The Visual Communication Division of the proceedings contains the following 7 papers: "Photography Editors as Gatekeepers: Choosing Between Publishing or Self-Censoring Disturbing Images of 9-11" (Renee Martin Kratzer and Brian Kratzer); "Jane Campion's 'The Piano': The Female Gaze, the Speculum and the Chora within the H(y)st(e)rical Film" (Jaime Bihlmeyer); "Newspaper Photo Editors' Perceptions of Women Photojournalists" (Ken Heinen and Mark Popovich); "Sex Appeals That Appeal: The Moderating Role of Women's Sexual Self-Schema in the Accessibility of Sexual Constructs in Memory" (John Davies, He Zhu and Brian Brantley); "Perceptions, Exceptions, and Stereotypes: Visual Representation and the 'Monster's Ball'" (Yolanda R. Cal); "Visual Components of Source Credibility for Non-Profit Organizations on the World Wide Web" (Linda Jean Kensicki); and "Evaluating Animated Infographics. A Step Towards Multimedia Research: An Experimental Approach" (Klaus Forster, Sabine Stiemerling and Thomas Knieper). (RS)
Photography Editors as Gatekeepers: Choosing Between Publishing or Self-Censoring Disturbing Images of 9-11

By
Renee Martin Kratzer
Doctoral Student
School of Journalism
University of Missouri
Columbia, Missouri 65211
(573) 884-6753 (office)
573-256-5400 (home)
kratzerr@missouri.edu

&

Brian Kratzer
Master’s student
School of Journalism
University of Missouri
Columbia, Missouri 65211
573-256-5400
bkfc9@missouri.edu
Photography Editors as Gatekeepers: Choosing Between Publishing or Self-Censoring Disturbing Images of 9-11

Staff photographers working for wire services, photography agencies, and editorial publications produce hundreds of images each day. One of the newspaper photography editor’s duties is to sift through this volume of images and choose the best ones for publication. This decision-making process can become difficult when the images contain graphic or disturbing content. On September 11, 2001, photography editors nationwide had the challenge of editing hundreds of photographs that documented the terrorist attacks in New York City and Washington, D.C.

Journalists and bystanders in these cities captured the horror and mayhem of that day. Faced with this monumental breaking news story, photography editors had to choose which of these photographs to print and which ones to withhold. This qualitative study focuses on the decision-making process of 22 photography editors at newspapers across the nation who played a role in choosing which images were appropriate for publication and which images best communicated the destruction and devastation of the day.

Theoretical Framework

Editors have been called “gatekeepers” because they possess the power to choose which stories pass through a “gate” to be consumed by readers while others are held back. In the classic gatekeeping study, White (1950) wanted to know why editors decide to publish some stories and not others. To find out, White had one newspaper wire editor, called “Mr. Gates,” keep a record of all the stories available to him from three wire services during one week. Mr. Gates recorded
his reasons for not publishing the rejected stories. White concluded that many of Mr. Gates' judgments were subjective and based upon his personal values (White, 1950). Snider (1966) replicated the study 16 years later using the same Mr. Gates and discovered that the news stories chosen represented a better balance among story topics, but that the news judgments Mr. Gates made were often based on his personal values. This latter finding is consistent with the original study.

Stempel (1985) used the gatekeeper theory in his study on how editors choose individual stories as well as a mix of stories from different categories, such as politics, economics, etc. His sample included three elite newspapers, two state newspapers, one national newspaper (USA Today), and three network newscasts. Stempel focused on the newspapers' international and national news published on page one, plus the broadcast news stories. He found agreement between the mix of story topics that were included, but disagreement on the specific stories that were published or aired (Stempel, 1985).

A single gatekeeper does not always make the final decisions about what news should be communicated to audiences. A study by Berkowitz (1990) focused on a network-affiliated television station and discovered that a group of people and not an individual producer decided which news stories should air. Using observations and interviews, Berkowitz also learned that the journalists based their decisions on instincts rather than textbook news values.

This study applies the gatekeeper theory to photography editors in order to gain insight into their reasoning for publishing or withholding images that contain disturbing content of the September 11, 2001, tragedy. Among the many photographs taken that day are images revealing the desperate situation of people trapped in the burning towers (Figure 1). In these photos, people hang out the windows looking for help. Faced with the possibility of burning to death, some
people made the decision to jump; others lost their grip and fell. With a click of the shutter, photographers froze these horrific falls in mid-air (Figures 2-3). These photographs captured people in their final desperate moments directly preceding their deaths. How did photography editors make the decision about whether these images should be published?

**Editing Dilemmas**

The debate over whether to publish disturbing photographs is not new, and there has been some research published on this subject. One study focuses on photographs showing the death of Chris Hani, secretary-general of the South African Communist Party. An image showed “blood spilled over the bricks around Hani’s head, his tongue hung between his teeth and a bullet hole was visible in his jaw. Editors debated how to walk the narrow tightrope between news and sensationalism, between reality and tastelessness” (O’Dowd, 1996). Some editors self-censored the image because of its graphic, shocking nature, but the image ran in two African newspapers. One editor said he chose it specifically for its shock value because “we needed to shock the nation a bit and deliver the story to them as blatantly, as raw, as it was, and this was the best we could do” (O’Dowd, 1996).

Using the shock-value of a photograph as a justification for running it may not be effective because the more shocking images that readers view, the less these images will affect them in the future. Susan Sontag writes in her book *On Photography* that “an event known through photographs certainly becomes more real than it would have been if one had never seen the photographs – think of the Vietnam War. … But after repeated exposure to images it also becomes less real” (Sontag, 1973).
Although there is not a large amount of studies on the ethics of publishing shocking images, the ones that have been conducted provide some insight into the arguments for and against publication. Lesley Wischmann (1987) discusses the ethics of publishing the Pulitzer Prize-winning photograph of the shootings at Kent State. Wischmann is close to the mother of Jeffrey Miller, the young man who was shot by a National Guardsman and died. The author raises issues with privacy. "When one has the misfortune to die in public, privacy rights evaporate, suspended by that slippery public right to know. I believe that is wrong. Everyone should be entitled to the privacy of his or her own death" (Wischmann, 1987).

Other Pulitzer Prize-winning photos don't just show a dead body but document the actual murder. Sue O'Brien (1993) looked at the reasons Associated Press newspapers decided to run Gregory Marinovich's photographs of African National Congress sympathizers killing an accused Zulu spy. O'Brien says that when deciding whether or not to publish offending images, the following question should be asked: "If the photograph violates principles of compassion or taste, does its social or news value outweigh the other values it violates?" The researcher examined 57 U.S. and Canadian newspapers that were members of the Associated Press to determine if these newspapers published photographs of the murder. The results show that 24 newspapers ran images of the victim being burned or stabbed, and 17 newspapers showed the victim in a less violent image. Sixteen newspapers didn't run any of these pictures. Interviews with 28 of the editors revealed there was no single rule governing the decisions. Some rules included the "breakfast test," which gauged whether certain coverage will ruin readers' breakfast, and a "distance test," which looks at the victim's proximity to the community. Other editors said the photographs were too graphic to publish (O'Brien, 1993).
To see whether readers and editors agree on making these ethical decisions, Craig Hartley’s (1983) study presented readers and photojournalists with 19 hypothetical ethical situations and asked for their judgment. His hypothesis was that the two groups’ ethical judgments would differ significantly, and this was supported in 17 of the 19 cases. This study reveals that readers and journalists have different ethical values and also highlights the need for journalists to explain their reasoning to the public.

A more recent study that looks at reader response to ethical dilemmas in journalism focused on the feature “You Be the Editor,” which ran in The Montreal Gazette (Raudsepp, 1999). The feature included 10 ethical dilemmas and asked the readers to make a decision. The researcher looked at the responses the readers sent in. Although this study suffers from having a self-selected sample of participants, the findings are still interesting. In 20 percent of the cases, the readers made different choices than the editors (Raudsepp, 1999). In cases that dealt with the issue of privacy, the editors were more likely to publish the photographs than the readers. “Quite clearly, readers tend to be more protective of privacy than editors, who, after all, make their living by disseminating information” (Raudsepp, 1999).

Print journalists aren’t the only ones struggling with these issues. Broadcast journalists also have to make decisions on what’s appropriate for the audience. When R. Budd Dwyer, Pennsylvania’s state treasurer, shot himself in the head at a press conference, many videographers caught the moment on tape. A case study revealed that 16 of the 19 stations chose not to air the video (Parsons & Smith, 1988). The researchers conducted telephone interviews with 19 news directors or news producers at stations in Pennsylvania to examine the decision-making process and rationales for airing or not airing the video. Journalists deciding not to air the video said that the graphic nature of the content wasn’t appropriate for television. Those that
did air the footage argued that it was newsworthy. The researcher comes to the conclusion that the journalists weren’t faced with an ethical dilemma in this case because many of them made the decision swiftly and without confusion.

Another study looks at the effects graphic images have on people’s recall of crime stories. Study participants watched crime news footage, with some assigned to see the visuals without the audio, and some exposed to both (Artwick, 1996). After the viewing, the students were asked to write down the pictures they had just seen. The expected results were that viewers would remember the images judged as most compelling; however, this happened for only two out of the eight total shots. The visuals that were recalled the most were close-up shots of faces, visual images that were rated low among the most compelling images (Artwick, 1996). For the most compelling images, audio did not aid recall. While this was one study with only 77 subjects, it does raise questions about the appropriate use of compelling images if these images don’t even create a lasting impact on viewers’ memories.

This study explores the following questions: How did journalists make the decision whether or not to publish disturbing images of the September 11, 2001, terrorist attacks? Why are these disturbing images important to publish? Did the newspapers’ proximity to New York influence the editors’ decisions for publishing the photo? Did the newspapers receive reader feedback about these images? Who serves as the final gatekeeper in choosing photographs for publication? Are these decisions made by a single gatekeeper or by a group?

Methodology

While many images from September 11 are emotionally upsetting, this study narrows the focus. The term “disturbing images” is operationalized as photographs that show people trapped
in the upper floors of the World Trade Center towers or people jumping or falling from the World Trade Center towers. To discover which U.S. newspapers published these images, a search of newspapers from September 11 and 12, 2001, was conducted. The newspapers were gathered from three sources: a university's special collection, the discarded entries from a photography editing contest, and the authors' personal collection. This wasn't a comprehensive search of all the newspapers published in America on those dates, but rather a search of the available newspapers.

Drawing upon the resulting list of publications that ran these disturbing images, 20 newspapers with circulations larger than 75,000 were selected from four different regions of the United States. Choosing newspapers from different locations allows the researchers to discover if proximity to the event influenced the decision to publish the photos. The United States Census Bureau map was used to determine the four regions. Four newspapers that published these images were chosen from each of the four regions for a total of 16 newspapers. To understand the reasons why some photo editors withheld the photographs, four newspapers that did not publish the images were also chosen, bringing the total to 20 newspapers.

In the process of conducting the interviews, two newspapers had photo editors who were unavailable, so two different newspapers were chosen. However, both of the photo editors who initially were unavailable ended up calling back and participating in the study, so the final total of newspapers in this study is 22. Five are from the East, eight are from the Midwest, five are from the South, and four are from the West. The newspapers are all located in large cities and

---

Photography Editors as Gatekeepers

have Sunday circulations of 80,000 for one newspaper, 100,000-499,999 for 14 newspapers and 500,000 and above for seven newspapers.

In-depth interviews were conducted with photography editors who were involved in selecting images for the September 11 and 12 newspapers. In this study, "photography editor" refers to the person who was involved in the final selection of images on that day. The actual title of participants vary and include managing editor for photography and graphics, director of photography, deputy director of photography, picture editor, and staff photographer. The participants were assured anonymity in order to obtain candid responses. Each editor was asked a set of questions, but the format of the interview process allowed for answers to be explored in detail. Preceding each interview was a question asking the participants how well they could recall the editing decisions they made on September 11 and 12. All participants said that they could, with many indicating that the day is etched into their memory. The interviews were recorded, and the transcriptions were analyzed for the results.

Debating the Decision

Among the newspapers that published the disturbing images, some staffs had long discussions about the ethics of printing the images while other staffs didn't discuss it at all (Table 1). For the latter newspapers, the decision to publish was made quickly. "No one really questioned much of what we were going to run. There weren't that many discussions that this was going to upset people. I think the event itself upset people," said a photo editor from the East. Another said the decision was simple. "There was not a great deal of hand-wringing. It was clear that this was a big story with powerful photography, and we did not want to hold back in
that effort, so it wasn’t as though we went through a great deal of soul searching on each photo,” said a Western photo editor.

Other staffs found the issue more complex and engaged in debate about whether the images were too shocking to print. The sheer horror of the photographs served as an argument both for and against publication. “I think after we looked at thousands of images, the flood of powerful imagery was so overwhelming that there was little or no doubt to not protect the public from the reality of the situation.” Many editors agreed that readers shouldn’t be shielded from the truth and chose the disturbing images precisely because the scenes are so horrific. One Midwest editor said: “The horror of the event and the magnitude just demanded that you get that across in a very forceful and powerful way. I can’t imagine what was going through those people’s minds as they’re trapped inside the Trade Center. And think of all the bodies, the people jumping to their inevitable deaths. What was going through their heads when they looked at everything around them or looked at the 100 stories beneath them? And to think that was their best escape. I just can’t fathom the horror, and I think that gets that across in a way that if you didn’t show it, people would recognize it as being a terrible thing, but when you have the image before you, it just helps convey what was really going on that day. You can’t not run a picture like that.”

