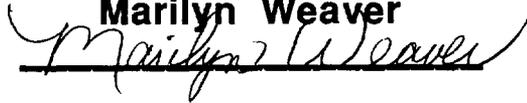# The Revolution of Informational Graphics

An Honors Thesis (HONRS 499)

by

Shelly A. Spier

Thesis Adviser
Marilyn Weaver

Ball State University

Muncie, Indiana

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The Revolution of Informational Graphics

The use of informational graphics is more than just a trend in newspapers and is therefore a topic deserving of investigation. To begin, it is necessary to provide a definition of the term informational graphics.

Peter Sullivan says that, "Information graphics exploit any combination of drawings, words and photographic image to create a visual means whereby news and feature coverage is extended in order to help the newspaper reader towards a fuller understanding of the words on the page" (Sullivan, 1987, p. 8). This simply means that informational graphics uses visually stimulating icons to give the reader clear and quick information about a newsworthy topic.

Infographs may be as simple as pie or bar charts, or as complex as a multi-faceted graph which includes original icons, text boxes and informational blocks. The graphic must tell, support or supplement a story. Their necessity in newspapers today is as simple as the fact that sometimes information transmits best visually, not verbally.

Research has dated one of the first graphics to be a map of an Egyptian gold mine which was drawn in 1320 B.C (Sullivan, 1987, p. 9). It is a fact that symbols were used long before the written alphabet. The creation of symbols by the early civilizations used much ingenuity in order to maintain and develop individual identities.

Another example cited by Sullivan of early graphics is the discovery of a family tree diagram. Research has dated this particular graph to the 9th century (p. 9).

"The symbolic element indicates the message; words only refine the meaning," Sullivan said in reference to the history of graphic symbols (p. 9). In the distant past many problems arose when trying to record the written word, therefore graphic symbols were developed. The written symbol was found to last longer than spoken words. It is difficult to study history before recorded symbols.

Following the introduction of printing, a dramatic growth in the quantity and quality of informational graphics is recorded. The first published statistical diagrams are found in William Playfair's *The Commerce and Political Atlas of 1786.* These consisted of simple bar and pie graphs. Yet, many years went by before the introduction of graphics to newspapers.

Many newspapers have only recently overcome their fear of graphics, and currently design in news is slowly becoming second nature. Still, earlier generation editors hold the perception that graphics is all flash and no substance. It can be predicted that soon these opinions will evolve.

Deciding the need of an informational graphic can be simple if the following questions are addressed: does the story give rise to a question that could be answered visually; is the story complicated; or, is there a chronology or sequence of events?

It is also necessary to ask questions during the creation of an infograph. A fine balance must be struck between conveying the main point of a story and providing more information. This balance can be found by asking what the main point is that the graph will communicate, what is the best way of visually conveying that information, can it be done with the resources available and if it can it be completed in a reasonable amount of time.

Of course, the goal of an informational graphic is to make facts easy to

read and understand, but the creation of these illustrations can be a complex task.

The graphics process can be broken into five steps: 1) gather information from reliable sources; 2) write and draw the graphic as you would write a story; 3) edit; 4) edit again in the graphics department; and 5) keep in touch with the artist as the graphic evolves.

Informational graphics is not art, but journalism. Data should not be distorted to make a pretty picture. Journalistic graphics show facts in a way that words or pictures could not do alone. Editors are beginning to agree that, "One part content and one part design can truly add up to three in journalistic communication" (Fitzgerald, 1984, p. 14).

A very important part of the graphic is the sidebar. The sidebar is usually specially packaged and accompanies a bigger story. It should be an entertaining alternative which adds extra reader appeal to any story (Harrower, 1991, p. 147). Types of sidebars include lists, quizzes, quotes, fact boxes or glossaries.

As stated earlier, there are many different kinds of graphics. The three most simple graphics are line, bar and pie charts. Line charts measure changing quantities over a period of time. Bar charts are used to compare two or more items by sizing them as columns drawn side by side. Pie charts compare the parts which constitute a whole. These graphics can be very simple, or may be combined and altered to be complex.

Many resources provide tips for building better infographics. Some of their hints include making a sketch before using a computer, including the basic elements of headline and source, developing a personal artistic style,

not cluttering editoral information with art, labeling each element carefully and clearly and being cautious when adding color to a graphic so that it doesn't overpower the message.

Graphic designers are becoming more expressive in news values and judgment and are no longer considered to be extras and dispensable. Their goal is to make pictures tell a story. Graphics people need to be understood as news people, because their productions are factual and not just art.

Cute graphics, like cute writing, have no place in today's newspaper. Graphics should have a beginning, middle and an end.

Also, many small newspapers still rely on clip art to decorate their pages. Excessive clip art use makes the appearance of a publication very unprofessional.

Currently, the most adopted technique of informational graphics is the color weather map. Even if the paper does not use color, the weather map has become an essential element.

"These are the glory days of informational graphics and there is no end in sight," said Howard J. Finberg, assistant managing editor of the *Arizona Republic*, in summing up the role of informational graphics in newspaper's today (Garneau, 1989, p. 44).

A survey of the American Society of Newspaper Editors concluded that graphics will play a bigger role by the year 2000, regardless of newspaper size (Garneau, 1989, p. 44).

J. Ford Huffman said that, "Any newspaper has one purpose: to make the paper easier to read. Newspapers are a visual medium: graphic design in journalism is not decoration, it is a way to tell a story" (Sullivan, 1987, p. 97). If graphic design and informational graphics are tools which make the

newspaper more readable, then it is inevitable that graphics will be more frequently used in the future.

