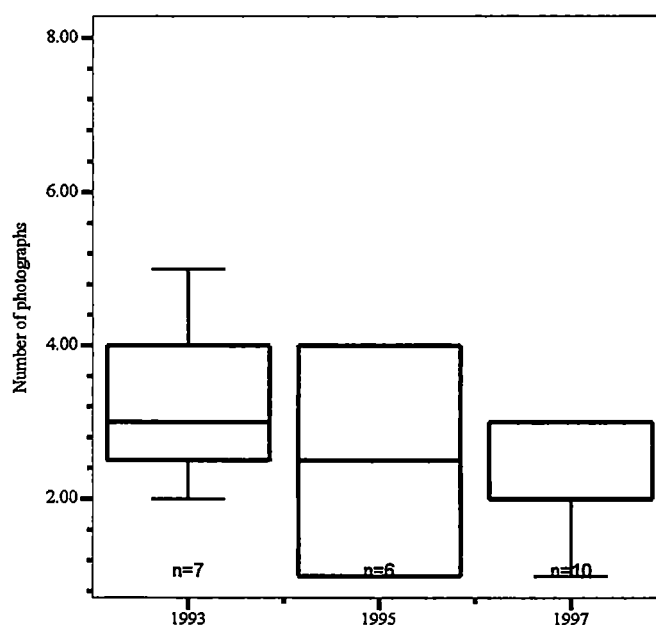
Figure 56. Number of photographs on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of photographs	3.29	3.00	3.00	3.00	1.25
	1995	Number of photographs	2.50	2.50	1.00	3.00	1.38
	1997	Number of photographs	3.30	3.00	3.00	7.00	2.11

n = 23; 1993=7; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Number of photographs	3.09	3.00	3.00	7.00	1.68

(a) Statistics by year and for all cases



(b) Boxplot by year

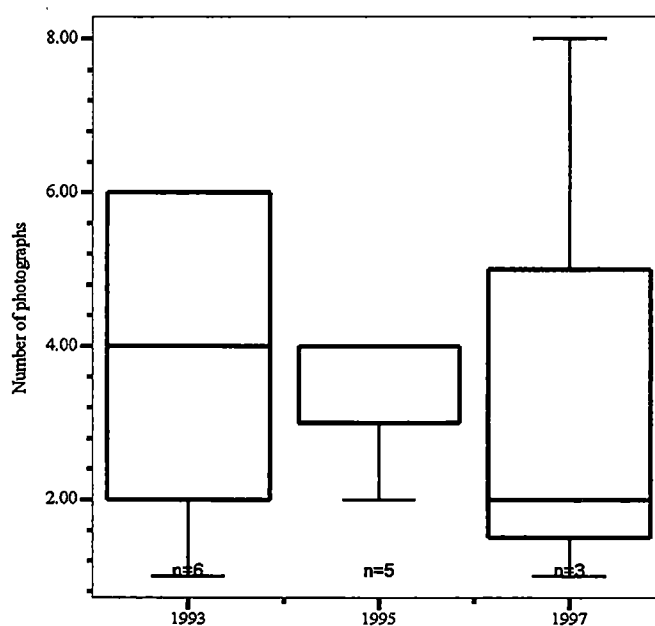
Figure 57. Number of photographs on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of photographs	3.83	4.00	6.00	5.00	2.14
	1995	Number of photographs	3.20	3.00	3.00	2.00	.84
	1997	Number of photographs	3.67	2.00	1.00	7.00	3.79

n = 14; 1993=6; 1995=5; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Number of photographs	3.57	3.00	2.00	7.00	2.06

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 58. Number of photographs on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of illustrations	1.33	1.00	1.00	1.00	.58
	1995	Number of illustrations	1.33	1.00	1.00	2.00	.82
	1997	Number of illustrations	1.00	1.00	1.00	.00	.

n = 10; 1993=3; 1995=6; 1997=1.

			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of illustrations	.	.	.	.	.
	2.00	Number of illustrations	2.00	2.00	2.00	.00	.
	3.00	Number of illustrations	3.00	3.00	3.00	.00	.
	4.00	Number of illustrations	1.00	1.00	1.00	.00	.00
	5.00	Number of illustrations	1.00	1.00	1.00	.00	.00
	6.00	Number of illustrations	1.00	1.00	1.00	.00	.00
	7.00	Number of illustrations	.	.	.	.	.

n = 10; 1=0; 2=1; 3=1; 4=3; 5=3; 6=2; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of illustrations	1.30	1.00	1.00	2.00	.67

(a) Statistics by year, story count, and for all cases

Note: Graphs were omitted because variable has a limited number of cases.

Figure 59. Number of illustrations on all pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Number of graphics	1.62	1.00	1.00	2.00	.77
	1995	Number of graphics	1.45	1.00	1.00	2.00	.69
	1997	Number of graphics	1.44	1.00	1.00	2.00	.62

n = 42; 1993=13; 1995=11; 1997=18.

