

## *DESIGN CHANGES IN U.S. FRONT PAGES, 1885 – 1985*

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A design revolution is said to have transformed newspaper front pages in the past twenty years.<sup>1</sup> The revolt toppled “traditional” makeup, replacing it with “modern” layout.<sup>2</sup> Click and Stempel first noted the shift in 1974.<sup>3</sup> By 1981, so many newspapers had been redesigned that García reported, “The look of American newspapers is rapidly changing,”<sup>4</sup> and by the end of the decade, Moen cited “enormous activity in the field of newspaper design in the 1980s.”<sup>5</sup>

The goal of newspaper redesign, according to Ben Bradlee of the *Washington Post*, is to provide “readability, clarity, organization, order”<sup>6</sup> — qualities closely associated with the “modern” style. Commentators describe the specific elements of this design style: The “modern” front page has horizontal layout with fewer columns and simplified headlines,<sup>7</sup> many “visual” elements,<sup>8</sup> and clear organization.<sup>9</sup>

Designers disagree over whether this design revolution has made newspapers look more alike or more distinctive. Garcia has argued that redesigns have produced “cookie-cutter” front pages in U.S. newspapers.<sup>10</sup> Nesbitt has argued that front pages have actually become more diverse as newspapers added to the range of “tools,” or design devices, available.<sup>11</sup> These debates question whether progress has been beneficial or harmful.

According to most commentators, the cause of the layout revolution was mainly the introduction of new technology, although competition from other media is also cited.<sup>12</sup> But these explanations are unconvincing. Newspapers have been notoriously slow to adopt new technologies. They have not rushed into pagination, they are one of the last commercial holdouts of letterpress printing, and they initially resisted the 35 mm camera. Historically, the pattern has been that newspapers gradually adjust to the push by some (often younger) staffers for new techniques, and not that new techniques invade and transform the newspaper.<sup>13</sup> Likewise, newspapers have been slow to respond to competition from “visual” media. Magazines and specialty newspapers began using photographs long before they were common in the American daily press. Color television became the rule in the sixties, twenty years before color pictures appeared with any regularity on news pages. Yet technology and competition remain the received explanations for change.

Utt and Pasternack also suggest two other factors: “a greater concern among news people for appearance” and “the trend-setting national daily, *USA Today*,”<sup>14</sup> that is, a groundswell among journalists for change and a revolutionary leader among newspapers. Concern for appearance has certainly been a factor. The leadership role of *USA Today* is less clear. *USA Today* adopted graphics and color after other newspapers had done so,<sup>15</sup> and other innovators such as the *St. Petersburg Times* reduced their use of color and graphics in reaction to the advent of *USA Today*.

The literature of newspaper front page design is infused with a brand of conventional wisdom based on the idea of progress. The “traditional” style is described with terms of opprobrium, such as “dull” and “seemingly endless”; the newer “modern” style is celebrated as “fresh” and

“lively.”<sup>16</sup> Newspapers are applauded for modernizing or branded “stubborn” for “resisting” change.<sup>17</sup> Again, the locomotive dragging publishers from tradition to modernity is supposedly technological change, along with competition, journalistic attitudes, and a newspaper leader.

To put the prevailing wisdom to the test, we examined newspaper front pages over the past century to determine when newspapers adopted the specific elements of the “modern” style. We wanted to see whether the pattern of change revealed discontinuities resulting from the introduction of new technology and new media, that is, whether design change was revolutionary rather than gradual. We also studied front pages to discover whether the result of design change has been greater uniformity or greater diversity.

### *Method*

To record the sweep of change from just after the first press photograph appeared to just after the immediate impact of *USA Today*, data was collected from 1885 to 1985. The formal properties of each item on each page were examined, following the analytical system proposed by Barnhurst and others.<sup>18</sup> Each front page was coded for number of stories, illustrations, advertisements, columns, lines per page, and words per line, as well as styles of headline typography, column rules, and column width (uniform/non-uniform). Each story was coded for length, shape (vertical, horizontal, square, brace, or rectangle), byline, headline typography, topic, and position on the page; each illustration was coded for type (illustration — photo, chart, drawing, cartoon — or advertisement), shape, and position (“with story” for illustrations, “at margin” for advertisements).<sup>19</sup>