Some of the questions brought up during the debates concerned whether the victims in the photographs could be identified, the response of the readers, and the ability of the images to contribute to the overall storytelling about the terrorist attacks. The storytelling reason is why many of the photography editors said these images had to be included in the newspaper. “It was never a decision of not or want or any question. We had to run it because it told the story,” said a Southern photo editor. A few editors remarked that they normally would not run such disturbing images, but that the immensity of the attacks prompted them to reevaluate their reasoning. One
editor from the West said, “If it were a suicide or a traffic accident, then we wouldn’t show it because they are perhaps no less tragic to the individuals involved, but unfortunately, they are daily events. Something like this, I think it’s our duty to bring out the exclamation points and the visual sledgehammers so that we can tell this in the enormity of the story, as best as we possibly can.” Another Western editor said the fact that it was several people who jumped or fell, as opposed to a single person, gave the photographs more merit. He said many in the newsroom were shocked by the images and opposed running them. “People gasped ... They thought we were being sensationalistic and they said, ‘I can’t believe we’re going to run this picture,’ so we discussed it yet again. And what we decided was since it wasn’t just one person that jumped that it was a number of people, we had an obligation to run the picture.” Others believed that the images would prompt readers to imagine themselves in victims’ situation, allowing them to relate more fully to the event. “Every person that saw them could immediately identify with the choice of having to jump rather than die in the flames. So, our hearts sank when we saw those photos. That, maybe more than any of the other photos, brought it home to me as to how horrific that must have been that day,” said a Midwest editor.

The four newspapers that didn’t publish the disturbing images wanted to shield readers from photographs they deemed inappropriate. One editor from the Midwest said, “We felt there were so many other photographs that could illustrate it without being so graphic.” Another Midwest editor said that he talked about the images with the photography staff and decided not to present them as options during the budget meeting. “There was no debate. I think we just felt we knew what our audience was, and it wasn’t what they would be tolerant of. .... I think just about anything you took out of that event was strong enough to get the point across. I don’t think you necessarily have to have people falling out of the building.” One Southern photo editor did
propose the images to his managing editor, who made an immediate decision. "I basically said, 'I think we need to run this,' and he said, 'We'll never run that,' and that was about the end of it."

The fourth newspaper in this study that declined to publish the images spent more time debating the issue. "We kind of thought it out both ways - run it, don't run it, would it contribute to the story, what would the reader pull away from that or bring from that," said a photo editor from the South. "It was a real gut call. It was real close. We thought it was a little bit more than our newspaper audience could stomach. It came down to not wanting to push the readers any harder at that time. There was something about looking at those images that, especially on a still image, it set you back quite a bit."

This reaction is exactly the reason many photography editors wanted the images to be seen by their readers. "Sometimes you've got to be willing to bite the bullet and publish the image that kind of upsets people because part of our job is to record events of our time," a Southern editor said.

None of the newspapers in this study that published the images placed them on the front page; they all ran inside, with some in color and some in black and white (Table 1). Ten used the images as the dominant element on the page, and seven used them as a secondary element or smaller. The content of the images was clearly more important than other considerations, such as composition, lighting, etc. None of the editors said the basic elements of the photographs were debated; all of them concentrated on the content. Only one editor, who is from the South, remarked that the disturbing images weren't among the day's standouts. "Let's face it. It wasn't one of the most dynamic photos of the day ... But was it one that helped tell the story? Absolutely."
Proximity

The question of whether newspapers' nearness to the event influenced the decision to publish the disturbing images brought mixed responses. Twelve said it had no effect on the images they selected; in other words, the decision to publish the images was not based on whether they were close to New York City or whether New Yorkers were among their readers. A Midwest editor referred to the axiom that the farther away you are from a tragedy, the more graphic the pictures that get published can be, but he said this didn't apply to the terrorist attacks. "In this particular case, that doesn't have any merit at all. This was an international tragedy of the highest scope."

Ten participants said proximity was a factor in their decision-making. Several made comparisons between selecting pictures of the terrorist attacks to choosing violent images from the Middle East. "Because it happened domestically, you didn't feel the distance from the story that maybe you did from, say, the Middle East where we've almost just become numb with the bombardment of images. It seemed like every photo seemed to offer something different. I mean, they all hit home," a Midwest editor said. Another editor from the same region said that his newspaper's decision not to run the disturbing images was based on the values of the readers in that area. When referring to readers, several participants said they would have to think twice about choosing the disturbing images if the tragedy had occurred in their own community. "It would have been a different thought process whether we would have run it or not. I think we're all more conscious about affecting people in our community, where we might possibly know the person falling, as opposed to some nameless person in New York," a Midwest editor said.
fact, one newspaper from the East that is in a state near New York did not publish the disturbing images because of their nearness to the site of the tragedy. "I think if we had been on the West Coast or the Midwest, we would have run it. The fact that it might have been one of our readers jumping to their death, falling to their death, is what kept us from running it." However, the two newspapers in this study closest to the site published images of people falling and said that their nearness to the tragedy did not influence their decisions at all.

Some newspapers immediately sent their own journalists to the scene, which was made more difficult because of the ban on air traffic. One newspaper in the West had three photographers drive across country to New York. Newspapers from the other regions also had their own staff photographers scramble to the scene to provide coverage and lessen the newspapers' reliance upon the wire services and photo agencies.

Reader Response

Nine editors reported that they had not received any feedback from readers regarding the photographs. One editor attributed this lack of reaction to the fact that readers had already seen many of the same images on live television. Others said the entire day was so full of horrific events that the images of trapped or jumping victims didn’t stand out as much. A Southern editor sums it up: "I expected much more of a fervor from our public, and I think we didn’t just because so much had transpired. If you were to take September 11 away and run that picture, there would be a groundswell of people upset. But put it into context of events of the day, and all of sudden, I don’t want to say it was minor, but it wasn’t the big issue I expected it to be."

Nine others reported they had some feedback, but five said the feedback was minimal. Out of the remaining four newspapers that published the images, two said they received mixed
responses, but the other two said they received negative feedback. “People were really upset. They didn’t see any reason for us to run that. I think the nature of the image and the size certainly didn’t help any as far as they were concerned,” says an Eastern editor whose newspaper ran a photograph of people jumping as a dominant color image on an inside page. He said that a story exploring the reasons why people may have chosen to jump from the towers ran a few days following September 11 and helped to “soothe the readers.”

Two photography editors at Eastern newspapers were not expecting the strong reader reaction the photographs sparked. The readers didn’t contact the newspapers to complain, but to ask for copies of the photographs to be enlarged so that they could try to determine the identity of the victims to see if they were their missing loved ones. One photography editor said: “I spoke personally with many, many people that first week and the weeks following who had tragic, just excruciating stories about family members who called to say, ‘Is there anything that can be done to help us identify people in these pictures? We haven’t seen our father, brother, uncle in a few days.’ I had many conversations with people who were grief stricken and desperate for any hope or any access to any kind of information, and I was really moved and horrified that people had to go to the extreme. And there was nothing we could do. We couldn’t tell who anybody was. We tried different ways of opening the pictures in Photoshop and studying them and enlarging and shrinking them. Other than sort of bright colored clothing, there were no identifiable features that we could ascertain.”

Another photography editor in the East had a similar experience. Photography staff members enlarged the photographs of people trapped or jumping and sent copies to all the people who requested them, but the images became so blurry that identifying people was not possible.
They were upset, but they also wanted closure for themselves. This is how their loved ones died. Unfortunately for us, we were unable to help them,” the photo editor said.

This unexpected response from readers who lived near the tragedy shows that editors’ concerns about invading the privacy of the victims were not shared by many of the victims’ families. One of these newspapers that had evoked a strong reader response had struggled with the privacy issue. “There were enormous discussions going on about was there any possibility of being able to identify anybody. We were very clear to make sure that no one could identify anyone based on what we published, and that was providing a level of privacy and a modicum of respect for people’s grief.” Ironically, many readers wished the identity of the trapped and falling victims were identifiable. Some newspaper editors across the country may have made the decision to self-censor the disturbing images out of concern that the bodies were identifiable and would invade the person’s privacy. The failed efforts to identify the victims by two newspaper staffs show that this argument is invalid.

Who Guards the Visual Gate?

The gatekeepers who make the final daily decisions regarding photographs differ at the various newspapers. Six of the respondents said that the person in charge of the photography department makes all of the photography decisions without having to seek the input of other editors (Table 2). One of these photography editors is located in the West. Although he acknowledges that this practice isn’t widespread at newspapers, he argues that it works. “I am the photo editor. I have final say on the photographic content of the newspaper. I don’t take pictures into meetings to debate the photo editing anymore than I would expect the city desk or
the wire desk to provide a full copy of stories for me to help them edit. I trust them to do their job, and they need to trust me to do mine.”

Eleven others say that photography editors collaborate with other editors in making these calls. “It’s too important for that to be in the hands of one person or one group of people. I think there needs to be a variety of input,” a Midwest editor said. Some of these photography editors don’t believe the other people involved need to be trained in photo editing. “It would be wrong to say only picture people should be involved in making decisions about pictures. There are often larger issues as well ... It’s an interesting position to be in the middle, seeing a lot that other people don’t see, making judicious decisions about what people do see,” an Eastern editor said.

Five respondents said the final image selections are not up to them but to other editors outside the photography department. Some of these photographers said they don’t object to this newsroom structure. “I’m a strong believer in that the captain runs the ship, and he answers for whatever the newspaper does,” says a Southern editor. One Midwest editor explains that although he or she does not make the final decision, they are still an important part of the process. “The ultimate responsibility should rest on the shoulders of the editor. But the editor is only as good as the people he or she has put into a position to make decisions along the way.”

These results reveal that the person serving as the photography gatekeeper at these newspapers might not be a person with a background in photography. In half of the cases, the daily decisions are made in collaboration with others. When asked who is the person that ideally should be making the final photo editing decisions, the results don’t vary much. Nine said the decision should be up to the photography editor, nine said it should be a collaborative decision, and four said it should be up to editors outside the photography department.
Despite only half of these newspapers reporting that they collaborate with others on a daily basis to choose final images, the majority of respondents reported that this collaboration did occur on September 11 and 12 (Table 3). Nineteen of the 22 photography editors interviewed said they discussed their image choices with other photographers, designers, and editors. Only three respondents said the final decision was made by one person. In two of these cases, the decision makers were photography editors, and in the other case, it was the managing editor. What is interesting to note is that in two of these three cases in which a single individual made the decision, the choice was that the disturbing photographs would not run. This brings up the question of whether the 19 respondents who were involved in group decisions would have reached the same conclusion had they made the decision on their own.

When the respondents were asked if they agreed with the final editing decision that was made in regard to the disturbing photographs, the answer is an overwhelming yes. All respondents except for two said they would make the exact same decision in hindsight. The two people who said they did not agree with the final decision are at newspapers that chose not to publish the disturbing images. “I wish we had put it inside somewhere. I think it would have made our package a little more complete. I’m not sure we conveyed to the readers the split second judgments the people were making,” a Southern editor said. The other photography editor said if the decision had been his alone, he definitely would have run a disturbing picture.

Conclusion

Photographs have the ability to convey emotion, so it’s not surprising that photographs with disturbing content often spark a debate about whether the images are appropriate for publication. This study focuses on the disturbing images of people trapped in the top floors of the
World Trade Center or jumping or falling from one of the towers. The results reveal that the debate about running the photographs centered around five issues: the proximity to New York City, the reader response, the horrific content, victims' privacy, and the ability of the photograph to help communicate the story of the day. Although many newspapers reached the same conclusion that the images should be published, the reasons for doing so varied. This demonstrates that there is not a clear-cut rule for dealing with disturbing images and that debating the issue in a group is helpful in raising all of the issues that should be considered.

Understanding how photography editors make these decisions helps shed light on reasons why some expose their readers to disturbing images while others shield the readers from what they deem as inappropriate content. In this study, the photography editors were in a gatekeeping role when they chose whether to present the disturbing images as options for publication. If the photography editor made the decision that readers shouldn’t see the disturbing images, then other editors didn’t have the option of choosing them because they were unaware they existed. Likewise, if photography editors showed the images to others and pushed for their publication, the images might have been allowed through the final gate. In this sense, the photography editors do serve as gatekeepers. This study also found that often photography editors often are not manning the final gate – there are others who have the authority to overrule decisions. At some publications, there are multiple people at the gate, and all decisions are made collaboratively. For the September 11 coverage, this collaborative process was in effect even at newspapers that don’t normally engage in such group decision-making.

There is little doubt that photography editors will be faced with more disturbing photographs in the future. Examining the decision-making process at 22 newspapers around the nation allows for comparison on how the final decisions were reached and offers insight into the
arguments for and against publication. The decisions that were made during this difficult time can help guide photography editors faced with similar editing dilemmas.
Figure 1

Thomas Dallal *Freelance / SIPA Press*
Figure 2

Richard Drew/AP

BEST COPY AVAILABLE
Table 1: Results

<table>
<thead>
<tr>
<th></th>
<th>Publish</th>
<th>Color</th>
<th>B&amp;W</th>
<th>Dominant</th>
<th>Secondary or smaller</th>
<th>Debate</th>
<th>Proximity Matters</th>
<th>Same Decision</th>
<th>Reader Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>East (5)</td>
<td>Y: 4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>Y: 4</td>
<td>Y: 2</td>
<td>Y: 5</td>
<td>Y: 3</td>
</tr>
<tr>
<td></td>
<td>N: 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N: 1</td>
<td>N: 3</td>
<td>N: 0</td>
<td>N: 2</td>
</tr>
<tr>
<td>Midwest* (8)</td>
<td>Y: 6</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>Y: 5</td>
<td>Y: 4</td>
<td>Y: 7</td>
<td>Y: 3</td>
</tr>
<tr>
<td></td>
<td>N: 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N: 2</td>
<td>N: 4</td>
<td>N: 1</td>
<td>N: 3</td>
</tr>
<tr>
<td>South (5)</td>
<td>Y: 4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>Y: 5</td>
<td>Y: 2</td>
<td>Y: 4</td>
<td>Y: 2</td>
</tr>
<tr>
<td></td>
<td>N: 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N: 0</td>
<td>N: 3</td>
<td>N: 1</td>
<td>N: 2</td>
</tr>
<tr>
<td>West (4)</td>
<td>Y: 4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>Y: 3</td>
<td>Y: 2</td>
<td>Y: 4</td>
<td>Y: 1</td>
</tr>
<tr>
<td></td>
<td>N: 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N: 1</td>
<td>N: 2</td>
<td>N: 0</td>
<td>N: 3</td>
</tr>
<tr>
<td>Total</td>
<td>Y: 18</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>7</td>
<td>Y: 17</td>
<td>Y: 10</td>
<td>Y: 20</td>
<td>Y: 9</td>
</tr>
<tr>
<td></td>
<td>N: 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N: 5</td>
<td>N: 12</td>
<td>N: 2</td>
<td>N: 9</td>
</tr>
</tbody>
</table>