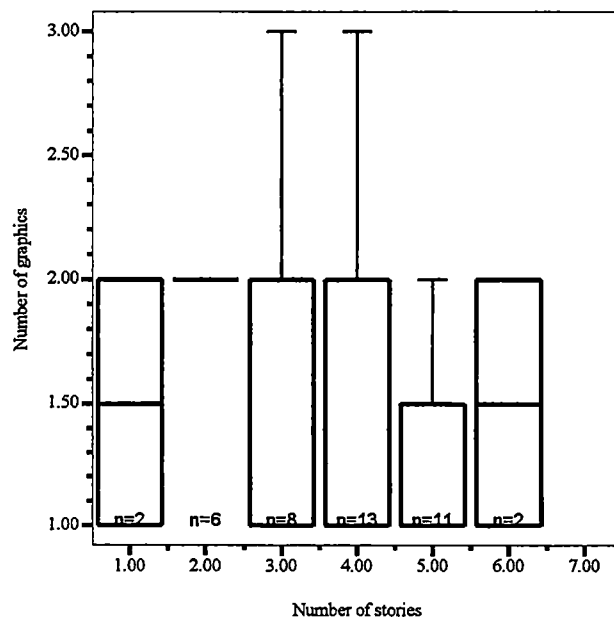
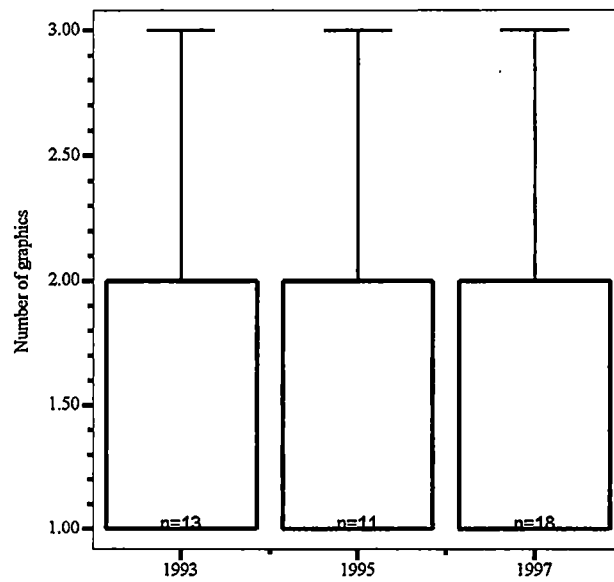
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Number of graphics	1.50	1.50	1.00	1.00	.71
	2.00	Number of graphics	1.83	2.00	2.00	1.00	.41
	3.00	Number of graphics	1.50	1.00	1.00	2.00	.76
	4.00	Number of graphics	1.38	1.00	1.00	2.00	.65
	5.00	Number of graphics	1.45	1.00	1.00	2.00	.82
	6.00	Number of graphics	1.50	1.50	1.00	1.00	.71
	7.00	Number of graphics	.	.	.	.	.

n = 42; 1=2; 2=6; 3=8; 4=13; 5=11; 6=2; 7=0.

	Mean	Median	Mode	Range	Std Deviation
Number of graphics	1.50	1.00	1.00	2.00	.67

(a) Statistics by year, story count, and for all cases

Figure 60: Number of graphics on all pages



(b) Boxplots by year and story count

Figure 60 (continued)

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all images	29.63	28.79	19.12	31.72	8.15
	1995	Percent space for all images	36.05	32.31	6.64	93.36	20.25
	1997	Percent space for all images	37.24	35.05	34.24	58.98	13.16

n = 68; 1993=20; 1995=23; 1997=25.

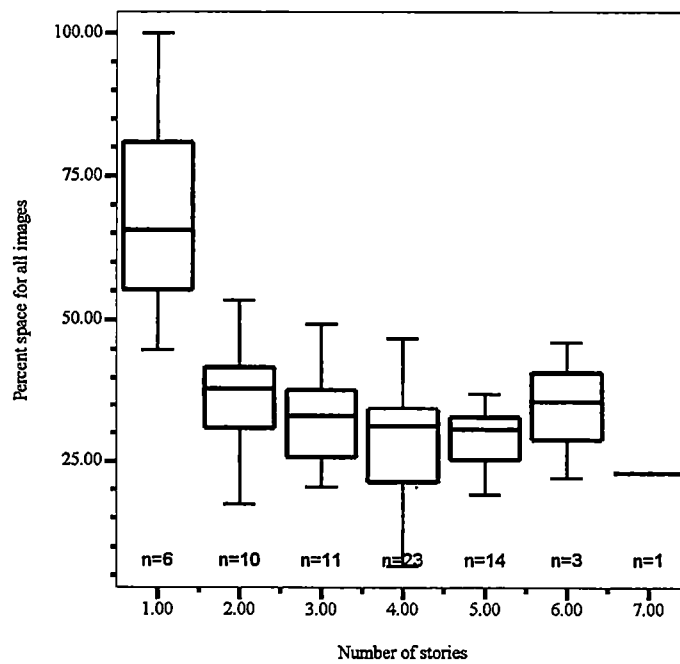
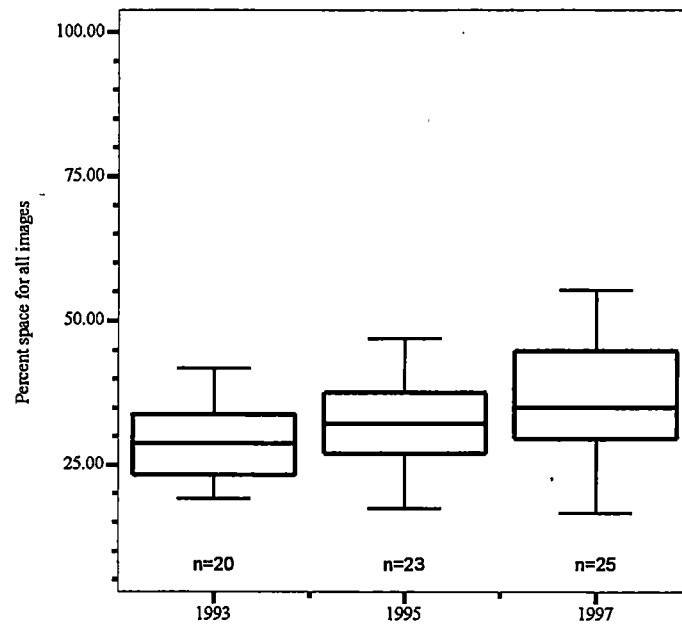
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for all images	68.70	65.59	44.80	55.20	20.52
	2.00	Percent space for all images	36.61	38.09	17.52	36.00	11.76
	3.00	Percent space for all images	33.12	33.06	20.55	28.75	9.41
	4.00	Percent space for all images	29.23	31.26	34.24	40.17	9.64
	5.00	Percent space for all images	29.35	30.66	19.12	18.03	5.16
	6.00	Percent space for all images	34.64	35.66	22.04	24.17	12.12
	7.00	Percent space for all images	22.93	22.93	22.93	.00	.