As stated by John Sherlock, graphics editor of *USA Today*, "It is necessary to 'think' graphics because they are important now and are getting more important as the news hole shrinks."

The advent of the computer age is also believed to be increasing the use of graphics. A personal PC computer with graphic software is currently the most often used and the most powerful tool (Sullivan, 1987, p. 99).

The most common computer in newsroom art departments is the Macintosh, produced by Apple Computer (Harrower, 1991, p. 145). Other systems, such as the IBM are also popular choices. Computer graphic technology is constantly changing and improving, and it is important to a publication not to be left behind.

Informational graphics has produced a new breed of visual journalists (Garneau, 1988, p. 44). But, according to Finberg, "To achieve the quality of informational graphics that we strive for and that readers deserve, all journalists need to break through the barriers that separate visuals and words and look at the presentation of information as the ultimate goal of any newspaper (Garneau, 1988, p. 44). Many editors seem to be in agreement with this statement.

Editors have begun to recognize infographics as a new way of attracting and keeping readers, which is the purpose of a newspaper. Graphics can relieve the burden of information from reporter's copy and make the whole package more palatable to the reader. Increased readership is directly related to increased revenues for the paper.

Graphics are not just a fad, but then again graphics are not the answer

to all design problems. Some believe there is a dangerous trend in the uniformity of design (Fitzgerald, 1984, p. 14). Not all newspapers should try to become clones of *USA Today.*

Total integration of reporters and designers is years away. Reporters need to understand how important graphics are to their story and designers need to understand how important headlines are to design (Garneau, 1989, p. 14). Graphic designers are journalists.

Also, the globalization of communications and publishing will increase the use of informational graphics. Representative icons are easier to comprehend than foreign words. We are becoming a global society, and communications will begin to value the use of any tools which may bridge its gaps.

The revolution of infographics in newspapers is still growing, and will continue to grow. The development of desktop publishing, personal computers, global communications and the desire for increased readership of newspapers are only a few of the factors which will aid in their destined advancement.

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Methodology

My studies in the Honors College have been both challenging and fulfilling, and the thesis project was an excellent conclusion. The opportunity to research a topic of personal interest was welcomed during my senior year.

I chose to research the topic of informational graphics for several reasons. Being a journalism student it is necessary to be aware of new innovations and developing styles. Also, I did not have an opportunity to study this topic as extensively in required courses as I would have liked to. Graphics themselves are not a revolution, but their news value in publications has only recently become realized.

I began the project by choosing to develop my own informational graphic; thereby, not only learning the process through research, but also through practical experience. I decided to design a graphic about some of the construction projects on the campus because they are visible to the public, yet not much information is actually known. I chose to use a data map to give numbers and statistics in an organized and easy to understand manner.

I contacted several offices and people before I finally found someone who would give me access to the records necessary to develop my graphic. The

information I found during that search was not very detailed, but enabled me to focus on a few of the major projects.

Next, I had to re-teach myself the MacDraw software program on the Macintosh computer system, with the aid of my adviser. After completion of the informational graphic, I now feel very proficient with the program.

The graph I produced is the result of much hard work. I learned how important every detail of the graph can be. For example, all text boxes should be the same size, including the opening of the arrows into the box.

During this time, I was also doing library research on the topic. Information was difficult to find, as informational graphics in newspapers is a recent trend. My adviser provided me with many valuable sources not found in Bracken Library.

My research paper is a concise summation of much of the information currently available on the topic. It provides the reader with a broad overview of informational graphics.

I feel that my graphic is a clear summation of a few of the highly visible construction projects on the Ball State campus. All unnecessary graphic elements and clutter were eliminated, and the informational graphic's message is clear.

Completing this project has taught me of the history of graphics, importance of informational graphics to today's newspapers and the proper steps for the development of infographs. The project was both a challenge and an enjoyment to complete.

Just A Glimpse: BSU Under the Hammer

Ball State University undertook approximately 150 individual projects during 1991. Just the seven bids highlighted in the graph cost over $1,812,873.

BSU is contantly under construction and renovation. Mark Keever, purchasing coordinator of the physical plant, said that the university solicits bids from hundreds of companies and always chooses that which is the lowest.

Each phase of remodeling is bidded out to prospective construction companies. For example, a single bidder does not complete all of Lucina, but individual parts, such as asbestos removal or ventilation upgrading. Therefore, it is difficult to arrive at a dollar figure spent on a single building.

Millions of dollars is spent annually to both restore and remodel campus buildings, as well as the undertaking of new construction.

Irving Gym
Parking/Service Drive
$426,464--Eden Enterprises

Petty Ave.

Neely

Robert Bell Building

Architecture Building

Whitinger Building

Cooper Science Wing
Ventilation System Modif.
$659,250--Apex Vent.

Ball Communications

Bracken Library

Fine Arts
Exterior Rehibilitation
$174,978--Atlin Construction

Emens Auditorium

McKinley Ave.

West Quad
HVAC Modif.-Rstrm Upgrade
$203,500--Oberle & Assoc.

Teachers College

Riverside

North Quad

Arts Terrace
Masonry Restoration
$165,402--Atlas Construction

Administration Building

Burkhardt Building

University Ave.

Lucina
Abestos Removal
$37,900--Star Environmental

Student Center
Installation-East Parking Lot
$147,379--Midwest Concrete