The extreme detail of the formal analysis limited the number of pages that could be coded. Front pages were selected at ten-year intervals from three newspapers, all of which had been continuously published for the century under study. The papers were chosen to be somewhat representative of differences in circulation: the San Francisco *Chronicle*, to represent metropolitan dailies; the Springfield, Illinois, *State Journal-Register*, to represent smaller urban dailies; and the *Peterborough* (formerly *Contoocook*) *Transcript*, of New Hampshire, to represent small-town weeklies. The three were also chosen for their geographic diversity. For the dailies, seven randomly chosen issues representing a reconstructed week, balanced among seasons, were sampled; for the weekly, one issue per season was randomly selected to yield four sample issues per year. In all, 198 issues containing roughly 5000 individual items were coded.<sup>20</sup>

### *Results*

The front pages clearly became less dense and more orderly over the century studied. The average front page contained fewer items arranged with more white space in positions that more clearly signaled each item’s import. This shift is evident in a number of measures (see Table 1).

Table 1

**Average Elements on the Front Page**

The mean number of elements by year for the sample newspapers. Standard deviations are shown in parentheses. One-way analysis of variance (10 df)  $p < .000$ ,  $F=14.6$  for items,  $F=27.9$  for stories,  $F=20.7$  for words.

<b>Year</b>	<b>Items</b>	<b>Stories</b>	<b>Words</b>
1885	49.6 (15.7)	24.6 (9.4)	12000 (3900)
1895	30.1 (12.8)	20.5 (11.9)	7900 (1000)
1905	34.1 (14.0)	21.5 (9.8)	7500 (1400)
1915	22.1 (9.1)	13.6 (6.3)	7900 (800)
1925	27.4 (6.3)	17.3 (7.7)	6600 (1300)
1935	26.8 (6.4)	21.8 (6.6)	6600 (3600)
1945	23.3 (7.8)	17.6 (4.8)	6300 (700)
1955	23.3 (7.3)	16.3 (4.2)	6300 (700)
1965	15.3 (2.5)	10.3 (1.8)	5500 (1000)
1975	11.2 (1.9)	7.4 (1.2)	6000 (800)
1985	9.4 (2.1)	5.7 (.8)	4400 (500)

The average number of items (stories, ads, illustrations) on the front page declined from a high of 58.0 for the *Transcript* of 1885 to a low of 7.29 for the *Chronicle* of 1985. The average number of stories per front page declined in the sample from a high of 32.3 for the *Register* in 1895 to a low of 5.25 for the *Transcript* in 1985. The number of columns declined gradually from a high of nine to a low of five or six, while the number of lines per column also fell. As a result, the number of words per page declined from upwards of 10,000 in 1885 to less than 4500 in 1985, with a sharp drop coming in the last years studied.

Fewer stories and fewer items meant less clutter and more hierarchy on the front page. Interestingly, for both story- and item-count, wide disparity among the three newspapers studied was apparent until the 1920s. Beginning with the 1925 data, increasing uniformity among newspapers accompanied the declining density of their front pages, as is apparent in declining standard deviations among newspapers within each year. Noteworthy in these statistics is the relative recency of the highly ordered front page. The average number of stories dipped below ten only between 1965 and 1975, though the decline had been clearly linear for forty years by then.

Heightened attention to the tenets of “modern” design is also apparent in several other measures (see Table 2). The number of decks in the average headline declined, while the width of the average headline increased. The layout of the stories also became more horizontal, as measured in the width of the average story in columns. Note how the number of columns each story occupied grew over time from a nearly universal single column in 1895 to a more expansive column and a half (with fairly high variance) in 1985. Even more pronounced was the expansion of headlines across columns, even while the number of decks in the average headline declined. Again, though these trends are apparent throughout the years sampled, a marked shift is apparent in the most recent few decades.

Table 2

**Design Characteristics for Selected Years**

The mean of sample front pages for several indicators of headline and story shape. Standard deviations are shown in parentheses. (The data for 1895 show slightly less than one column because a few stories were not headlined.)

<b>Measure</b>	<b>1895</b>	<b>1925</b>	<b>1955</b>	<b>1985</b>
Columns/story	1.09 (.57)	1.04 (.19)	1.09 (.31)	1.44 (.88)
Decks/headline	1.64 (1.0)	1.60 (.95)	1.24 (.59)	1.14 (.38)
Columns/headline	.97 (.32)	1.81 (2.2)	1.63 (1.7)	2.35 (1.4)

In other headline characteristics, changes seem to have been pretty much in place before the “design revolution” (see Table 3). Headlines had already begun dropping serif typefaces, along with condensed type in headlines and all-upper-case headlines.