*Results for color and size are missing for one Midwest newspaper but will be added soon
### Table 2: Gatekeeper

<table>
<thead>
<tr>
<th>Region</th>
<th>Who is the visual gatekeeper?</th>
<th>Who should be?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East (5)</strong></td>
<td>Photo Editor: 1, Editor: 1, Collaborative: 3</td>
<td>Photo Editor: 3, Collaborative: 2</td>
</tr>
<tr>
<td><strong>Midwest (8)</strong></td>
<td>Photo Editor: 1, Editor: 2, Collaborative: 5</td>
<td>Photo Editor: 1, Editor: 2, Collaborative: 5</td>
</tr>
<tr>
<td><strong>South (5)</strong></td>
<td>Photo Editor: 0, Editor: 2, Collaborative: 3</td>
<td>Photo Editor: 2, Editor: 2, Collaborative: 1</td>
</tr>
<tr>
<td><strong>West (4)</strong></td>
<td>Photo Editor: 4, Editor: 1</td>
<td>Photo Editor: 4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Photo Editor: 6, Editor: 5, Collaborative: 11</td>
<td>Photo Editor: 9, Editor: 4, Collaborative: 9</td>
</tr>
</tbody>
</table>

### Table 3: Decision-making Process

<table>
<thead>
<tr>
<th>Region</th>
<th>Group Decision (Collaborative)</th>
<th>Single-person Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East (5)</strong></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Midwest (8)</strong></td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td><strong>South (5)</strong></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>West (4)</strong></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19</td>
<td>3</td>
</tr>
</tbody>
</table>
Bibliography


Jane Campion's *The Piano*: The Female Gaze

The Female Gaze, the Speculum and the Chora within the H(y)st(e)rical Film

Research Paper
By
Jaime Bihlmeyer
Assistant Professor
Southwest Missouri State University

Contact:
Jaime Bihlmeyer
1760 W. Maria Drive
Nixa, MO 65714
(417) 724-1054
email: jaimebihlmeyer@smsu.edu
Jane Campion's *The Piano*:
The Female Gaze, the Speculum and the Chora within the H(y)st(e)rical Film

Female specificity in narrative films is a topic as illusive and controversial as it is incredibly rich with potential for analysis and research. Particularly illusive is scholarly research on the female gaze in mainstream filmmaking. Male specificity in the movies is far less illusive and controversial. So pervasive is the male presence in mainstream film form that the term the male gaze¹ has become institutionalized in theory and practice. The female gaze, perhaps unavoidably so, eludes institutionalization². My paper presents a *glimpse* into the traces (*semios*) of the female gaze in Jane Campion's historical film, *The Piano*. Campion's filmic text creates a space in mainstream movies where cinematic enunciation intersects with the linguistic and psychoanalytical innovations of the last half century. I have chosen *The Piano* because it presents an overwhelmingly clear demonstration of the female gaze and does so within the limitations of mainstream film conventions.

In order to discuss the female gaze and the historical film, we must first examine general aspects of the mainstream movie industry and its relationship to the phallocentric hegemony.
HOLLYWOOD, THE HISTORICAL FILM AND PHALLOCENTRISM

The historical film genre is defined primarily by its representation of an earlier time period than the one in which the film was actually made. This definition consists of at least three subcategories of films: those representing reclaimed events actually documented in the historical record, those adapted from fictions originally published during a specific historical period (as in another Campion film, *The Portrait of a Lady* adapted from the Henry James novel), and lastly, a newly conceived narrative set in the past as in the case of Campion’s *The Piano*. Historical films may focus on one or any combination of these categories.

In the film industry, the great majority of films, including the historical film, construct themselves under the stylistic umbrella of the dominant mode of filmmaking. This style is comprised of production practices systematized in American mainstream movies that have originated primarily in an economy of Euro-phallocentrism in Hollywood. The terms I will use to signify this style of filmmaking are Classical Hollywood Cinema (CHC) and mainstream movies.

If we conclude that males of European descent have affected a mastery of the film industry since its inception, the dominant mode of filmmaking, CHC, necessarily privileges a phallocentric economy. Insofar as phallocentrism stems from the concept of the possession of the phallus and is rooted in traditional theories of psychoanalysis, a brief review of the Freudian canon follows. The discussion speaks to the inherent incongruity in
attempting to define or to represent female specificity within a phallocentric hegemony that runs as deep as language itself.

**OEDIPUS-MIRROR-SPECULUM-CHORA: The Decline of the Phallus**

I'd like to introduce this segment with a brief account of the usual and the uncanny (suspects). Jacques Lacan, a major proponent of Freud's theories, established L'ecole Freudienne at Vincennes in Paris, which provided a fertile ground for innovations in psychoanalytic theory. Lacan refined Freud's theories with his concept of the Mirror Phase in child development as well as with the integration of linguistics into the psychoanalytic canon. In the 1970s, post-structuralist psychoanalyst and philosopher Luce Irigaray broke with her mentor Lacan and denounced the Freudian school for its patriarchal bias. Other post-structuralist philosophers of the post-Freudian school, including Helene Cixous and Julia Kristeva, as well as Alice Jardine in America, followed suit. A brief discussion of Freudian theories leading to the innovations of these post-structuralist philosophers will shed light on approaches to female specificity in psycho-linguistic theory, arguably the most substantive analytical tool in the verification and institutionalization of the female gaze.

Freud’s writings on the Oedipal Complex describe the child’s desire for the mother coupled with the child’s acute awareness of the mother’s lack of a penis and the consequent (mortal) fear that the father, as a presence
outside the mother-child symbiosis might be the cause of the castration in the mother. For the child this signifies the superiority of the phallus/penis and results in the child's entry into the Symbolic order, that is, the cultural construct specifically (re)presented in language. This process causes the repression of the pre-lingual developmental stage and its association with the maternal semiotic. The Symbolic order privileges the father as master of the phallus since the mother is recognized as signifying biological and Symbolic lack.

Lacan posits that the child experiences the Mirror Phase (as reflected typographically and psycho-linguistically in the juxtaposition of the terms ideal ego and the ego ideal) when s/he distinguishes he/rself definitively as separate from the m/other. This developmental stage involves complex relationships of narcissism, misrecognition and alienation that lead to the child becoming a speaking subject and so subject to the Law of the Father, i.e., the patriarchal prerogative dominant in Western culture. For Lacan, the Symbolic order organizes itself linguistically and in opposition to the Imaginary, defined as the desire of the pre-lingual entity. The unconscious then is positioned as the space for the repressed residue of the imagined wholeness between the child and maternal body that the pre-lingual child experiences during the series of physical and psychical losses prior to he/r entry into the Symbolic order. The Freudian canon, however, disregards the pre-lingual maternal influence on the speaking subject in favor of language and the Law of the Father.
Luce Irigaray argues that the Freudians were derelict in substantiating the role of the maternal in sexual difference and identification. Irigaray proposes the (meta)morphosis of Lacan's mirror into the Speculum, a mirror-tool for probing the depths of female specificity. Irigaray also calls for a feminine syntax, and for women to compete with "the phallosensical homologue..." Moreover Irigaray posits that the current socio-philosophical issues regarding sexual difference and femininity amount to a new frontier in artistic and critical pursuits:

"Sexual difference would represent the advent of new fertile regions as yet unwitnessed, at all events in the west. By fertility I am not referring simply to the flesh or reproduction. (...) ...it would also involve the production of a new age of thought, art, poetry and language; the creation of a new poetics."

Linguist and fellow psychoanalyst, Julia Kristeva, also working in Paris, expanded on Irigaray's poetics. Much of her work focuses on the semiotic, and its origins in the pre-symbolic stage of human development. Kristeva's use of the word "chora" expands on the pre-lingual developmental stage Lacan calls the Imaginary Wholeness. Kristeva appropriated the term from Plato's *chora*, which possesses "linguistic connotations of an enclosed space or womb..." Martha Reineke cites Kristeva on the chora:
"It is a matter of opening, in and beyond the scene of linguistic representations, pre- or trans-linguistic modalities of psychic inscription that one could call semiotic, in recovering thus the etymological meaning of the Greek semion--trace, mark, idiosyncracy [distinctivity]. At the foundation of philosophy, before our mode of thinking was enclosed in the horizon of language understood as a translation of the idea, Plato, recalling the atomists, spoke in the Timaeus of a chora--archaic receptacle, mobile, unstable, anterior to the One, to the father and even to the syllable, metaphorically identified as nourishing and maternal."

Here Kristeva refers to the chora and its semiotic as "pre- or trans-linguistic," which I refer to as the unspeakable because it consists of expressions prior to language and therefore is excluded from the phallocentric language-dependent economy. Nevertheless, the chora produces traces or marks, i.e., "modalities of psychic inscription." Insomuch as the chora precedes the symbolic, it is also a/the nexus of lost/found desire and found/lost inscription. The multiplicity of the chora and its semiotic is uncanny. On the one hand, the chora is overwhelmingly attractive and secure reflecting the Imaginary Wholeness and the maternal semiotic. On the other hand, it is overwhelmingly terrifying in its potential for deconstructing and splitting the univocal tendency in the interpretation of the Symbolic:

"...the maternal body is the place of a splitting. Through a body destined to insure reproduction of the species, the woman-subject...[is]
more of a filter than anyone else—a thoroughfare, a threshold where

'nature' confronts 'culture.'

According to Kristeva, exploring the chora remains a threat to the stability of Lacan's Law of the Father, because the womb/chora, "a threshold where 'nature' confronts 'culture'," and so disrupts the prevailing phallogocentric systems. Kristeva's implications ascribe to woman, as the maternal body, an authenticity "more than anyone else" for existing as a "filter" for the pre-lingual semiotic. Functioning as a filter between the maternal semiotic and the symbolic order, women are privileged in terms of trans-semiotic enunciation.

The strategies for applying these positions are quite different for Kristeva and Irigaray. On the one hand, Irigaray stresses the essentialism of FEMININITY and proposes an autonomous and equal sphere of empowerment for women in a largely political articulation based on female-constructed parameters of FEMININITY. Kristeva, on the other hand, rejects the politicized construct of FEMININITY and suggests empowering FEMININITY through an emphasis on the traces in language of the maternal semiotic. The apparent ambiguities and the multiplicity that Kristeva proposes in her theories are very consistent with the inherent heterogeneity in the enunciation of FEMININITY within the Symbolic order programmed to privilege males and establish homogeneity.

The writings of Irigaray and Kristeva, are useful in the analysis of the historical film and the phallocentric functioning of the film industry at large. Both "French feminists" acknowledge the extent to which culture neglects the valorization of the maternal semiotic. Moreover,
their emphasis on the maternal semiotic in language correlates strongly with the semiotic aspects of movies beginning with the film industry's own pre-lingual developmental stage.¹⁵

UNVEILING THE FEMALE GAZE: The Female Voice in Mainstream Film

While the Freud-Lacanian sphere of influence on critical theory has led to an emphasis on FEMININITY and post-structuralism, as we see in Irigaray and Kristeva, the univocal, phallogocentric sphere of influence on the American film industry has remained. This is evident if we accept that the CHC style presents and represents the phallogocentric or male gaze.

"...a theoretical orthodoxy has arisen which declares that the cinematic look, at least in the classical film, is patriarchal and works only to satisfy the fetishistic and voyeuristic pleasure of the masculine look."¹⁶

As a reaction to the dominance of patriarchal specificity in the cinematic apparatus, a feminist imperative has arisen and made substantial in-roads in the film industry since the 1980s. The efforts of women in the mainstream movie industry have consisted primarily in establishing an articulation/voice of political activism. Strategically pragmatic, the female voice replicates the strategies of the established mode of filmmaking. The mimetic process, however, presents a homogeneous, univocal facade or (reverse) alterity, masking female/feminine specificity.¹⁷ It can be argued that to imitate an economy that is
homogenous and univocal is to reinforce and subscribe to that economy, in this case, phallogocentrism. It follows then that FEMININITY is masked over by the hegemony inclusive of the female voice that seeks to refute the phallocentric economy. The female voice in mainstream movies replicates CHC codes resulting in female-produced films that are indistinguishable from male-produced films.\textsuperscript{18}

The feminist movement in the film industry has helped establish women in controlling positions in the production of mainstream films. These positions include executive producers, owners of studios and star performers with box office clout. A stronger female presence in the film industry has resulted. Recent female-oriented devices that mirror their male counterparts include female action heroes (\textit{Alien}) and female buddy movies (\textit{Thelma and Louise}). These enhancements in the opportunities for women in the industry have functioned well in spearheading an atmosphere for the surfacing of FEMININITY in mainstream movies. This struggle has resulted in the female gaze, that is, the trace of FEMININITY that lies behind the female voice, to manifest itself in mainstream movies.

In so far as the female gaze signifies a break from the Law of the Father, by denoting the strategic deconstruction of phallologocentrism within the arts, it connotes the enunciation of the maternal. The enunciation of FEMININITY in mainstream movies therefore necessitates the unveiling of the female gaze by means of the displacement/replacement of the maternal semiotic always already repressed within the Law of the Father.
In order for the female gaze to manifest itself, a re-evaluation/re-visioning of the Symbolic order and its masking of FEMININITY must occur, if only intuitively for the filmmaker and the spectator. The emergence of post-structuralist theories on psychoanalysis, linguistics, and FEMININITY, exemplified in the writings of Irigaray and Kristeva, offers an innovative and crucial step in the re-evaluating and re-visioning process. However, the pervasiveness of the Law of the Father, with its "unconscious structured like a language" as Lacan posits, hampers the post-structuralist process in mainstream movies. Laura Mulvey in her text, *Visual Pleasure and Narrative Cinema*, references the linguistic difficulties that the enunciation of FEMININITY encounters within the constraints of the Symbolic order, when she explains:

"It gets us nearer to the roots of our oppression, it brings an articulation of the problem closer, it faces us with the ultimate challenge: how to fight the unconscious structured like a language (formed critically at the moment of arrival of language) while still caught within the language of the patriarchy."\(^{19}\)

The female gaze in mainstream movies, is not only Symbolic and very much an "unconscious structured like a language" but also pre-lingual and expressive of the maternal semiotic. The female gaze is necessarily multiplex, problematic, ambivalent and progressive in terms of its potential for deconstructing the Symbolic order. Furthermore, the female gaze poses a primal threat to phallogocentric subjectivity, a univocal and linear subjectivity, because it (re)asserts an uncanny and non-linear link to the repressed pre-
(and extra-)lingual Imaginary Wholeness. If we delineate the female gaze in terms of the multiplex spirit that is intrinsic to the enunciation of m/other and the maternal semiotic, the work of Jane Campion is a(n) (in)tangible effort in the institutionalization of the female gaze in mainstream movies.