n = 68; 1=6; 2=10; 3=11; 4=23; 5=14; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all images	34.60	32.94	34.24	93.36	15.04

(a) Statistics by year, story count, and for all cases

Figure 61. Percent space for images on all pages



(b) Boxplots by year and story count

Figure 61. (continued)

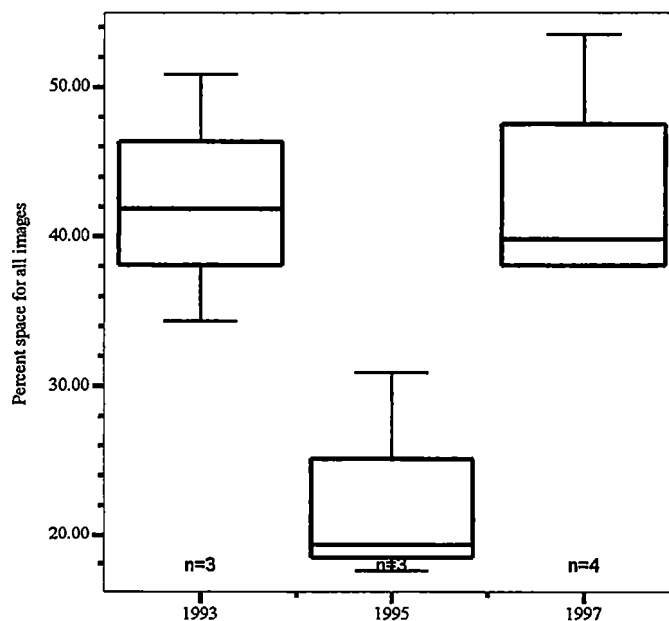
Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all images	42.35	41.85	34.36	16.48	8.25
	1995	Percent space for all images	22.59	19.30	17.52	13.43	7.29
	1997	Percent space for all images	42.81	39.84	38.04	15.48	7.32

n = 10; 1993=3; 1995=3; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all images	36.61	38.09	17.52	36.00	11.76

(a) Statistics by year and for all cases



(b) Boxplot by year

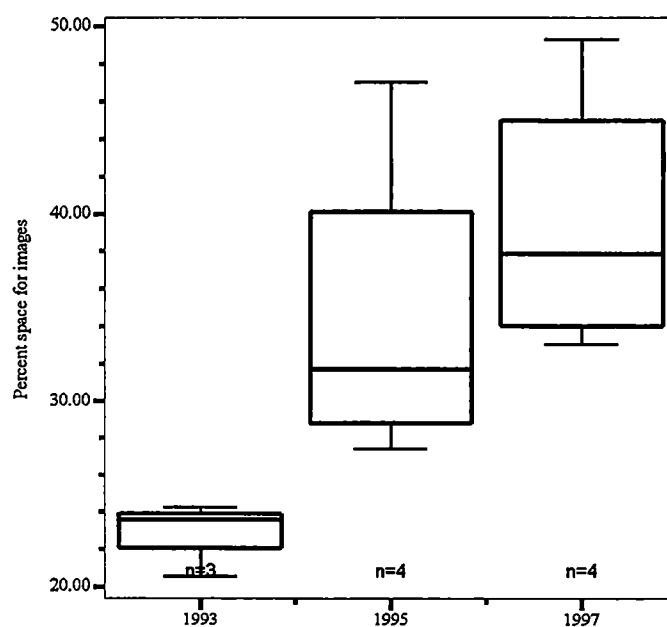
Figure 62. Percent space for images on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for images	22.79	23.58	20.55	3.68	1.96
	1995	Percent space for images	34.46	31.72	27.40	19.62	8.70
	1997	Percent space for images	39.53	37.88	33.06	16.24	7.27

n = 11; 1993=3; 1995=4; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for images	33.12	33.06	20.55	28.75	9.41