Table 3

**Headline Typography Changes for Selected Years**

The percentage of headlines from the sample front pages. Each typographic characteristic is a discrete measurement, unrelated to other characteristics (and therefore not adding to 100 percent).

<b>Measure</b>	<b>1895</b>	<b>1925</b>	<b>1955</b>	<b>1985</b>
Sans serif	7.0	34.1	54.1	52.7
Condensed	5.5	9.0	17.2	0.0
All caps	31.6	35.2	10.7	1.4

A non-stylistic indicator of this pattern of change is the frequency and variety of bylines (see Table 4). Bylines became much more frequent in the 1920s. Significantly, though bylines had become familiar in the 1920s, it was not until the 1960s that front-page stories became routinely bylined, and only then that the individual reporter’s byline became common. At the same time, the array of types of bylines contracted.

In line with the “modern” style, the prominence of illustrations on the front pages of newspapers increased, while their relationship to the verbal content of the front page grew more complex. The results show a rather striking increase in the number of stories that included illustrations, from 5.7 percent in 1895 to 21.5 percent in 1985 — an increase accounted for by charts, maps, drawings, and other forms of what might be called “infographics.” Meanwhile, the percentage of photographs that were directly related to accompanying stories declined, from 90.5 percent in 1895 to 66.7 percent in 1985; photos came commonly to stand on their own on the front page (though stand-alone photos remain in the minority). At the same time, the number of photographs on the front page grew while the total number of items declined.

Table 4

**Use of Bylines for Selected Years**

The number of bylines from all three newspapers at thirty year increments. Percentages for the year are shown in parentheses (an asterisk indicates > 1 percent).

Kind of byline	1895	1925	1955	1985
None	260 (88)	195 (63)	180 (61)	23 (27)
Reporter	36 (12)	21 (7)	11 (4)	39 (45)
Newspaper		4 (1)		
Associated Press	1 (*)	37 (12)	58 (20)	23 (27)
United Press		7 (2)	31 (11)	
International News Service	43	(14) 15	(5)	
Copley				1 (1)
Multiple		5 (2)		

*Discussion*

The findings qualify the notion of a design revolution in the past twenty years. The pattern of change might be summarized thus: Sometime in the World War I era, the newspaper front page became open to new design ideas; sometime between 1955 and 1965, these new design ideas came to dominate the front page. The shift was gradual, but an acceleration in the final decade accounts for the common conception of a “revolution.” The newspapers adopted all of the specific forms commentators identified with the “modern” style — fewer columns, prominent illustrations, horizontal layout, fewer stories and more prominent illustrations, and simplified headline typography. Whatever its significance, *USA Today* came after the trend, not ahead of it.

The data reveal no discontinuities that might result from the introduction of new technology or new media. In fact, the observed trends predate the introduction of new technology, and most of the design changes were not dependent on technology. Certainly technology does not account for the decline in the density of the front page. Typography has always been capable of varying the number of columns, as well as the number of lines per column of type, on the page. New technology was not needed to reduce the number of words on the page or to simplify headline typography. Nor was the prominence of illustrations dependent on technical change. In one hoary example of the received history, headlines spanning two columns were supposedly the result of the technological innovation that removed column rules, which had previously served the mechanical function of holding the metal type together on the cylinder. But two-column headlines were technically feasible and appeared before stereotyping eliminated the functional requirement for column rules. Editors simply ran the headline across the two columns, leaving the column rule to run wherever it fell between the words or letters of the headline.

The introduction of technology has been a constant explanation for changes in newspapers, and its use is significant. Newspaper publishers have resisted change, but by invoking technology, editors and designers have made change seem inevitable. Technology takes the “blame,” removing the onus from those urging change and pressing those who resist. The rationale is more interesting as an artifact of the internal politics of newspaper publishing than it is useful for its explanatory

power. Technology has been an important element in the background, but not the cause of newspaper design change.

Another background element has been competition. Beginning in the 1940s, editors and artists were aware that their audience was increasingly attracted to radio, news magazines, and later, television. The new visual media presented a clear challenge, illustrated when radio lost its dominance to television. Competitors either differentiate themselves, as radio did by shifting to music, or imitate the opponent (“go head to head” in business parlance). The response of newspapers has been to imitate — to open themselves to changes in their visual form. Although competition encouraged newspapers to experiment with new visual elements, it did not dictate which elements should be adopted, nor how to integrate them into the overall pattern of the page. An example of this influence is so-called modular layout. In the received history, newspapers adopted modular layout used by magazines in order to compete with them. But modular magazine design is a dramatically different concept, in which the same unit of measure (a square or rectangle) determines the scale and placement of every object in the layout. Newspapers have no such module, and in fact, the term is incorrectly applied to what newspapers do. So-called modular layout is no more than the squaring off of the dog-legs that characterized traditional layout. Newspaper “modules” are arbitrary rectangles, a far cry from modular design in other fields. Magazine design probably encouraged editors to innovate, but the editors themselves invented the new layout pattern.