THE PIANO: An Ekphrasis

Jane Campion wrote and directed The Piano. In 1993, the film was nominated for eight Oscars and awarded three including Best Screenplay Written Directly for the Screen. These awards affirm Campion's welcome under Hollywood's deceivingly motley umbrella and her acceptance into the mainstream. Given the phallocentricty of CHC, it is surprising that the film industry has chosen to recognize a movie that is a prim(e)(al) example of the emerging female gaze in mainstream movies.

Campion exhibits a post-structuralist verve in her film set in 19th century colonial New Zealand. In The Piano she deconstructs Freud-Lacanian canon in a manner that questions and pokes fun at the self-absorption of the phallus/penis in phallogocentrism. She also enunciates cinematically the liminal quality of the m/other as well as the pre-lingual pulsations and colorful sensations of Kristeva's maternal semiotic. The integrity of Campion's vision in terms of the enunciation of FEMININITY positions her work as a manifestation of Irigaray's Speculum--affording us a glimpse of the unspeakable: the primal desires colliding/meshing with the Symbolic order.
The film takes place in the early 1800s in New Zealand. A single mother, Ada, has been obligated by her father to marry Stewart, an English ex-patriot in colonial New Zealand. A young sounding female voice-over comments that she is Ada and that she has willed herself not to speak since she was the age of six. No explanation is given and we are left to wonder if she has tapped into the power of passive aggression, and/or simply displaying an extraordinary quirk of character. The film begins its display of polysemy. Ada's chosen non-vocal state deconstructs the dominance of the spoken language in the Symbolic order and references obliquely the unspeakable nature of the repressed mother. Moreover, she and her daughter communicate in sign language—a para-linguistic (and extra-linguistic) display that connotes the lack of hearing (in Ada's case a rejection of hearing phallogocentric speech) as much as a lack of speaking—not to mention the kinesthetic visual sphere of communication involved in signing that is obliquely analogous to motion pictures.

The tension between Ada's semiotic inclinations and Stewart's Symbolic order is highlighted from the beginning. Ada's one passion—far exceeding her attachment to speech and Symbolic subjectivity, is to play her piano. Her musical penchant references the maternal semiotic as per Kristeva who posits that musicality in language and the arts represents traces (semios) of the chora. Stewart, Ada's contract-husband, meets the mother and daughter on the beach in New Zealand where they have been crudely deposited by burly seamen. Much to Ada's consternation, and against her protests, Stewart decides to abandon her piano on the beach. Ada pines away for her piano.
Later, Stewart marries Ada on a rainy day. Campion painstakingly shows Ada getting fitted with her white wedding gown over her dark dress. Later Ada is led to a photographer's backdrop out in the pouring rain. She wears her wedding dress, analogous to a veil in this instance, sloppily in place over her stark attire of everyday. The emphasis on Ada's costume is a critical reference to the female masquerade. The gloomy, claustrophobic scene ends with an extreme close up shot looking from the position of the camera lens towards the/aperture as the eye of the photographer appears and then is ousted by another male eye asserting itself at the opening--this latter eye appears to be Stewart's. Stewart and the male photographer before him are comfortable with scopophilia--the male desire in observing sexual difference from a safe distance. Curiously, we are not shown Stewart's POV back out through the lens. Surprisingly, Campion retains Stewart's eye on the screen gazing eerily back through the lens and the/aperture. In this shot, Campion deconstructs the male gaze and makes a pun of scopophilia and its mediating device, the camera and lens. She isolates the b(eye)ological apparatus of the male gaze without completing the look in the conventional way via an eyeline match (traditionally consisting of a subject's eyes glancing out of frame and then a cut to the object of that glance). Stewart's gaze, oblique and ambiguous in its isolative framing, remains unfulfilled and is being gazed at in return from the m/other side of the/aperture. It is as if Campion has positioned the spectator at the interior threshold of the chora while Stewart postures from the voyeur position, his gaze mediated by the camera.
Campion emphasizes Stewart's unfulfilled gaze in a particularly disruptive sequence of cinematic signs. And yet the disruptive force mirrors the semiotic function within the Symbolic order: Campion's emphasis on the chora in this scene brings on an explosion of connotation that furthers and displaces the narrative linearity of the movie in a tension that disrupts as much as it sutures. Campion creates a space that becomes analogous to the chora on one side of the mediating object, the camera. Moreover, the profilmic camera in this series of images is needed to capture and to frame Stewart's eye positioned at the viewpoint of the (un)known, the figurative POV of the m/other. Campion's uncanny use of the camera attaches itself to Irigaray's concept of the Speculum, the metaphorical device for probing the essentialities of the womb. In this short sequence, Campion deconstructs the male gaze at the threshold of the Imaginary, the chora, the speculum, the unspeakable. Although the maternal semiotic remains restrained within the narrative, the liminal and polysemic quality inherent to the female gaze in the cinema, is superbly articulated in this scene. The camera becomes emblematic as a device for probing FEMININITY at the liminal space. The male subject/spectator is suddenly confronted with an unfulfilled gaze and the trace of the unspeakable m/other mediated by the Speculum of the camera-inversa. The spectators find themselves in the uncanny position of the m/other probed and disavowed by the male gaze reflected in the Speculum/camera. Campion has accomplished in one or two edits an acute display of differance. Campion's filmic (de)construct draws out and highlights the symbiotic/destructive relationship between Kristeva's semiotic and the univocal linearity of the CHC narrative. But Stewart disavows non-fulfillment and the film slips back into the narrative. After his (non)glance through the
looking glass, Stewart takes his soggy place next to Ada in front of the photographer's backdrop in the pouring rain.

Not long after the wedding, Ada gathers the courage to ask her neighbor, Baines, to take her to the beach to play her abandoned piano. Baines appears to have incorporated native culture into his life, at least superficially, as the tattoo markings on his face imply. He consents to her request and, on the beach while she plays the piano through a dislodged plank in its shipping crate, he bombards her with glances in a terse, relentless manner. The emphasis of the scene is on Ada's love for her music, and we realize that Baines is attracted to her passionate abandon. By highlighting Ada's own non-transcribed music Campion references Kristeva's chora/womb filled with pre-lingual rhythms and pulsations. Richard Allen concurs stating:

"Music seems to short-circuit language and somehow evoke raw, unmediated feeling. The relation to the mother's body and a pre-rational body centered subjectivity is evoked both by the character of Ada's relationship to the piano, her music making, and the connotations that are attached to it."25

Soon after this scene, Baines requests of Stewart a trade of land for the piano along with lessons to be given by Ada. When Stewart enthusiastically agrees, Ada complains writing adamantly: "The piano is mine. It's mine."26 Steward pounds on the table stating that "We are a family now. We all sacrifice and so will you." He storms out of the room. Ada
glances sullenly into the camera abruptly making eye-contact with the spectator. Campion now plays with illusionism (the creation on the screen of an illusory world of the narrative), the hallmark of CHC. Within the univocal context of mainstream conventions, her direct glance at us, the audience, has pierced the "invisible" fourth wall (the camera lens), and so invites a jarring multiplex reading. Suddenly the narrative is arrested and we are confronted by the female gaze directed at us as we begin to squirm in our voyeuristic position--we cannot disavow the stare of the m/other as she gazes down from the screen. Separating the narrative from its illusion of wholeness threatens dissolution of the story. And yet remarkably, Campion does not fully disengage from the functionality of the narrative/Symbolic order. Strategies for interrupting and deconstructing narrative illusionism necessarily privilege the maternal semiotic exposing uncanny fissures in the Symbolic order/Law of the Father and (re)present a primary characteristic of the female gaze in mainstream movies.

Soon Ada is giving piano lessons to Baines while her daughter waits outside his shack. Baines states that he wants only to listen and to watch her play under the ruse that he will learn by observing. One day, however, after much gazing and hovering, Baines lunges at Ada's neck awkwardly landing a kiss. She jumps up and away startled from her trance at the piano. She has been stirred from her ambiguous communion with the chora. Baines quickly proposes a way she can earn her piano back. He offers her the equivalent of one white key per visit with the eventual repossession of the piano if she permits him to perform "things I'd like to do while you play." Ada circles her piano and bargains for more keys per visit. Baines concedes and the deal is made.27
During subsequent piano lessons, Baines continues to circle Ada as she plays for him. One day however, his actions go beyond social norms. He crawls under the piano then requires her to lift her skirts higher and higher. He gazes at her stocking covered legs then reaches past her elaborate hoopskirt frame to a hole in her black hose and puts his finger tip on her exposed skin. He has now explored beyond the fetish of her garments and has inserted himself metaphorically into this deconstructed portal to discover the trace of the body of the m/other. The experience alters him. His active, desire-of-the-speaking-subject diminishes as he seeks to become the object of Ada's desire, the m/other's desire. He tries to re-enact the Imaginary Wholeness, the subject/object splitting from the figurative and bodily wholeness. He performs an imitation of the repressed pre-lingual subject/object relationship. The phallus is now displaced for him--he has been transformed into an "other" than he was before encountering the m/other.

Soon thereafter, Baines displays his alterity by presenting his object-self to Ada fully in the nude--he has resituated his identification with the phallus/penis and has gained an inkling of jouissance. Baines appropriates a state of ambiguity: He feigns the active while (re)presenting the passive posture. Do we read that he is at once lost and found in multiplicity--or is he just love sick? Is love-sickness residual separation anxiety, that is, separation from the m/other? Is Baines re-staging the splitting of the subject from the Imaginary Wholeness at the mirror stage? The polysemy of his actions is consistent with the enunciation of the female gaze. By depicting Baines as transformed after tactile contact with Ada, Campion concurs with Kristeva that the source of the subject-in-process
Jane Campion's *The Piano*: The Female Gaze

is the m/other. As a subject-in-process, Baines has become unstuck from the linearity of the Law of the Father in this display of Other-than-subjectivity.

Hesitantly and matter-of-factly, Ada lies with Baines in compliance with their transaction agreement. Both are naked as Flora spies on them through a crack in the outside wall. He embraces her awkwardly as we look on with difficulty through the crack—signaled as Flora's point of view by the editing and the hand-held camera work. Campion's pun in this sequence results from her choice to give Ada's daughter the traditionally voyeuristic hand-held camera shot gazing through the crack in Baines' cabin. Campion effectively deconstructs the male gaze by attributing it to a pre-pubescent female. The handheld camera use in this shot replicates the male voyeuristic convention in mainstream filmmaking, and yet Campion clearly designates Flora as the originator of the look. Flora is too young to be actuate the desire of the adult subject. The sequence dis(play)s voyeurism at once present and absent. The (photo)play is simultaneously humorous and iconoclastic. And the object of that deconstructed gaze is the awkwardness of two naked bodies that lack: Baines lacks objectivity because the m/other (Ada) does not desire him and Ada lacks subjectivity because she is m/other—they are subjects-in-process, the one feigning wholeness in a clumsy false-intimacy, the other fulfilling her contract. Baines does coerce Ada into bed but his desire is as much absent as it is present due to his new found alterity and Ada's lack of desire. Baines and Ada have discovered intuitively the multiplex spaces beyond the univocal Law of the Father. Verification of Ada and Baines' unrequited intimacy is born out when Baines gives back the piano in dismay.
In the next scene, Stewart disciplines his step-daughter when he catches Flora mimicking the Maori children as they hug and kiss tree trunks with lewd hip movements. He makes her wash all the tree trunks with soap and water. The adult Maori’s who observe Stewart’s unease at Flora’s lascivious imitations are bewildered by his prudish admonishments. Campion’s imaging of the Maori reflect obliquely the female gaze in terms of the double bind: The Maori are colonized, objectified and co-opted by the European males. They can only mimic the colonizers in order to achieve a semblance of empowerment. Campion features two Maori: a matronly bi-lingual woman who courts Baines from time to time with lewd insinuations; the other Maori is a multi-sexual, bi-lingual male who also directs explicit sexual remarks to Baines. The bi-lingual status of both these Maori characters connotes the false empowerment inherent in the colonial double-bind of language mastery. Further, at a subtextual level, it references Kristeva’s maternal semiotic and its problematic relationship to the Symbolic order. Campion engages in the representation of native peoples as a means to further highlight the symbiotic/disruptive relationship between the maternal semiotic and the Symbolic. The noble savage speaks the European vernacular back to the colonists at once reinforcing the dominance of the phallogocentric Symbolic order as well as the concept of Euro-centric dominance over primitivism and yet paradoxically the event opens a cultural and social fissure in the Euro-centric concept of the speaking subject. When an Other culture masters a European language, the qualitative opposition between Other vs. Euro-civilization is at once subverted and validated. The filmmaker’s imaging of the Maori in this multi-lingual and trans-cultural manner not only speaks to the paradoxical symbiosis between the maternal semiotic and
the Symbolic order, but also references the double bind for the female voice and gaze in the realm of language and mainstream movies.32

When Baines sends back the piano to Stewart's house, he tells Ada: "The arrangement is making you a whore and me wretched. I want you to care for me." At first Stewart rejects the piano supposing that Baines will try to break their deal and get his land back. But Baines explains that the piano is for Ada and has nothing to do with the land deal. Once appeased, Stewart accepts the return of the piano. But he is bewildered when Ada loses her passion for the piano now that it has been returned. He sees Ada leave the house and walk to the edge of the forest outside his window. At this point Campion cuts to a full shot of Ada from behind and then dollies the camera towards Ada while craning up into the back of her head. The camera continues to dolly in to an extreme close up of the circular braids of Ada's hair. A dissolve occurs repositioning the camera to the forest. The forward movement continues gently into the foliage as the camera cranes higher. Ada's spirit has transcended from her body into the unspeakable space: the chora. The images are sublime and abject. An overflow of the maternal semiotic permeates the colony.