(a) Statistics by year and for all cases



(b) Boxplot by year

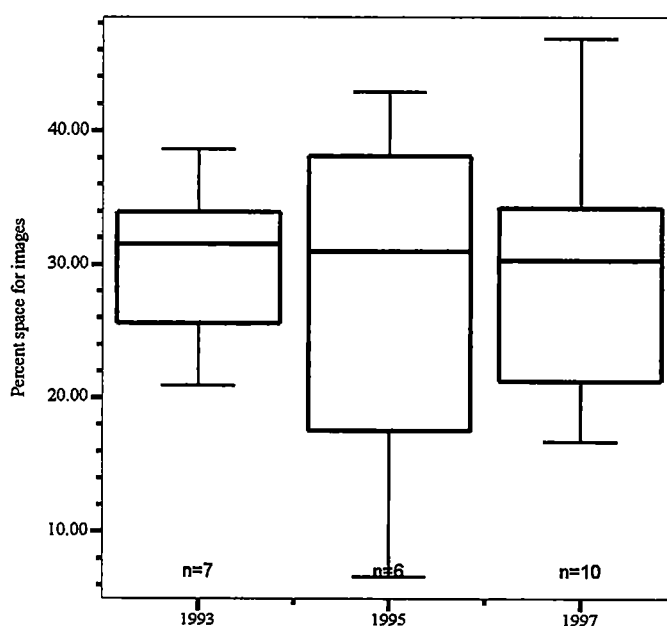
Figure 63. Percent space for images on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for images	30.01	31.54	20.91	17.69	6.62
	1995	Percent space for images	27.85	31.00	6.64	36.21	13.58
	1997	Percent space for images	29.50	30.32	34.24	30.10	9.69

n = 23; 1993=7; 1995=6; 1997=10.

	Mean	Median	Mode	Range	Std Deviation
Percent space for images	29.23	31.26	34.24	40.17	9.64

(a) Statistics by year and for all cases



(b) Boxplot by year

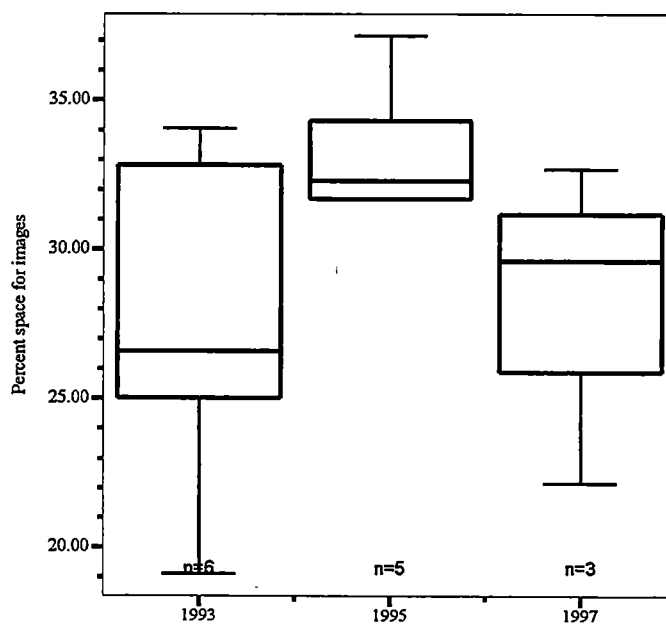
Figure 64. Percent space for images on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for images	27.37	26.60	19.12	14.93	5.52
	1995	Percent space for images	32.43	32.31	26.68	10.47	3.86
	1997	Percent space for images	28.17	29.62	22.16	10.57	5.43

n = 14; 1993=6; 1995=5; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for images	29.35	30.66	19.12	18.03	5.16

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 65. Percent space for images on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all largest images	21.78	21.67	5.82	29.95	7.43
	1995	Percent space for all largest images	29.45	26.23	8.76	67.93	14.95
	1997	Percent space for all largest images	25.98	23.55	9.09	64.70	13.88

n = 58; 1993=18; 1995=18; 1997=22.

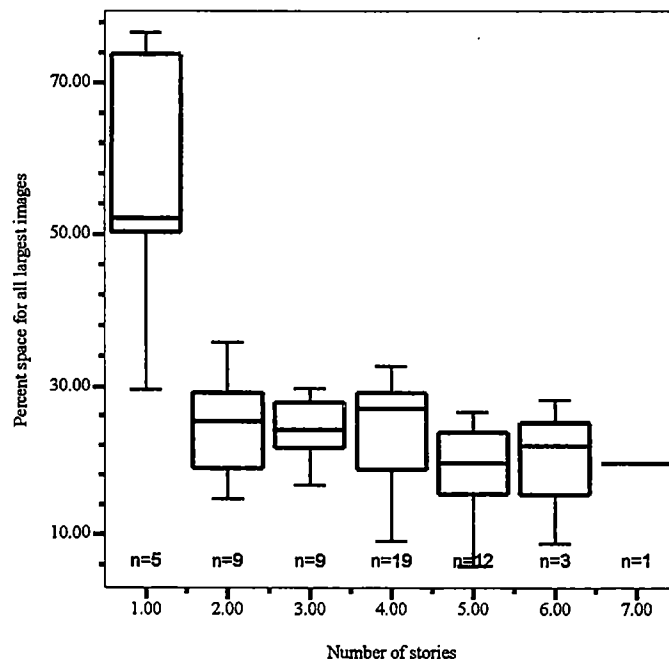
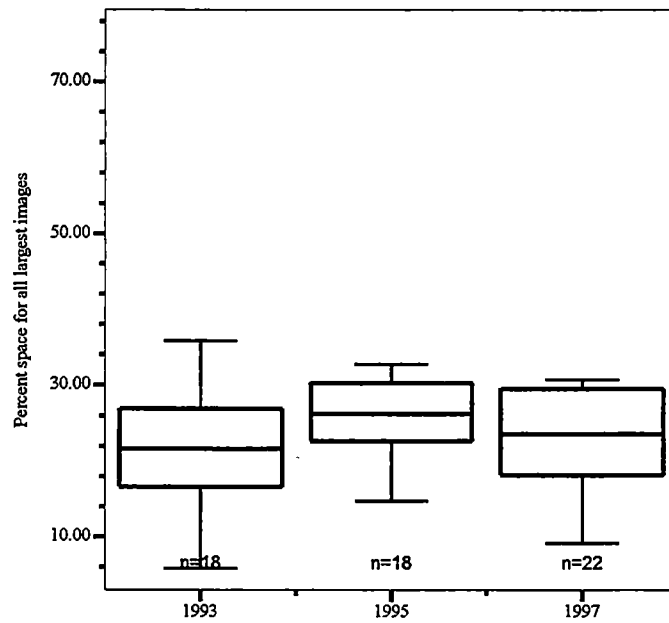
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for all largest images	56.51	52.12	29.62	47.07	19.28
	2.00	Percent space for all largest images	24.36	25.19	14.73	21.04	6.83
	3.00	Percent space for all largest images	25.55	24.07	16.64	25.81	7.67
	4.00	Percent space for all largest images	24.08	26.89	9.09	23.57	6.88
	5.00	Percent space for all largest images	18.83	19.58	5.82	20.54	6.13
	6.00	Percent space for all largest images	19.60	21.91	8.76	19.36	9.89
	7.00	Percent space for all largest images	19.63	19.63	19.63	.00	.