Competition and technology were convenient rationales for change, and they found their way into the scholarly literature. Researchers merely adopted the ideological position that technology and competition create progress. Instead of examining the motives and constraints of practitioners, researchers celebrated change and lobbied for a particular design style. The newspaper research reflects the administrative bent of design scholarship in general, which honors great designers and valorizes contemporary practices.<sup>21</sup> But if technology is relegated to the background, then some other urge motivated editors to make particular decisions about the form of newspaper front pages. In place of the conventional wisdom, we speculate that there were two motive forces for the specific changes they made.

One was the participation of newspaper editors and artists in the broader cultural drift from Victorian style to modernism.<sup>22</sup> Twentieth-century design in general has lagged behind the triumph of modern style in the fine arts, and newspaper design has lagged behind even further. In the print media, modernism first made its impact felt in advertisements and magazines and then diffused into the news media slowly. The design ideas behind the creation of the “modern” front pages, which can be traced in articulate form to the work of Allen, Arnold, and Sutton,<sup>23</sup> were adapted from newsmagazines and predated the widespread newspaper redesigns by several decades. By invoking the challenges of technology and competition, these writers were able to develop a rationalization for what were essentially stylistic decisions. They attacked the 19th-century style and prescribed the specific forms of modernism — simplicity, order, and authority.

Another motive force was the emergence of an increased attentiveness to issues of journalistic practice that might be summed up in the term “professionalism.” We interpret the decline in variation in the sample to signal the appearance by the 1920s of a shared notion of the function of the front page.<sup>24</sup> The front page of 1885 was a dense jungle of news items and, quite often, advertisements; it gave an impression of diversity, randomness, and complexity, leaving it to the reader to make sense — or draw a map — of the world. Gradually, newspapers lost the habit of placing dozens of stories on the front page in narrow columns.

The contemporary front pages are far more tightly structured and sparsely populated; they also bear frequent evidence of the newspaper’s concern to map the world for its readers. For example,

the primitive headline, with its multiple decks stacked vertically above a single column, offered an outline of the story. The modern headline tells the reader the point — the import — of the story. The changes suggest a subtle shift in the meaning of headlines.

Bylines tie this pattern of change to both institutional and ideological developments in the media. The more-frequent bylines of the 1920s reflected the growth of wire services and syndication — note the relative diversity of types of bylines in these years — and an increased attention to professional issues. Bylines are meant to give credit to authors, and in the process to lend gravity to their stories. Authorship is a form of authority, and the frequency of bylines is a good indicator of the extent to which a newspaper endeavors to map the world for its readers, because such a mapping inherently implies expert or professional authority. The dense front pages of the late nineteenth century abjured such authority, and in effect said to the reader, “These items are gleanings from a world too big and noisy for us to make sense of; you make sense of it yourself.”

Mapping is also a visual activity, and newspaper front pages became defined in the professional lore as primarily visual, a shop window that gave a glimpse of the world (and encouraged sales). The number of illustrations increased, and more of them stood alone; especially in recent years, information has been packaged in graphic forms. The development of the concept of the newspaper as a visible map, making sense of events, opened it to the stylistic changes dictated by the general cultural embrace of modernism. The visual (as well as the textual) presentation of news demanded order, hierarchy, and usability. Now that a stylistic vocabulary has colonized newsroom discussions, it seems likely that future changes will follow the stylistic trends of the culture. Perhaps we await the postmodern front page.

The transformation of the newspaper into a map became more important as the newspapers themselves grew fatter. As the front page showed fewer elements and enhanced orderliness, more information went inside. The total page count of the average daily edition gradually increased, a trend that was pushed by increasing advertising and declining competition from other newspapers. As newspapers became longer, they added sections with fronts of their own, which allowed them to further reduce the density of the front page. They also began “jumping” or continuing stories to inside pages, which explains why the word count declined faster than the story count.