In the next scene, Ada walks through the forest toward Baines' house with her daughter following. At one point, Ada refuses to allow Flora to accompany her and sends her daughter back home, signing angrily. This is the first time we see Flora rejected by her mother. When Stewart finds Flora stomping through the woods alone and swearing passionately, she notices him and suddenly ends her tirade on the word "bleed..." He asks Flora where her mother has gone. Angrily, Flora answers: "To hell!"
In the meantime, Ada finds Baines in his bed supine, passive, desolate. His sensitivity to the unspeakable semiotic, his lovesickness, has discouraged him. He has no hope for her affections. He guides her to the door admonishing her for not caring. She slaps his face and sinks to the floor. As he squats beside her, she embraces him and clings to his neck. They are released to their desires, their defiling, disrupting bodily-centered jouissance.

Outside Baines' cabin, Stewart arrives. He peeks through crack in the cabin and notices Baines kneeling before Ada as she takes her clothes off. Baines reaches under the framework of her hoops, raises her white undergarments and crawls under and up into her m/other-ness. Stewart pulls himself back from the sight. Still, he remains active and pursues voyeuristic pleasures. When he returns to the peephole, Campion completes the eyeline match with a handheld view through the crack towards the interior. Baines is no longer visible under Ada's lavish undergarments. It is as if he has disappeared into Ada's threshold of m/other-ness. Campion deconstructs the voyeuristic scene with quirky humor and image play. A dog licks Stewart's hand and he brings his hand up in a daze and gazes at it distractedly. Then Stewart rubs the fluids from the dog's muzzle off his hand onto the outside wall of the cabin before continuing his gaze through the crack to the exchange of body fluids in Baines cabin.

Baines and Ada consummate their desire--both are active in an invasive, intimate close up. Subjectivity and objectivity oscillate between them like polarities of alternating current. At one point they look into each other's eyes and Baines pleads: "Whisper it." And she places her face next to his, her mouth at his ear as if whispering something to him. Is Ada
about to enter the Symbolic order figuratively through speech, or is she feigning speech and communicating the maternal semiotic? Is she accomplishing both? As depicted by Campion, the silence we observe and the mimetic gesture of Ada's moving lips indicate that an exchange beyond the Symbolic is taking place. Both lovers are experiencing the jouissance at once underpinning and destructing language. Campion has thus foiled and fulfilled Baines' plea for the spoken word from Ada. Baines and the spectator are both satisfied and frustrated with Ada's silent communiqué. Ada simultaneously complies and disregards his request. A symbiosis between the phallus and jouissance, that is, a reciprocity between the Symbolic and the semiotic, synthesizes, materializes. The multiplicity of the sequence belies, misreads and (de)(re)constructs masculinity/femininity and spectatorship.

After their lovemaking, Ada re-attaches her garments. She approaches the foreground and leans down to pick up a button that slips from her fingers and drops through a crack in the wood floorboards. It lands on Stewart who is now watching from below the planks (a most unlikely voyeuristic position). We are surprised to see Stewart there. He is supine and vulnerable now as his voyeurism appears satiated and the possibility of Ada discovering him seems for a split second inevitable. As a nexus between the illicit lovers and Stewart's surveillance of them, the displaced button brings to the spectator a pun on the fetish, Lacan's small objet a—penetrating Stewart's voyeuristic space, and creating a sight gag: at once a blatant contrivance of the cinema while presenting an illusion of narrative spontaneity. CHC, as an illusory strategy, is at once disrupted and sutured. The button rolls down his pale neck into his shirt and his fingers feel for it. The scene asserts
Jane Campion's The Piano: The Female Gaze

closure as the loose thread of Stewart's whereabouts is resolved, and yet the knowledge Stewart acquires from his clandestine whereabouts under the floor boards designates narrative irresolution: What will happen now that Stewart is privy to Ada's betrayal of their marriage vows?

Baines traipses across his cabin after Ada and asks her if she loves him while the borders of the screen resituate enclosing the frame of a small mirror on the wall that provides a surface for Ada's face as she completes her toilette. She pauses in her grooming, almost a freeze frame making eye-contact with the m/other in her own reflection. Baines insists on knowing if Ada loves him. Her eyes then wander ever so slightly inside her thoughts. With a final glance, her eyes return to the mirror. She then turns to Baines and takes up his shirt and rubs her mouth and face on his bare chest. This scene marks the beginning of the portrayal of a kind of duality for Ada that features, on the one hand, her identification with the Imaginary Wholeness consisting of the pre-lingual self-sufficient narcissism, and, on the other hand, an identification with the applied narcissism of active desire within the Symbolic order. Via image-play between lingering glances in the mirror and the display of Ada's sexual desire, Campion deconstructs Lacan's Mirror Phase, that is, the developmental stage that completes the subject's entry into the Symbolic order and the repression of the maternal semiotic. Ada does not relinquish the Imaginary, she does not repress the maternal semiotic and still she partakes of the desire of the speaking subject. Again, the multiplicity of the images belies the phallogocentric construct.
Later, Stewart surprises Ada in the jungle and wrestles her to the ground. As she struggles, he pulls and tugs at her garments. Encumbered by his groping, Ada pulls herself along the ground and the foliage around them is full of vines and supple branches graphically accentuating the birdcage appearance of her hoops. Stewart continues grappling after her attempting awkwardly to mount her on the run. Flora's off-screen voice calling out in the distance for her mother finally puts an end to this pathetic display of the hysterical, emasculated subject.

In the next scene, Stewart (re)establishes order by sequestering the unheimlich35 m/other within the heimlich structure, his house. Arms crossed, Ada stands helpless with the backside of her body reflected in a full-length oval mirror as Stewart hammers wood planks over the windows of his cabin, barricading her inside. Flora jumps on a chair near a window, places her hand on a top section that has not yet been covered and shouts: "Here, Papa." The word papa resonates because it is the first time that Flora calls her stepfather papa and it signals a rupture between her identification with her m/other and the Law of the Father. A plank goes up in that space closing little Flora in as well.

Ada's time barricaded in Stewart's cabin is depicted in an extremely sensual and tactile manner creating a reversal in the patriarch's intent: instead of a prison, his enclosure becomes the chora/womb. One night, Ada surreptitiously enters Stewart's room and caresses him provocatively as she strips him of his bedclothes. The explicit sensuality continues as Ada visits him over the course of several nights. Stewart is overwhelmed and submissive as if in shock at her sexuality and his sexual fastidiousness. One night,
Jane Campion’s *The Piano*: The Female Gaze

Stewart breaks from his apprehensions and reaches for her. She immediately draws back from him. Questions arise for the spectator. Is Ada disavowing her apparent desire? Is Ada re-enacting the uncanny and distantly familiar separation from the m/other? Stewart grasps at straws. He imagines that she desires him, and that eventually she will play her part in his household. He interprets her actions in a phallocentric manner because he cannot recognize literally, figuratively or even intuitively her m/other-ness. The spectator is also reluctant to acquiesce to Ada’s display of disruptive multiplicity. The spectator is tempted to react with disavowal at the maternal semiotic and to consider Campion’s direction obtuse even quirky and cruel. Campion laces her re-enactment of the maternal *jouissance/abjection* with the implication of the double bind: How can Ada hope to communicate the tactile, sensual and pulsating maternal semiotic to Stewart, the speaking subject, within the cultural stronghold that is the lingual constructs of the Law of the Father?

Referring to an earlier display of bodily communication in the movie, Richard Allen speaks to Ada’s "tactile form of communication" with her daughter Flora in terms of Kristeva’s maternal semiotic:

"Campion links Ada’s and Flora’s private sign language with the body of the mother when, in the liminal space of the beach between the sea (mother) and the Bush (adult desire), we spy Ada engaged in an animated act of story-telling. She communicates with Flora in her private sign language in a womb like tent constructed out of one of
Ada's hooped petticoats that is surrounded by a little mound of sand decorated with white shells no doubt sculpted by both mother and child. This scene serves as a visual figuration not only of Kristeva's idea of the chora: the container that encases and defines a body-centered "feminine" subjectivity where the child is a part of the mother's body, but of the "semiotic," non-linguistic, tactile, form of "communication" which defines it. Allen positions Ada as the m/other. He observes that Campion's work (re)presents "a visual figuration (...)of Kristeva's idea of the chora." Allen further suggests that her work also serves as a figuration of the maternal semiotic. Allen's position speaks directly to the concept of the female gaze in the movies: The female gaze is indeed a visual figuration of the chora including its semiotic.

To recap, Ada's unexpected display of sensuality towards Stewart, transforms the "homely" cabin of Stewart's into the "unheimlich" space. Even the lighting in this makeshift prison becomes a warm glow. Ada communicates the primal event via caresses and rejection. Tactile communication (re)produces the uncanny sensuality and severity previous to and inclusive of human sexuality. Directed at Stewart, Ada/Campion (re)enunciates abjection/jouissance, as if performing remedial lessons of the pre-lingual developmental stage.
In Stewart's mind Ada has made several cultural transgressions. She does not display the
lack that the Symbolic order designates for the other-than-male. She does not defer to the
Law of the Father. Moreover, Ada displays the active desire associated with the
phallus/penis. Stewart indicates to Ada that he can forget her cultural indiscretions if only
she will stay away from Baines. Ada acquiesces, so he takes down the barricades. Once
freed, however, Ada professes her desire for Baines by attempting to send him a sign,
which, paradoxically, is suggestive of castration: Ada dislodges a key from the piano and
etches upon it her words of love. However, when Ada forces Flora to deliver the piano key
to Baines, Flora delivers it instead to her stepfather. Stewart's reaction, as he explains
later, is to "clip her wings." He grabs up an ax, pulls Ada from their cabin and chops off her
index finger causing a spurt of blood to fall on the screaming Flora.

Later, when Stewart attempts to rape Ada, the maternal semiotic is brought home to him in
a surprisingly extra-lingual manner. Campion signals Ada's speechless enunciation by
means of a sequence of eyeline matches back and forth from Ada's eyes to Stewart's now
vulnerable gape as he backs away from her. Bewildered, he asks: "What?" but she does
not speak. She gazes at him with serenity. Later, with musket in hand, Stewart informs
Baines that he "heard" Ada "speak" inside his head. Neil Robinson interprets Ada's will as
sufficiently threatening to cause Stewart to declare that the dissolution of their marriage is
an articulation of his will.

"...she [Ada] retaliates with a(n) extra-linguistic threat which Stewart
later names to Baines: 'She said, 'I am afraid of my will, of what it might do, it
is so strange and strong.' Whether these words are Ada's or the voice of patriarchy's unspoken fear of women, the intimation that the patriarch might have to pay with his body for the desires he inscribes onto the woman's body is more than Stewart can stand, so he masquerades that he chooses to end the relationship ('I wish her gone. I wish you gone'), and gives into Ada's desire to be free from him.37

Previous to this scene, Campion foreshadowed Ada's extrasensory skills and its effect on patriarchal agency. Earlier in the movie, Ada explains in sign language that Flora's father became afraid when he began 'sensing' her thoughts, that is, her telepathic pulses. It is implied here that her former lover abandoned her due to his misgivings of her extra-linguistic abilities. Baines is not shown to be vulnerable to her semiotic, telepathic pulses. In fact, he seems to be liberated from phallogocentric phobias. The spectator finds it easy to collude with Campion as she depicts Baines to be, at the very least, a worthy mate. He appears to have distanced himself from the patriarchal prerogative, that is, the univocal posturing of the speaking subject.

There is an apparently fortunate outcome to Ada's telepathic address: she and Baines depart together for the mainland. They take the piano with them balanced in the middle of a narrow boat powered by Maori oarsmen. Unexpectedly, Ada makes them throw the piano over the side and impulsively steps into the coil of rope attached to the piano. She is pulled overboard. Sinking fast, she does not struggle for the longest time as if complacent in her return to the primordial ocean brine. When she suddenly, squirms, kicks her shoe off
and surfaces, Ada's voice over announces that she is surprised that her "will" has "chosen life." Despite overt signs of having survived her ordeal, covert filmic signs suggest multiple readings. These cinematic signs include: slow motion (re)presenting hyper-reality; Ada's narration exclaiming "What a death! What a chance! ( ...) My will has chosen life." enunciated as if a question; then, as Baines and the Maori grapple her inanimate body from the sea, Ada's eyes appear closed; and lastly, the camera moves up and away from the boat to a birds-eye-view suggesting that her spirit is departing. These filmic techniques indicate the deconstruction of Ada's apparent survival while suggesting a heightened, transforming experience for both the protagonist and the spectator who become one: subject/object.38 The subsequent scenes further this multiplex reading and result in a deconstruction of closure:

**THE FINALE/OVERTURE**

The film's ending is striking in its concise enunciation of FEMININITY. It is an epilogue consisting of a recapitulation of the narrative film techniques that coalesces into pronounced traces of the female gaze. The five final shots of *The Piano* are linked overtly by Ada's voice over affording the narrative an implied Symbolic closure. The implied closure of the univocal ending, however is compromised by Ada's final words. She recites a strophe of a poem while the spectator views at once comforting and disconcerting visuals. Ada's final (re)citation celebrates the abjection/jouissance venerated in a 19th century male poet's ode to the bottom of the sea39. The following discussion of the last
images in the movie serves as an overture to and a coalescence of the disparate seeming aspects of the female gaze applied to mainstream movies.

The five final shots of The Piano are as follows:

1. Close Up on Ada's hand playing the piano. The silver prosthesis replacing her index finger is ornate and prominent in the frame. 
   Ada's Voice Over: "I teach piano now in Nelson. George has fashioned me a metal fingertip; I am quite the town freak, which satisfies."