n = 58; 1=5; 2=9; 3=9; 4=19; 5=12; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all largest images	25.75	24.19	23.70	70.87	12.78

(a) Statistics by year, story count, and for all cases

Figure 66. Percent space for all largest images on all pages



(b) Boxplots by year and story count
Figure 66 (continued)

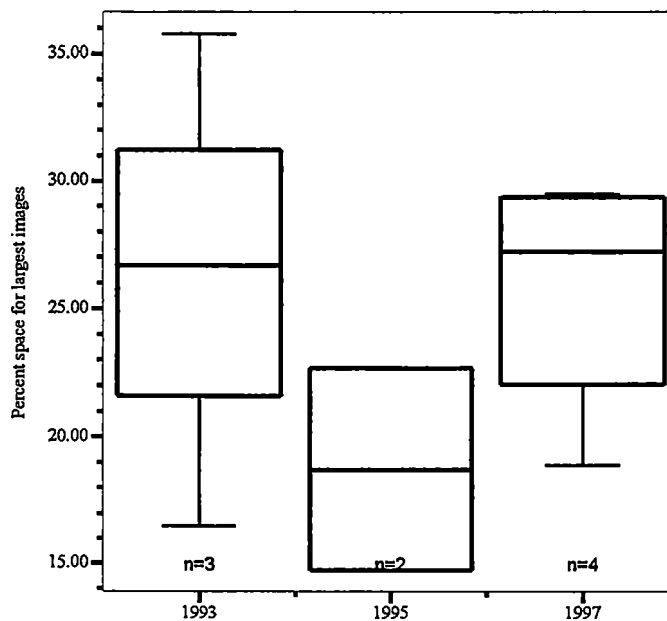
Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for largest images	26.33	26.68	16.53	19.24	9.62
	1995	Percent space for largest images	18.71	18.71	14.73	7.96	5.63
	1997	Percent space for largest images	25.70	27.22	18.89	10.59	4.95

n = 9; 1993=3; 1995=2; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for largest images	24.36	25.19	14.73	21.04	6.83

(a) Statistics by year and for all cases



(b) Boxplot by year

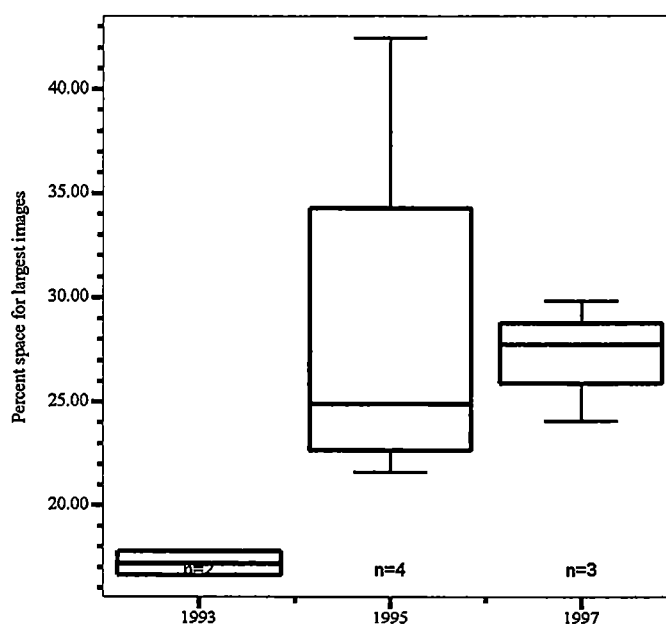
Figure 67. Percent space for all largest images on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for largest images	17.20	17.20	16.64	1.13	.80
	1995	Percent space for largest images	28.47	24.90	21.63	20.82	9.50
	1997	Percent space for largest images	27.22	27.75	24.07	5.77	2.92

n = 9; 1993=2; 1995=4; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for largest images	25.55	24.07	16.64	25.81	7.67