Finally, the study newspapers also became increasingly uniform. By the end of the century under study all three newspapers came to share modern design features: six columns, modular layout, a small story count, two or three front-page illustrations, sans serif and upper and lower case headlines, and so forth. The expanded Standard Advertising Unit System, effective in 1984, culminated a long trend toward uniformity.<sup>25</sup> In the Garcia-Nesbitt debate, these data support Garcia’s position, that newspapers have become less diverse.

### *Conclusion*

This study is significant because it challenges the conventional wisdom of newspaper design research. By considering a sample in detail over a full century, it suggests the broader trends of the front page. Further research is needed along these lines, studying the meaning of the form as well as the content of the front page. The administrative bias of design research should be evaluated. And our speculations on the possible alternative motivations for change need to be further tested.

During the century, the newspapers in the study shifted from the complexity of the Victorian era to the simplicity of modernism. The front pages became more orderly. They abandoned the dense, random appearance of the nineteenth century in favor of a more spacious, more patterned appearance. The modern front pages seek to map reality for their readers. This shift in appearance

is rooted in changes in journalistic and design ideas. Journalists, sensitive to the “responsibilities” of their increasingly professionalized vocation, sought to do a more thorough job of digesting and organizing the news. And designers, beginning in earnest in the 1940s, sought to rationalize the front page, to make it more readable and structured, in line with the modern approach to visual arts.

These stylistic and professional concerns played out on a background of technological change and competition. Newspapers adapted slowly to new technologies; competition with other, more visual media also encouraged design innovation. The decision to create the modern front page involved other considerations — probably style and ideology — more than technology and competition. The results of this study challenge the conventional foregrounding of technology as the motive force for change. Instead, the received wisdom that technological change has been the driving force behind visual change in newspapers seems questionable.

As newspapers became more structured, their appearance also became more homogeneous. Virtually all newspapers have come to share the design features of modernism. These similarities might be called structural. While every newspaper will carry a front-page photograph of a President’s inauguration, for instance, they may use strikingly different photos. The differences in photos selected is superficial. On a deeper level the structural similarities betoken a shared sense of the purpose and meaning of front pages, headlines, bylines, and stories: they are meant to present an authoritative map of the day’s events; moreover, the maps presented by different newspapers seem strikingly similar.

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<sup>1</sup>Howard I. Finberg and Bruce D. Itule, *Visual Editing: A Graphic Guide for Journalists* (Belmont: Wadsworth, 1990), "The Visual Revolution," pp. 3–12.

<sup>2</sup>Gerald C. Stone, John C. Schweitzer, and David H. Weaver, "Adoption of Modern Newspaper Design," *Journalism Quarterly* 55:761–66 (1978); J.W. Click and Guido H. Stempel III, "Rate of Adoption of Modern Format by Daily Newspapers," *ANPA News Research Report* No. 22:6–10 (Sept. 1979).

<sup>3</sup>J. W. Click and Guido H. Stempel III, "Reader response to modern and traditional front page make-up," *ANPA News Research Bulletin* No. 4 (June 1974).

<sup>4</sup>Mario R. García, *Contemporary Newspaper Design: A Structural Approach* (Englewood Cliffs: Prentice-Hall, 1981), p. 1.

<sup>5</sup>Daryl R. Moen, *Newspaper Layout and Design*, 2d. ed. (Ames: Iowa State University Press, 1989). See also "Front Pages: How Much Have they Changed?" *Editor & Publisher*, Nov. 2, 1985, p. 15.

<sup>6</sup>Quoted in Jay Anthony and Kate Newton Anthony, "Typefaces, White Spaces, Splashes of Color," *Washington Journalism Review*, May 1985, p. 31. Similar goals of legibility, simplicity, and hierarchy are described in Jack Z. Sissors, "Some New Concepts of Newspaper Design," *Journalism Quarterly* 42:236–42 (1965).

<sup>7</sup>Click and Stempel, *op. cit.*, note 3; David H. Weaver, L. E. Mullins, and Maxwell E. McCombs, "Competing Daily Newspapers: A Comparison of Content and Format," *ANPA News Research Bulletin* No. 7 (Jan. 1973).

<sup>8</sup>Keith Kenney and Stephen Lacy, "Economic Forces Behind Newspapers' Increasing Use of Color and Graphics," *Newspaper Research Journal* 8:33–41 (1987); Edward J. Smith and Donna J. Hajash, "Informational Graphics in 30 Daily Newspapers," *Journalism Quarterly* 65:714–8 (1988); Paul Lester, "Use of Visual Elements in Newspaper Front Pages," *Journalism Quarterly* 65:760–3 (1988).