2. Medium Shot of a female whose features are veiled in a dark kerchief walks towards the camera along a white exterior wall. 
   Ada's metal finger with its leather binding clicks the wall as she guides herself along. In the background through the white lace drapes of an open patio glass door, a bookshelf with many volumes is visible. Two other such doors are visible on the wall that Ada is using as her guide. The lace curtains from these windows blow outward in the breeze like petty-coats or the lace dresses of period bridesmaids. Ada turns and walks away from the camera uttering consonants under her veil. Ada's Voice Over: "I am learning to speak. My sound is still so bad I feel ashamed. I practise only when I am alone and it is dark."

4. Continuation of (2) above. Ada is returning towards the camera along the porch wall. Baines enters from frame right and positions himself against the white wall waiting for the veiled Ada to reach him. Just as she reaches him, she pronounces the phoneme "pa" twice in sequence: "pa-pa." She pauses, and then slowly passes him dragging her hand across his chest. As she starts moving past, he lifts his hand to secure hers and a short dance occurs as he twirls her to the wall and caresses her face over her dark veil. He then folds back the black kerchief from her face and they kiss. As Baines continues to kiss and nuzzle Ada, the camera moves back from them. The piano melody in the background fades out. Ada's Voice Over: "At night..."

5. Medium shot of the ivory keys of Ada's piano under the sea. The camera pulls back and up to reveal the rope, Ada's shoe and finally Ada still attached to her piano floating above with her gowns transforming her into a giant dark balloon. The camera continues to float farther and farther away. The figure of Ada attached to her
piano becomes increasingly difficult to see until every trace
disappears into the blue saline sea of the uncanny. Ada's Voice
Over: ".../ think of my piano in its ocean grave, and sometimes of
myself floating above it. Down there everything is so still and silent
that it lulls me to sleep. It is a weird lullaby and so it is; it is mine.
'There is a silence where hath been no sound
There is a silence where no sound may be
In the cold grave, under the deep deep sea." 

(FADE TO BLACK)

In the first shot of this sequence described above, Campion image-plays with the myth of
castration undermining and highlighting its influence. Baines has fashioned a prosthesis to
make up for Ada's digital lack after her metaphorical castration at the hands of Stewart.
On the one hand we observe appearance of Ada's recovery and return to piano playing,
while on the other hand, the image of the prosthetic finger creates a quirky fetish object.
Ada's voice over refers to herself in her new life in town as a freak in the eyes of society,
which satisfies her. Ada's satisfaction is a reflection of Campion's oblique allusion to
difference, which she has cultivated throughout her film from the non-speaking Ada and
her maternal semiotic, to the deconstruction of the Law of the Father and the male gaze.
Between this shot of Ada's prosthetic finger and the last shot of her pulled from the sea, we
have colluded with the filmmaker by (co-)constructing a jump in time and space. What this
jump signifies is up for grabs despite Ada's reassuring narration. It is up to the spectator to
(re)construct meaning from this abrupt edit. Following the reassuring suggestion of Ada's voice over, most spectators will be tempted to collude with the semblance of closure.

In the second shot in this sequence, Campion deconstructs the marriage ceremony. The veiled bride leisurely marches down the aisle during a lace-strewn ceremony with the Good Book on display, if discreetly positioned on a shelf in the background. With this closing allusion to marriage, a comedy is signaled in the traditional poetics of narrative. However, since the bride is arrayed in a black veil, the spectator is confronted by a contradictory sign within this increasingly disturbing tableau. In the spirit of infinite semiosis, mortuary and religious connotations arise from the dark veil. It is sardonic and (Krist)evanesque on Campion's part to mix the allusions of marriage, death and religion. The overt peculiarity of the image is subdued by Ada's soothing extra-diegetic narration. To punctuate the allusion of marriage and death, Baines, the groom figure but in a black shirt, will soon enter the frame to lift the veil and kiss the bride.

However, before Baines walks down the aisle, the ceremony is interrupted by a cutaway to Shot 3 in the sequence. The cutaway to Flora in a garden is reminiscent of a prior scene in which Flora performs joyous cartwheels in "real time" on the beach while screeching out gleefully to her mother who is totally immersed in playing piano. This time, however, Flora is seen performing silent cartwheels in slow motion--an altered state indicated by the filmic technique reserved for (re)presenting memories and occasions of heightened realities such as fancy, hallucinations, dreams and dying thoughts. The heightened state of the entire final sequence in the film, is particularly coalesced in this playful shot. And yet once again
Ada's voice over softens the startling potential of the imagery. This time Ada's voice, still pronouncing phonemes, is a diegetic bridge over the insert of the cutaway presenting Flora's ethereal cartwheels in a garden. Again, we collude with the filmmaker who has crafted the guise of closure and yet, barely below our consciousness, we fear the worst from the eerie slow motion of Flora's cartwheels.

Shot 4 perfunctorily continues the wedding deconstruction and seals it with a kiss—not before deconstructing the Law of the Father with Ada's phoneme-play. The 'plosive' "papa" voiced under the dark veil is diverse in its meaning and tone—an indictment/conspiracy at once playful as it is clinical.

The final shot of the movie pays homage to the intertextual inclination of the female gaze. Ada's narration complements the visual of the bottom of the sea and ends with a male-originated intertext in the form of a poem about the depths of the sea. The construct of the film is itself an intertextual homage as it references traditional narrative poetics and contemporary mainstream filmmaking practices while enunciating the traces of a post-structuralist feminist discourse. The last shot, however, contains layers of intertextual punctuation many of which are communicated aurally via speech. Ada's language is suggestive of narrative closure, her poignant and cryptic musings, as well as the recited poetry from the film's chosen historical period. Ada's voice over creates multi-metaphors: she refers to silence as a lullaby (songs associated often with music to calm the pre-lingual entity); she claims ownership of the weird lullaby that is the silence of her own watery
grave; and finally, the overall sense of Ada’s identification with the Imaginary Wholeness of her final/inchoate resting place in the chora/womb of the ocean.

Within the final five shots, and based on a consistent use of these strategies throughout her film, Campion affords us an abstract for the female gaze in mainstream movies. Her strategies include deconstruction, which, for the purposes of our discussion, designates image-play and word-play of which the function is to circumvent phallogocentrism. The purpose of circumventing phallogocentrism is to (re)present the multiplicity in signification, which, in turn, valorizes the maternal semiotic enmeshed and colliding with the univocal Symbolic order. The outcome of this circumvention and its valorization of the maternal is beyond the scope of this paper, and perhaps, beyond the scope of language itself.

Filmmaker Jane Campion in her film *The Piano* opens a significant portal for the analysis of FEMININITY in mainstream movies consistent with post-structuralist feminist theory.

---

1 See the writings of Annette Kuhn, Laura Mulvey, Teresa de Lauretis and Kaja Silverman.

2 Toril Moi, focusing in on FEMININITY (See note 8 below) and the patriarchal economy, states: "Why should feminism remain faithful to the patriarchal project of gendering the world? (...) My own vision of feminism—not of 'femininity'—is for a politics that would abandon every attempt to set up restrictive ideals for female practice, be it textual or sexual. Or to put it radically and polemically: femininity is a patriarchal problem. Feminists must therefore be able to analyze the phenomenon more persuasively than any

I hope to stay within the spirit of this vision. The difficulties in establishing the concept of the female gaze in conventional theory are indicative of the controversies surrounding FEMININITY. To begin with, scholars must come to terms with the double bind in analyzing FEMININITY founded in pre-lingual human development deciphered (decoded/encoded/meta-coded) within the phallogocentric constrictions of language. The post-structuralist reflections on FEMININITY in Irigaray, Kristeva and Cixous, contribute to a revolutionary stage in human self-reflexivity signaled by (post)modernism. In the spirit of these ontological heights in the human struggle, and despite the uncanny nature of the female gaze, my paper develops a discussion of FEMININITY in mainstream movies as exemplified by the work of Jane Campion in her film, The Piano.


4 As Emma Parker so aptly explains: "In Revolution in Poetic Language (1984), Kristeva offers a psychoanalytical analysis of language and establishes a distinction between the symbolic and what she calls the semiotic. The semiotic is a pre-Oedipal, pre-linguistic realm associated with the maternal and the feminine (because at that stage in its
psychological development the child is unable to distinguish between subject and object, itself and its mother) and characterized by fluidity, multiplicity, possibility, heterogeneity, rhythms, and pulses. Entry into the symbolic, characterized by law, order, coherence, stability, and rationality, occurs at the time of the Oedipal crisis and acquisition of language and depends on separation from the mother and submission to the Law-of-the-Father. The semiotic continues to exist within the symbolic but is repressed. As the feminine principle is constantly repressed so it constantly threatens to erupt." Emma Parker, "From House to Home: A Kristevan Reading of Michele Robert's Daughters of the House," Critique 41 (2000): 153.

Based on the Lacanian concept regarding the splitting subject's recognition of the father in pre-lingual development that causes the definitive separation of the subject from its imagined self-object (m/other) and the establishing of language/the Symbolic order. This in turn establishes the phallus as the primary signifier. For the most part, Lacan’s theories support Freudian psychoanalysis including the Oedipal Complex and voyeurism from which theory on the male gaze in mainstream films has been extracted.

Irigaray: "...what a feminine syntax might be is not simple nor easy to state, because in that 'syntax' would no longer be either subject or object, 'oneness' would no longer be privileged, there would no longer be proper meanings, proper names, 'proper' attributes...Instead, that 'syntax' would involve nearness, proximity, but in such an extreme form that it would preclude any distinction of identities, any establishment of ownership, thus any form of appropriation. (...) There are also more and more texts written by women
in which another writing is beginning to assert itself, even if it is still often repressed by the dominant discourse. From my part, I tried to put that syntax into play in *Speculum*, but not simply, to the extent that a single gesture obliged me to go back through the realm of the masculine imaginary. Thus I could not, I cannot install myself like that, serenely and directly, in that other syntactic functioning—and I do not see how any woman could."


7 "Opaqueness of matter, fleeting fluid, vertiginous void between two, a mirror in which the "subject" sees himself and reproduces himself in his reflection, a shutter set up to allow the eye to frame its view, a sheath-envelope that reassures the penis about the mark made by its solitary pressures and imprints, a fertile soil to bear his seed...Never is she one, either male or female.


8 The term FEMININITY is signaled in this article with capital letters in order to reinforce the latent trace of m/otherness. This word distances itself from the male in (fe)male while retaining a residual fe(male) implication in phallogocentric terms. FEMININITY also suggests to me a quality that is independent of woman-ness, despite and owing to its origins in m/otherness. Distanced from woman-ness via the extra-gender experience of the pre-lingual Imaginary, FEMININITY is positioned outside the binary opposition of man and woman and so free to be explored without essentialist impediments.

10 Leon Roudier, in his introduction to Margaret Waller’s translation of Revolution in Poetic Language, explains Kristeva's semiotic and semiotics: "Her concern does lie within the field of la semiotique (i.e., "semiotics" as a general science of signs) but it involves a more specific domain that she calls le semiotique ("the semiotic") seen as one of the two components of the signifying process--the other being "the symbolic." While this division is not identical with that of unconscious/conscious, id/superego, or nature/culture, there are analogies here that could be usefully kept in mind. In all four instances there is a constant dialectical process at work, one that has its source in infancy, and is implicated in sexual differentiation. Such a dialectic comprises drives and impulses on the one hand, the family and society structures on the other. One difference, however, is that the semiotic/symbolic opposition as envisaged here operates within, by means of, and through language." Julia Kristeva, Revolution in Poetic Language, Trans. Margaret Waller. (New York: Columbia University Press, 1984), 4.


14 Kelly Oliver explains: "Part of what makes Kristeva's semiotic chora difficult to read is that it is not homogeneous or univocal. Rather, its meaning and function shift throughout her writings. The fact that the semiotic maternal chora is interpreted in such completely contradictory ways by Kristeva's critics might be proof of this. Kristeva claims that she is concerned with discourses in which identity breaks down. She is concerned with discourses that call up a crisis in identity. For her the discourse of maternity is such a discourse. It is a discourse that, possibly more than any other, points to a subject-in-process." Oliver, Kelly. Reading Kristeva: Unraveling the Double-bind (Bloomington & Indianapolis, IN: Indiana University Press, 1993), 48. It is this shifting and identity breakdown that demarcates the innovation of FEMININITY within the realm of the Symbolic.

15 The movies also went through a (semiotic) silent period of development—aurally and even graphically in terms of the written word. Moreover, intertitles (text) preceded the spoken word in film. Silent films dominated the industry from its inception in the early 1890s until the late 1920s. In keeping with the traces of the semiotic, film is referred to as comprising a language and yet still functions as "other" in the sense of its excesses and gaps in syntax. This last concept is implied by Teresa De Lauretis in her book Technologies on Gender: "The object of narrative and of film-narrative theory, redefined accordingly, would be not narrative but narrativity, not so much the structure of narrative (its component units and their relations) as its work and effects; it would be less the formulation of a logic, a grammar, or a rhetoric of cinema and to the establishment of film criticism as a humanistic discipline on a par with literary criticism, (....); and it would be less the description of a rhetoric of film narrative than the understanding of narrativity as the
structuring and destructuring, even destructive, processes at work in the textual and semiotic relations of spectatorship." Teresa de Lauretis, *Technologies of Gender: Essays on Theory, Film, and Fiction*. 1st ed. (Bloomington, Indiana: Indiana University Press, 1987), 118. As a structuring, destructuring, even destructive process for the spectator, narrativity and narrative film in particular is closely linked to the pre-lingual otherness of the maternal semiotic chora.