(a) Statistics by year and for all cases



(b) Boxplot by year

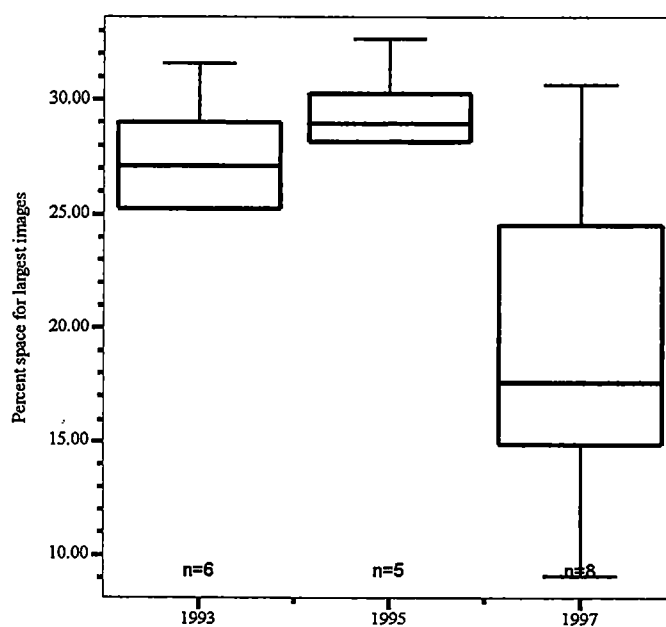
Figure 68. Percent space for all largest images on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for largest images	26.53	27.12	19.09	12.50	4.23
	1995	Percent space for largest images	28.90	28.97	24.44	8.22	3.02
	1997	Percent space for largest images	19.23	17.62	9.09	21.56	7.42

n = 19; 1993=6; 1995=5; 1997=8.

	Mean	Median	Mode	Range	Std Deviation
Percent space for largest images	24.08	26.89	9.09	23.57	6.88

(a) Statistics by year and for all cases



(b) Boxplot by year

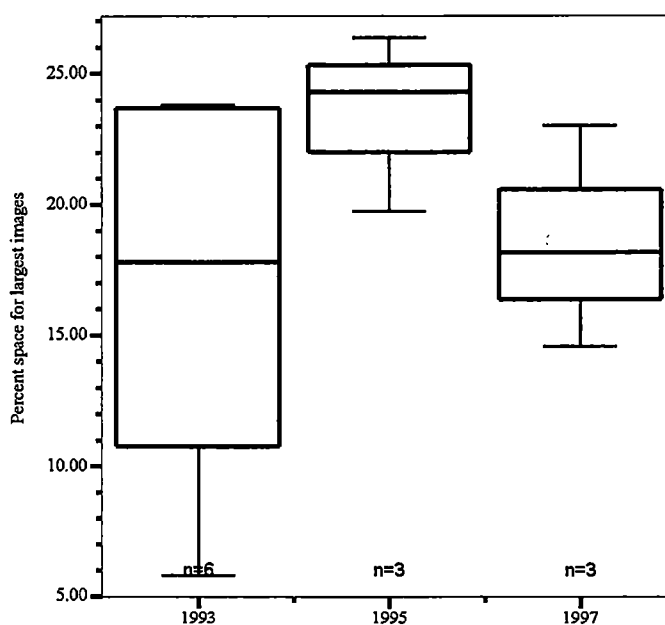
Figure 69. Percent space for all largest images on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for largest images	16.62	17.81	5.82	18.00	7.22
	1995	Percent space for largest images	23.47	24.31	19.75	6.61	3.38
	1997	Percent space for largest images	18.59	18.17	14.58	8.45	4.24

n = 12; 1993=6; 1995=3; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for largest images	18.83	19.58	5.82	20.54	6.13

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 70. Percent space for all largest images on 5-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for all smallest images	1.52	1.20	.36	5.16	1.19
	1995	Percent space for all smallest images	2.32	2.12	.10	5.68	1.81
	1997	Percent space for all smallest images	2.60	1.61	.11	10.51	2.89

n = 58; 1993=18; 1995=18; 1997=22.

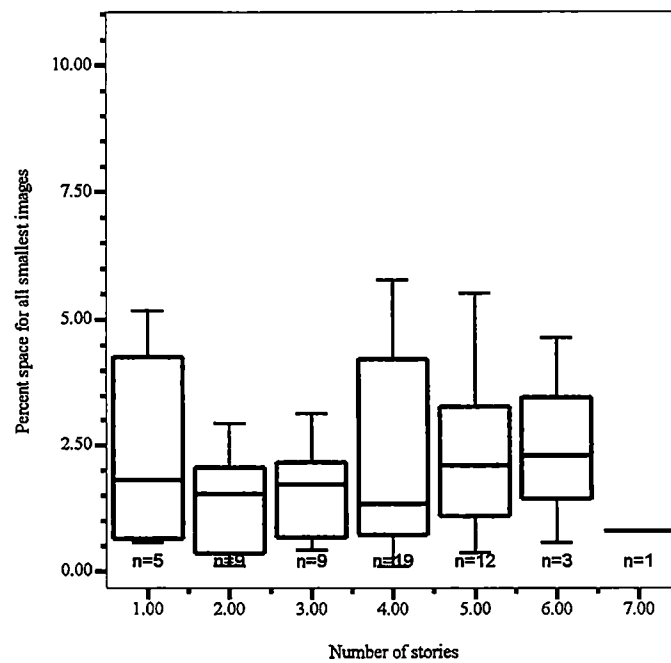
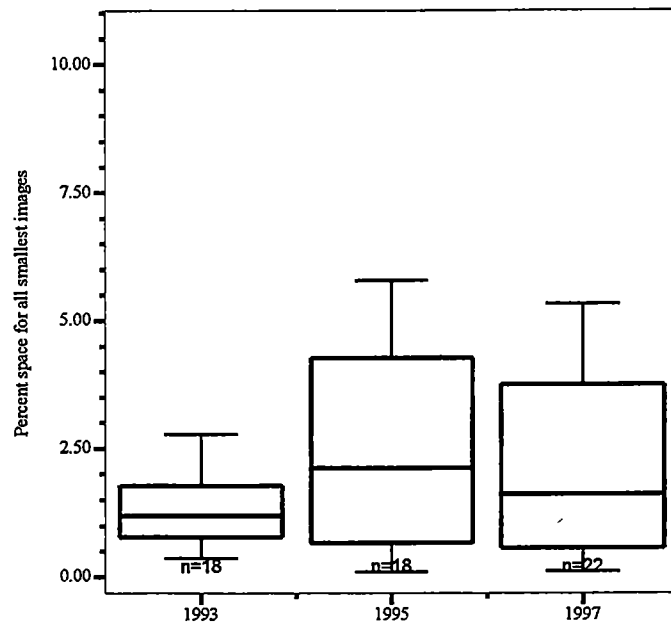
			Mean	Median	Mode	Range	Std Deviation
Number of stories	1.00	Percent space for all smallest images	2.49	1.82	.56	4.62	2.12
	2.00	Percent space for all smallest images	1.36	1.54	.11	2.83	1.04
	3.00	Percent space for all smallest images	1.55	1.73	.42	2.71	.94
	4.00	Percent space for all smallest images	2.46	1.33	.10	10.52	2.71
	5.00	Percent space for all smallest images	2.73	2.11	.37	9.32	2.61
	6.00	Percent space for all smallest images	2.50	2.30	.56	4.09	2.05
	7.00	Percent space for all smallest images	.79	.79	.79	.00	.