<sup>9</sup>A recent survey of the literature is Moen, *op. cit.*, note 5, pp. 12–15. See also the work by Sandra H. Utt and Steve Pasternack: "Front Pages of U.S. Daily Newspapers," *Journalism Quarterly* 61:879–84 (1984); "Subject Perceptions of Newspaper Characteristics Based on Front-Page Design," *Newspaper Research Journal* 8:29–35 (1986); and "How They Look: An Updated Study of American Newspaper Front Pages," *Journalism Quarterly* 66:621–27 (1989).

<sup>10</sup>Mario R. Garcia, "Too Often, Redesigns Produce 'Cookie-Cutter' Newspapers," *ASNE Bulletin* 694:34–35 (1987). See likewise Rolf Rehe, "The Emerging Patterns of Look-Alike Typography," *ASNE Bulletin* 640:22–23 (1981); Robert Lockwood, "Newspaper Design: Did We Miss the Revolution?" *ASNE Bulletin* 658:3 (1983); and Sandra H. Utt and Steve Pasternack, "Use of Graphic Devices in a Competitive Situation: A Case Study of Ten Cities," *Newspaper Research Journal* 7:7–16 (1985).

<sup>11</sup>See Phil Nesbitt, "Reaching More Readers with Redesigned Papers," *ASNE Bulletin* 703:3–7 (1988), and compare Dana Moffatt, "AP Access with Macintosh Results in Greater Usability," *Harte-Hanks Editorial Focus*, Summer 1987, p. 4.

<sup>12</sup>Finberg and Itule, *op. cit.*, note 1, "The Technological Explosion," pp. 13–23; Moen, *op. cit.*, note 5, Preface, pp. x–xi; Utt and Pasternack (1989), *op. cit.*, note 9.

<sup>13</sup>See, for example, Frank P. Hoy, *Photojournalism: The Visual Approach* (Englewood Cliffs: Prentice-Hall, 1986), p. 185.

<sup>14</sup>Utt and Pasternack (1989), *op. cit.*, note 9.

<sup>15</sup>Don DeMaio, "The Allentown Experiment," *Design: Journal of the Society of Newspaper Design*, No. 32:2 (1988).

<sup>16</sup>Utt and Pasternack (1989), *op. cit.*, note 9.

<sup>17</sup>*Ibid.*

<sup>18</sup>Kevin G. Barnhurst, "Design Theory: Expressing Tone," *Design: Journal of the Society of Newspaper Design*, No. 26:52–53 (1987); Donis A. Dondis, "The Basic Elements of Visual Communication," *A Primer of Visual Literacy* (Cambridge: MIT Press, 1973), pp. 39–66; Richard W. Budd, "Attention Score: A Device for Measuring News 'Play'," *Journalism Quarterly* 41:259–62 (1964).

<sup>19</sup>Coders were trained in a series of meetings in which definitional problems were discussed and resolved. At the end of this process, a test of inter-coder reliability was administered in which all the coders coded three randomly selected front pages from the sample. The results were deemed sufficient: For page-count items — number of stories, illustrations, columns, words per line, lines per page — agreement ranged from 100 percent to 83 percent, with an average of 88 percent. On story- and illustration-specific items — byline, headline typefaces, illustration position, and the like — agreement ranged from 100 percent on most headline typography and illustration measures to an 87 percent average on story-shape measures.

<sup>20</sup>Coders: Holly Kruse, Jochin Reicher, Rob Goldsmith, and Gilbert Rodman.

<sup>21</sup>Ellen Lupton, "Writing About Design," *Journal of Graphic Design* 9:10–11, 15 (1990).

<sup>22</sup>This may be the groundswell Utt and Pasternack (1989) observed, *op. cit.*, note 9.

<sup>23</sup>John Allen, *Newspaper Designing* (New York: Harper, 1947); Edmond C. Arnold, *Modern Newspaper Design* (New York: Harper, 1956); Albert Sutton, *Design and Makeup of the Newspaper* (Englewood Cliffs: Prentice-Hall, 1969).

<sup>24</sup>A detailed examination of the meaning of the front page is beyond the scope of this study. See, for example, Philip Meyer, "The National vs. Local News Controversy," *Newspaper Research Journal* 1:3–9 (1980).

<sup>25</sup>Charles M. Kinsolving, "An Ad Revolution," *College Media Review* 24:4–6 (1985).