17 Irigaray's description of women mimicking the desires of the patriarchal subject speaks to the veil-like quality of the female voice that constructs a mimesis of the phallogocentric address in film. "And when she also openly displays their power fantasies, this serves as a re-creation to them in their struggle for power. By setting before them, keeping in reserve for them, in her infancy, what they must of course keep clear of in their pursuit of mastery, but which they yet cannot wholly renounce for fear of going off course. So she will be the Pythia who apes induced desires and suggestions foreign to her still hazy consciousness, suggestions that proclaim their credibility all the louder as they carry her ever further from her interests. By resubmitting herself to the established order, in this role of delirious double, she abandons, even denies, the prerogative historically granted for her: unconsciousness. She prostitutes the unconscious itself to the ever-present projects and projections of the masculine consciousness. Luce Irigaray, *Speculum of the other woman*. 1st American Edition ed. (Ithaca, NY: Cornell University Press, 1985), 141. Furthermore, Kristeva speaks to a devotion some women have to the Symbolic order as a
defense/assault against the m/other. She links feminism with this defensive strategy. In Reading Kristeva, Oliver states: "As a defense, some women devote themselves to the Symbolic order. Kristeva identifies feminism as one such defense." Kelly Oliver, Reading Kristeva: Unraveling the Double-bind (Bloomington and Indianapolis, IN: Indiana University Press, 1993), 62. The female voice in mainstream movies adheres to the strategies of the phallogocentric film industry, thereby mirroring the Symbolic order resulting in a collusion with the Law of the Father. I would argue that this apparent collusion, however, functions as a necessary step towards establishing a milieu in the dominant cinema ready for the unmasking or revealing of the female gaze in mainstream movies.

18 Exemplar films include Awakenings, Valley Girl, Fast Times at Ridgemont High, and others produced and/or directed by women within the commercial film industry infrastructure. Many of these women producers and directors continue with the same mimetic strategies resulting in similar phallogocentric productions.

19 Constance Penley, ed. Feminism and Film Theory (New York: Routledge, 1988), 58.

20 Harvey Greenberg in his article on The Piano makes note of Ada's youthful trill in her voice over. "The camera peers at the emerging world through the lattice of a child's fingers, while Ada's six-year-old voice tells us she ceased speaking at that age, and does not remember why." Harvey Greenberg, "The Piano." Film Quarterly 47 (1994): 46. It could very well be that the filmmakers raised the pitch of Holly Hunter's voice over slightly to give an impression of a six-year-old voice. It is very likely that Ms. Hunter herself, in an interpretive gesture, assumed a higher pitch.
21 "Ada is not so much unable as unwilling to speak. She suffers, or, depending upon one's viewpoint, practices elective mutism. This rare, puzzling condition usually develops in early childhood and occurs rather more frequently in girls than boys."


22 "The semiotic, on Kristeva's account, is not that which falls outside of language: a state of nature, and eternal feminine. (...) The semiotic, a modality of language, is shaped necessarily by the Symbolic. Consequently, the unconscious, whose legacy the semiotic preserves, is not presented topographically by Kristeva as a wordless mother-land; for the unconscious emerges only in the space of words, in the gaps and fissures of language that mark the speech of the "I," belying its coherent, seamless self-representation as a subject fully in possession of itself." Martha Reineke, *Sacrificed Lives: Kristeva on Women and Violence* (Bloomington, IN & Indianapolis, IN: Indiana University Press, 1997), 39-40.

23 For more on masquerade and the masking of FEMININITY with the material of phallogocentrism, see Jane Ussher's *Fantasies of Femininity: Reframing the Boundaries of Sex*, specifically see the pages describing "Doing Girl." Jane Ussher, *Fantasies of Femininity: Reframing the Boundaries of Sex*. 1st ed. (London: Penguin Books; New Brunswick, NJ: Rutgers University Press, 1997), 359. Two articles also worth seeing are Mary Elliot, "Outperforming Femininity: Public Conduct and Private Enterprise in Louisa May Alcott's Behind a Mask" *ATQ*, Vol. 8 Issue 4, (Dec94), 299; and K. Devlin, "Pretending In "Penelope": Masquerade, Mimicry, and Molly Bloom" *Novel: A Forum on Fiction* Vol. 25 Issue 1 (Fall91), 71. See also Mary Ann Doane's article "Film and
Masquerade: Theorizing the Female Spectator," Screen, No. 23 (September-October, 1982).

24 "...the systematic play of differences, of traces of differences, of the spacing [espacements] by which elements relate to one another. This spacing is the production, simultaneously active and passive (the a of differance indicates this indecision as regards activity and passivity, that which cannot yet be governed and organized by that opposition), of intervals without which the "full" terms could not signify, could not function." Jacques Derrida, Positions (Chicago: University of Chicago Press, 1981), 27. Derrida's word-play defending the post-structuralist freedom of the signifier is very much manifest in Campion but in the form of image-play rather than word play. Via the deconstruction(active) of and the adherence (passive) to mainstream production practices while featuring the image-play between the profilmic camera (the photographer's still camera), the unfulfilled eyeline match and the filmic camera (the camera which records what we see on the screen), Campion effectively demonstrates differance.


26 This is an example of intertextuality and lends itself strongly to Ada's extra-lingual condition. Ada is creating a disposable literary corpus via her written word on sheets from a notepad she carries periodically around her neck on a chain. Although her written word is used to communicate with non-signing persons such as Stewart, within the context of
Jane Campion's *The Piano*: The Female Gaze

Campion's movie, Ada's oeuvre is slightly anterior to its display, and therefore an intertext that is "self-quoted" on the screen. Furthermore, the self-quote is deconstructed because although the delineation of Ada's on-screen writings 'text' is literally valid and emphasized by inclusion in the filmic text, it is invalid as a text if we determine that a text should not be disposable. Kristeva, who coined the term intertextuality, addresses the meaning of the term intertextuality in the following way: "The word's status is thus defined horizontally (the word in the text belongs to both writing subject and addressee) as well as vertically (the word in the text is oriented towards an anterior or synchronic literary corpus) ... each word (text) is an intersection of words (texts) where at least one other word (text) can be read ... any text is constructed as a mosaic of quotations; any text is the absorption and transformation of another." Toi Moril, *Kristeva Reader*, (New York: Columbia University Press, 1986), 37. The female gaze highlights this multi-textual exchange both as a stylistic choice and as an (appropriately) oblique reference to the intertextual relationship between the maternal semiotic and the Symbolic. In this scene, Campion is featuring Ada's written text linked to the m/other transposed within a motion picture text (linked to narrative structure[alism], which, in turn, is linked to the Symbolic order). In addition, Campion uses filmic technique as a text used to reproduce and so render in disposable Ada's written 'disposable' text while referencing music as a (m/other's) text/discourse via Ada's attachment to her piano (...).

This barter for sexual favors has caused controversy. Is the exchange a manifestation of Eros or soft porn? bell hooks in her ideologically charged manner suggests that Campion is promoting misogynist imagery in her depiction of the relationship between Baines and
Ada. She writes that Baines "...is Norman Mailer's 'white negro,' seducing Ada by promising to return the piano that Stewart has exchanged with him for land." See bell hooks, *Outlaw Culture: Resisting Representations* (New York & London: Routledge, 1994), 119-120. A similar read was made by Robert Kolker in his book *Film Form and Culture*. He writes about Campion and her film: "Jane Campion, a New Zealander, who made a few very strange, interior feminist films in her native country, broke into the American market by mixing soft-core pornography with some stylistic peculiarities in *The Piano* (1993)..." See Robert Kolker, *Film, Form, and Culture*. 1st ed. (Boston: McGraw-Hill College, 1999), 174. In another less disparaging vein, Richard Allen, writes: "...the exchange between Ada and Baines involves a certain reciprocity. However, it is a reciprocity conditioned by the terms of a contract. Ada does indeed begin to take pleasure in Baines' attention as her piano playing seems increasingly to become a solicitation, but it is a pleasure that does seem to be conditioned by her willingness to be objectified within a perverse scenario of control and submission. Of course, whether or not the relationship between Ada and Baines is accurately described as perverse is just what is at stake in interpreting these scenes. (...) It is certainly possible to view the "perversity" staged in the film as an hyperbolisation of romance, as a way of portraying the frisson, the electricity of erotic fantasy." See Richard Allen, "Female Sexuality, Creativity, and Desire in *The Piano.*" in *Piano Lessons: Approaches to The Piano* edited by Felicity Coombs and Suzanne Gemmell (Sidney, Australia: John Libbey & Company, 2000), 59. Cyndy Hendershot also reads less perversity and more eros into Baines and Ada's contract: "Baines has seen the piano from Ada's perspective and hence has come to see it as an
object of desire. What he desperately tries to do after this is to place himself in the structural position occupied by the piano vis-a-vis Ada: he tries to make himself the object of Ada's desire. By recognizing Ada's desire and placing his desire within her context, Baines has recognized a fundamental tenet of Lacanian subjectivity: my desire is the desire of the other. Baines is hence decentered, forced to find his desire through Ada's."


Mark A. Reid in his comments on the male gaze in terms of strategic camera angles during this sequence: "The audience is complicit in Baines' voyeurism since they view Ada through the perspective of Baines' upskirt low-angle shot." See Mark A. Reid, "A Few Black Keys and Maori Tattoos: Re-Reading Jane Campion's The Piano in PostNegritude Time" Quarterly Review of Film and Video Vol. 17, No. 2, 108.

Campion successfully mimics the male gaze in this strategic scene that elicits complicity from the spectator. As well as eliciting simultaneously from the spectator the troubling and soothing memory of the Imaginary Wholeness.

Stephen Heath in translating Barthes, proposes this definition: "...jouissance is specifically contrasted to plaisir by Barthes in his Le Plaisir du texte: on the one hand a pleasure (plaisir) linked to cultural enjoyment and identity, to the cultural enjoyment of identity, to a homogenizing movement of the ego; on the other a radically violent pleasure (jouissance) which shatters - dissipates, loses - that cultural identity, that ego." See Roland Barthes and Stephen Heath, eds. & trans. Image, Music, Text (New York: Hill and Wang, 1977), 9. Kristeva goes further with this violent pleasure that shatters. She
associates it with the transgression and euphoria of the maternal semiotic. Martha Reineke explains: "By jouissance, Kristeva refers to an excess and surplus of being--inassimilable alterity--that establishes for humans the possibility of creation, communion, newness, pleasure, and transgression." Martha Reineke, Sacrificed Lives: Kristeva on Women and Violence. (Bloomington & Indianapolis, IN: Indiana University Press, 1997), 24. The "inassimilable alterity" refers to the alterity that originates in the space of the maternal other, the m/other.


Kelly Oliver explains Kristeva's departure from Lacan in this transitional stage in human development: "The discourse of psychoanalysis postulates the fundamentally split subject, both conscious and unconscious, a subject-in-process/on trial. Her notion of subject-in-process, however, challenges Lacanian psychoanalysis, with its emphasis on the mirror stage and the Name of the Father as the initiation into subjectivity. For her, subjectivity is a process that begins with the material body before the mirror stage. It is a process that has its beginnings in the maternal function rather than the paternal function. The maternal body itself is a primary model of the subject-in-process." See Kelly Oliver, Reading Kristeva: Unraveling the Double-bind. (Bloomington & Indianapolis, In.: Indiana University Press, 1993), 13.
32 Alison Weber in her wonderful study of FEMININITY and rhetoric as represented by the writing of Saint Teresa of Avila, suggests that the double bind is conducive to a form of meta-discourse which she calls meta-communication: "Although the double bind was originally formulated as part of the etiology of schizogenic family structures, subsequent research has explored the salutary and creative responses to the bind. Double bind dilemmas can be handled without despair if the subject is able, in some way, to distinguish and acknowledge the interwoven components of the message. This may be done by giving a manifestly dual message in reply: instead of being paralyzed by the attempt to reconcile conflicting demands, the subject can reply illogically, with paradoxes of his or her own. A sufficiently resourceful subject can also break off or redefine the emotional dependency of the binding relationship. Finally, the subject can learn to meta-communicate--to appreciate and articulate the logical paradox in the bind..." See Alison Weber, Teresa of Avila and the Rhetoric of Femininity (Princeton, New Jersey: Princeton University Press, 1990), 48. There is a certain parallel in Campion's post-structuralist feminist discourse in film vis-à-vis the double bind in mainstream cinema and Saint Teresa of Avila's "metacommmunicative" writings vis-à-vis the double-bind in mainstream Catholic religious practices during the 16th century.

39 In the spirit of infinite semiosis, and the uncanny polysemy of the maternal semiotic, we are driven to consider several possibilities from the signs that Campion displays. Given that previously Ada told Flora that she has communicated telepathically with Flora's father, it is conceivable that Ada communicated telepathically with Baines during their interlude and he is asking for a whisper to verify her thoughts reaching his
mind. If this is the case, it speaks for Baines as he is the only male who does not express fear of her extrasensory abilities. This scene lends itself to multiple readings and is consistent with Campion's deconstruction of the Law of the Father.

34 In contrast, Richard Allen argues that Ada actually enters the Symbolic order like an awakening to her 'lack' of Imaginary Wholeness which is essentially what transpires for a child during the Mirror Phase. Allen states: "Insofar as Ada's subjectivity in the film is defined by a bodily narcissism, her awakening to the world of sexual desire comes at a great cost, for she is also awakened to the fact of her own lack of self-sufficiency." Richard Allen, "Female Sexuality, Creativity, and Desire in The Piano" in Piano Lessons: Approaches to The Piano edited by Felicity Coombs and Suzanne Gemmell, (Sidney, Australia: John Libbey & Company, 2000), 60. Campion, however, has indicated that Ada has experienced sexual desire in the past and has retained her bodily narcissism while sharing in the speaking subject's adult desire. She has and has not awakened to her own lack of self-sufficiency. She has and has not entered the Symbolic order.

35 Emma Parker references an etymological polysemy in Freud's use of the word uncanny. "In his essay "The Uncanny" (1919), Freud explains that the uncanny or unhomely (the literal translation of the German unheimlich) is related to what is frightening, to what arouses dread and horror and gives rise to feelings of repulsion and distress, and he gives death, dead bodies, the return of the dead, spirits and ghosts as prime examples (17:219;241). However, he expands that definition by adding that, rather than deriving from the unfamiliar (as the term itself might suggest), the uncanny "is that class of the frightening which leads back to what is known of old
and long familiar" (17:220). It is the return of the repressed, as Freud explains: "[T]his uncanny is in reality nothing new or alien, but something which is familiar and old-established in the mind and which has become alienated from it through the process of repression. ...the uncanny is something which ought to have remained hidden but has come to light. ("The Uncanny" 241)" Emma Parker, "From House to Home: A Kristevan Reading of Michele Robert's Daughters of the House." Critique 41 (2000): 153. In a manner of speaking, Ada's connection to the chora and her outlaw affair with Baines ought to have remained hidden but have come to light. Stewart tries to hide her fit away within the phallogocentric construct (re)presented by his barricaded cabin.