n = 58; 1=5; 2=9; 3=9; 4=19; 5=12; 6=3; 7=1.

	Mean	Median	Mode	Range	Std Deviation
Percent space for all smallest images	2.18	1.58	.56	10.52	2.16

(a) Statistics by year, story count, and for all cases

Figure 71. Percent space for all smallest images on all pages



(b) Boxplots by year and story count
Figure 71 (continued)

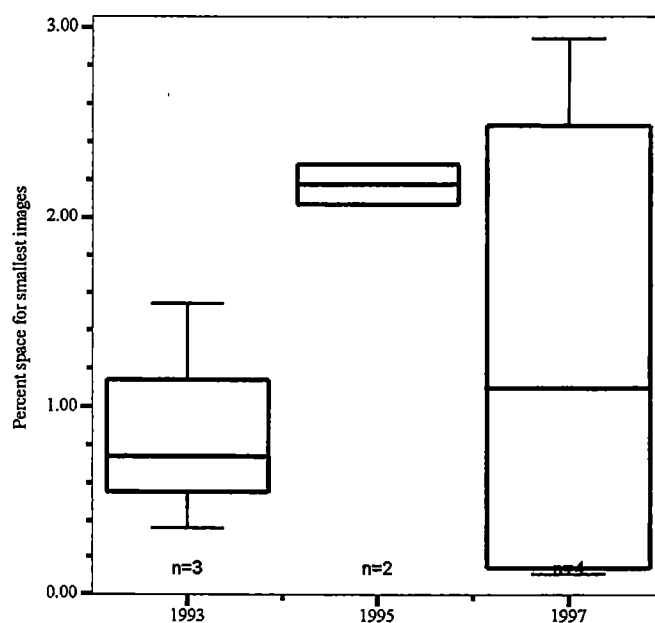
Data are not depicted for 1-story (6), 6-story (3), or 7-story (1) pages because of the low number of cases for each.

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for smallest images	.88	.74	.36	1.18	.60
	1995	Percent space for smallest images	2.17	2.17	2.07	.21	.15
	1997	Percent space for smallest images	1.31	1.10	.11	2.83	1.40

n = 9; 1993=3; 1995=2; 1997=4.

	Mean	Median	Mode	Range	Std Deviation
Percent space for smallest images	1.36	1.54	.11	2.83	1.04

(a) Statistics by year and for all cases



(b) Boxplot by year

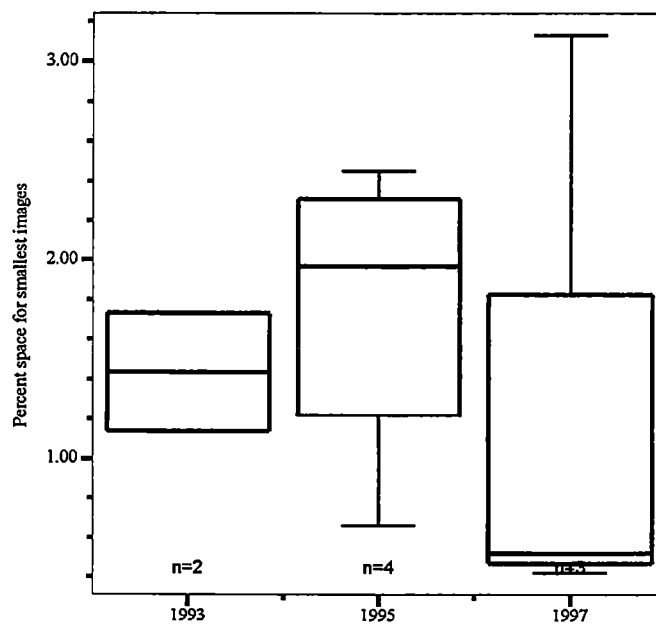
Figure 72. Percent space for all smallest images on 2-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for smallest images	1.44	1.44	1.14	.59	.42
	1995	Percent space for smallest images	1.76	1.97	.66	1.79	.79
	1997	Percent space for smallest images	1.36	.52	.42	2.71	1.54

n = 9; 1993=2; 1995=4; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for smallest images	1.55	1.73	.42	2.71	.94

(a) Statistics by year and for all cases



(b) Boxplot by year

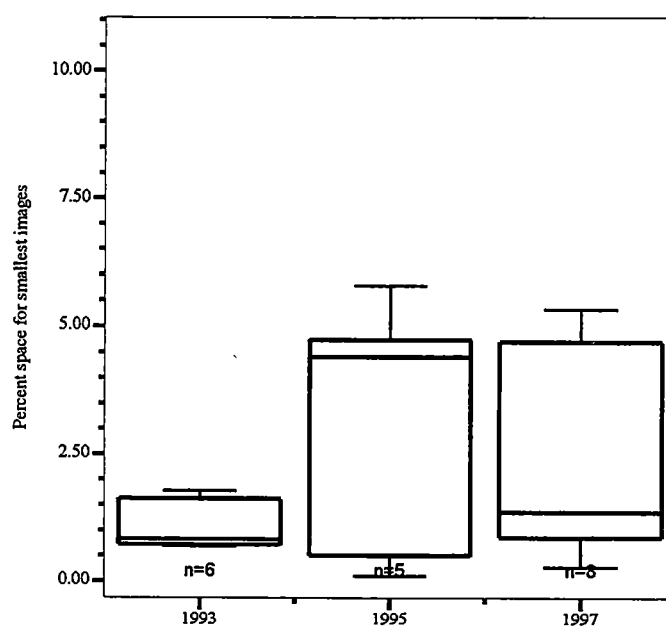
Figure 73. Percent space for all smallest images on 3-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for smallest images	1.07	.82	.68	1.10	.49
	1995	Percent space for smallest images	3.11	4.41	.10	5.68	2.61
	1997	Percent space for smallest images	3.09	1.37	.27	10.35	3.52

n = 19; 1993=6; 1995=5; 1997=8.

	Mean	Median	Mode	Range	Std Deviation
Percent space for smallest images	2.46	1.33	.10	10.52	2.71

(a) Statistics by year and for all cases



(b) Boxplot by year

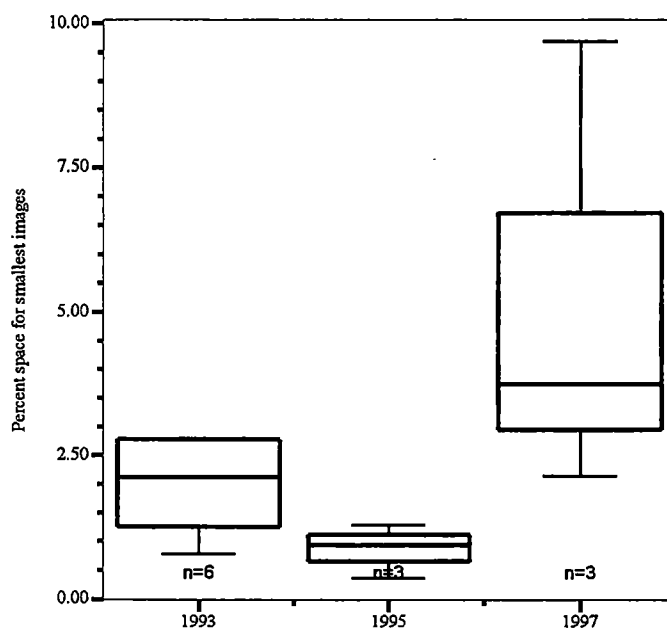
Figure 74. Percent space for all smallest images on 4-story pages

			Mean	Median	Mode	Range	Std Deviation
Year	1993	Percent space for smallest images	2.43	2.13	.78	4.74	1.67
	1995	Percent space for smallest images	.87	.94	.37	.92	.46
	1997	Percent space for smallest images	5.20	3.75	2.15	7.54	3.97

n = 12; 1993=6; 1995=3; 1997=3.

	Mean	Median	Mode	Range	Std Deviation
Percent space for smallest images	2.73	2.11	.37	9.32	2.61

(a) Statistics by year and for all cases



(b) Boxplot by year

Figure 75. Percent space for all smallest images on 5-story pages

Vita

Sharon Linn Rasmussen received her high school education in Montgomery, Alabama. She graduated with honors and faculty honors from Auburn University in Auburn, Ala., with a Bachelor of Fine Arts in visual communications.

Work experience included stints with the Lutheran Church in America in New York, N.Y., and with Auburn University. She was an associate art director at Whittle Communications in Knoxville, Tenn., and New York, N.Y., and she operated her own free-lance graphics and editing business, RasDesign. She has been employed for several years as a copy editor and page designer for *The Knoxville News-Sentinel*. Her professional awards include several national honors from the Educational Press Association and regional honors from the Society for Professional Journalists. Her Web site, "Presidents of the United States: Highlights of each Administration" was tapped as a resource for the Discovery Channel's schools program.

While in the master's degree program in journalism at the University of Tennessee, Knoxville, she worked as a graduate assistant on *Journalism and Mass Communication Educator* with responsibility for editing, copy-editing, and production under the guidance of the journal's editor. She received a university chancellor's award and a College of Communications-awarded graphics honor; she also was selected outstanding master's student for the college.

She is a member of Phi Kappa Phi; Kappa Tau Alpha; and the Communications Workers of America, Local 33076, The Knoxville Newspaper Guild.