38 Silverman expands on Kracauer to convey this special connection between the spectator and filmic (re)presentation: "The life for which this spectator yearns is, of course, his or her own. Kracauer makes that clear not only through his emphasis upon the cinephile's self-alienation, but through the natal metaphor by means of which he articulates the ideal relationship between the cinematic apparatus and the profilmic event. Films, he writes, conform most rigorously to our dreams when the camera seems as if it has "just now
extricated [its objects] from the womb of physical existence as if the umbilical cord between image and actuality [has] not yet been severed.' (p. 164). Kracauer’s viewer longs not only for the restoration of this “actuality,” but for the return of a presubjective condition, as well. Significantly, the life line leading back to fusion and nondifferentiation is the indexical relation of the camera to its object.” Kaja Silverman, *The Acoustic Mirror: The Female Voice in Psychoanalysis and Cinema*. (Bloomington & Indianapolis: Indiana University Press, 1988), 8. Silverman compares the disavowed connection between the camera and the profilmic object to the umbilical cord connecting the subject with the m/other and nondifferentiation. And this in turn affords the viewer an oblique link to the maternal semiotic in the Imaginary. We receive pleasure from many levels of awareness while experiencing the filmic event, one of which coincides with the vicarious uncanny fusion of our subjectivity and objectivity similar to the experience prior to language, prior to the Symbolic order, prior to the mirror phase.

39 In juxtaposing a male subject’s poem interpreted vocally by the mute female protagonist in a voice over accompanying the undersea visuals (re)presenting the maternal semiotic, Campion signals an inclusive, non-essentialist FEMININITY in the semiotic underpinnings of the Symbolic order. The implied continuum of difference/differance in the signification of FEMININITY/masculinity is substantiated by the pre-lingual, pre-oedipal stage in human development indelibly marked by the maternal economy. In this shot, Campion engages in intertextual practice along with the free exchange of masculine and feminine enunciation, as well as man and woman enunciating, within the sphere of FEMININITY.

41 See the writings of Charles Sanders Peirce.

42 Including perhaps, in a more deconstructive manner, Irigaray's call for the display of veiled Virgin Mary icons as emblematic of difference in feminist circles. "...her recent recommendation that women hang pictures of the Virgin Mary and her mother in their houses in order to produce the 'sexualized culture' [culture sexuee] desired by Irigaray (see Je, tu, nous, Paris, Grasset, 1990, p. 58)." Moi, Toril. "Femininity Revisited" Journal of Gender Studies 1 (1992), 324.
Newspaper Photo Editors' Perceptions of Women Photojournalists

by

Ken Heinen
Assistant Professor of Photojournalism
kenheinen@bsu.edu
Office: 765 285-8217

Mark Popovich
Professor of Journalism
mnpopovich@bsu.edu
Office: 765 285-8207

Department of Journalism
Ball State University
Muncie, IN 47306
Fax: 765 285-7997

Presented to the Visual Communication Division at the 85th Annual Convention of the Association for Education in Journalism and Mass Communication, Miami Beach, Florida

August 7, 2002
NEWSPAPER PHOTO EDITORS’ PERCEPTIONS OF WOMEN PHOTOJOURNALISTS

Improving diversity in the newsroom has become a hot topic among editors and executives at newspaper chains and at individual newspapers (Splichal and Garrison 2000). Newsroom diversity is normally considered in terms of gender, race and ethnicity. Black, Steele, and Barney (1999) in their book, Doing Ethics in Journalism, noted, among other things, that “diversity is about the way story ideas are developed and who does the reporting” (p. 178).

Becker et al (2001) found that the percentage of women in the journalism profession rose from 20 percent in 1971 to 28 percent in 2000, a surpassingly small increase. Becker’s Annual Survey of Journalism & Mass Communications Graduates found that in 2000 nearly two-thirds of the graduates were women, and Golombisky (2002) notes that, “female students have been the majority in mass communication for nearly twenty-five years.” Clearly, if the majority of these female graduates find employment in journalism, women could have a stronger voice in newsrooms in the near future. Because these trends are seldom broken down by specific types of jobs, little literature is available about the number and role of women in newspaper photojournalism. This scope of this study is limited to a look at what kinds of attitudes the growing number of female photojournalism graduates will face from the editors who hire and supervise newspaper photographers.

BACKGROUND: MALE DOMINATION

Traditionally, photojournalism has been the bastion of male photographers. As recently as the 1980s, many female photojournalists felt that their work was not taken seriously partly because they were often given softer assignments than men were (Rosenblum, 2000). Diana Walker, a Washington-based photographer for Time observed that in the 1960s few women photographers covered the White House, but 20 years later about half of the photographers were female (Roseblum, 2000). After four years as a war photographer for Contact Press Images, Deborah Copaken Kogan
(2001, 93) referred to the profession as “the manliest of men’s worlds” in which she had to prove herself constantly. She wrote, “In the field I had to be not only as full of macho bravado and testosterone as my colleagues, but more so.”

While considerably fewer in numbers than men, women have historically played a significant role in documentary photography and photojournalism. When Roy Stryker dispatched his band of Farm Security Administration photographers to show conditions during the Great Depression, he included Dorothea Lange, a specialist in documenting the problems of migrant workers (Newhall, 1964). Even though she was the only woman in the group of 13 photographers, her 1936 portrait of a migrant mother with children in Nipomi, California, may be one of the most memorable images of that era.

Margaret Bourke-White was an accomplished industrial photographer and associate editor of Fortune and Life magazines before she made the photograph for the first cover of Life. In 1937, she produced a photographic essay on the faces of the south and in the same year she produced a highly acclaimed eleven-page Life photographic essay on life in Muncie, Indiana, the subject of Robert and Helen Lynd’s 1927 sociological study, Middletown (Newhall, 1964). During World War II, Bourke-White was accredited by Life and the Defense Department as a war correspondent and “in 1942 she was the first woman to fly on bombing missions from North Africa” (Rosenblum, 2000, 185).

The 4x5-inch press camera, the workhorse of the newspaper industry in the 1940s, was deemed too heavy for women to take on assignments. In addition, some subject matter, such as sports and hard news, was considered “too rough for them to cover” (Rosenblum, 2000, 204). The bulk and weight of equipment became less of an issue as newspapers slowly switched to medium format cameras and finally to 35-millimeter gear in the late-1950s, but assignment discrimination, lower pay than men, poor advancement opportunities and peer harassment persisted.
Some female photojournalists have found gender issues a two-way street. Mary Lou Foy tells about her experiences in the 1970s and 1980s before she moved from The Miami Herald to The Washington Post:

In those early days, there was places the papers wouldn’t send a woman: a nighttime assignment in a bad-housing project, for example. But there were times they chose me over one of the guys. Once it was an art class with a nude female model and, another time, a drug stakeout that took place in a bar. A woman with cameras was far less obtrusive than a man.

The last time I was tossed out of an assignment because I was a woman came after an Orange Bowl game in the early 1980s. Although I had credentials, two Florida state troopers carried me from the locker room. Today, women work locker rooms everywhere.

It seemed to me that it evened out. Since women generally are perceived as less of a threat, I was frequently given coveted assignments to cover sensitive subjects who initially didn’t want a photographer around (Foy, 1998, 42).

Concerning sexist attitudes of male staffers, Mary Lou Foy said, “My approach to being the only woman photographer was to try to be one of the boys. Among other things, that meant that I laughed at dirty jokes and put up with girlie photos on the wall. I also kept my mouth shut when married colleagues had girlfriends” (Foy, 1998, 43). By the late 1980s, there were seven female photographers on The Miami Herald staff, one quarter of the paper’s shooters. The women stuck together to win awards and to fight back against the sexist attitudes.

Differences in salary structure and career advancement for women photojournalists compared to their male counterparts are topics that have not received much attention in the literature. Chang (1975) noted that women receive lower pay than men in the same departments at newspapers, but made no specific mention about photographers.

The conflict between job and family may be the biggest problem area for women photojournalists. Deborah Copaken Kogan, a former war photographer, summed up the problem after she gave up photojournalism:

I decided to quit photojournalism after only four years in the profession.
My reasons were many and varied, including exhaustion, disillusionment and a burgeoning sense of mortality. However, (and though I was loath to admit it back then, especially to my fellow photojournalists), I also quit because I'd fallen in love, because I wanted to start a family. And I felt quite simply and quite personally, that being someone’s mom and covering wars were at odds with one another. (Kogan, 2001, 93)

The issues of whether to marry and whether to have children vex many female photojournalists. Margaret Bourke-White, in her own words, chose not be bound by “golden chains” (Bourke-White, 1964, 197). Mary Lou Foy’s marriage broke up “partly because of long hours in the darkroom making perfect prints, but also due to the stress of daily newspapering in a city with high crime and fast money. I could be nuts after work” (Foy, 1998, 43). Dedication to her work has taken a personal toll on The Washington Post multiple-Pulitzer Prize winner Carol Guzy who “is divorced and her personal life is in flux, as she describes it. She talks about longing for stability but continues on a high-speed course that isn’t likely to lead to a white picket fence existence. She put off the decision to have children during her marriage” (Ricchiardi, 1998, 33).

According the database kept by the National Press Photographers Association (NPPA), the trade group that represents photojournalists, paid memberships during the summer of 2001 totaled 9,796. Of those, 7,153 said they worked in print media with the remainder being in television. The percentage of all women in NPPA was 21 percent while the percentage of female still photographers was 24.3 percent. The actual figures may be slightly higher because some women do not answer the gender question on the membership form and sometimes it is difficult to determine gender from surnames. By comparison, in 1976, only 300 of the 4,200 (7.1 per cent) NPPA members were women (Slattery and Fosdick, 1979). Today, the most recent undergraduate enrollment figures at schools of journalism averaged 63 percent female (Becker et al., 1999), indicating that the number of women seeking jobs in the news industry may be rising significantly.

Few would argue that women have made their mark in this world as photojournalists. However, their success has not come easily in this male-dominated profession, as their testimony
illustrates. With the potential influx of large numbers of new female talent on the horizon and the concern about diversity in the newsroom, researchers in this study were interested to learn how photo editors at picture-conscious newspapers felt about issues important to women working in photojournalism.

LITERATURE REVIEW

While informative articles about women photojournalists have been published in the trade press, little scholarly research has been done in the area of women in photojournalism. Neilan (1997) noted in her comprehensive review of photojournalism literature that “the role of women in photojournalism was lacking.”

Slattery and Fosdick (1979), in their survey of NPPA members, found that women photojournalists show the same level of professional values as men on the basis of the McLeod/Hawley index. Their findings indicated that photojournalism might be one of those occupations “that minimizes the effect of sex status for, in photojournalism, performance counts.”

Walsh et al. (1996) found in their study of women in newsrooms that only 35 percent of the newspaper work force is composed of women and that those women have salaries eight percent lower than their male counterparts. Of the women they surveyed, nearly 40 percent felt they had experienced at least some discrimination in the form of assignments, pay or advancement during their careers. While six percent of the 227 respondents were photographers, no separate statistical breakdown was provided for their views. However, Walsh et al. (1996) noted one case in which a female chief photographer from a small southeastern newspaper often is required to do processing for a male co-worker, a situation that she feels would not exist if she were a male.

Pasternack and Martin (1985) noted in their study of daily newspaper photojournalism in the Rocky Mountains that approximately four of every five (81.3 %) staff photographers are young males, a figure confirmed by NPPA membership records. Except for this figure, gender issues were
not mentioned in the study or in its list of five characteristics newspaper editors seek in photojournalists.

Flatow (1994) observed that 68 percent of the women working in editorial positions at Indiana newspapers reported they had experienced sexual harassment in the workplace. Verbal abuse from co-workers was the most common problem. The study did not specify figures for particular editorial departments.

In a national study of women’s page editors, Chang (75) found women’s salaries to be significantly less than men’s for comparable work. Chang also noted that the women polled did not see themselves as tokens on the staff, but they did not appreciate the chauvinistic attitudes of some of their male co-workers.

It should be obvious from the previous literature, and considering the numbers of women preparing now in journalism schools to enter the field, that the time has come to research the perceptions of the photo editors who will hire and supervise this influx of women photojournalists. Just what are their perceptions of women as photojournalists? What are women photo editor perceptions of women as photojournalists? What do photo editors think about the work habits, salaries, working conditions, and professional qualities of women in newspaper photojournalism?

**METHOD**

The investigators chose to employ Q methodology to help them understand the perceptions of newspaper photo editors toward women in their profession. This is not the first time that Q methodology has been employed in a photojournalism study. William Stephenson (1960), who created the methodology and was distinguished research professor in journalism at the University of Missouri, used the Q process to develop an alternative selection procedure for photo judges. A committee had been invited to select the 50 memorable news pictures of the past half-century as part of the observance of the 50th anniversary of the School of Journalism at the University of Missouri.
He discovered that two views, rather than a majority one, dominated the selection process. He concluded that it was time for any agency involved in judging in the arts, in general, and in photojournalism, specifically, to consider more suitable criteria for future judging.

Although this study does not focus on the photo selection process, Stephenson's factor analysis procedures can be employed to examine the perceptions of photo editors toward women in photojournalism. First, a concourse of statements concerning various aspects of the field of photojournalism was constructed from magazine articles, on-line references, and photojournalism convention presentations and discussions. In all, 57 statements (See Appendix 1) were chosen for a Q sort comprised of an equal number of positive statements toward female participation in newspaper photojournalism, negative statements toward female participation, or neutral statements that gave credit to the photojournalism exploits of both genders.

Twenty-seven photography editors from newspapers that demonstrated a strong commitment to photojournalism excellence were selected to receive the Q sorts by mail. The editors were employed at newspapers that had won national photojournalism awards in the 57th NPPA/University of Missouri Annual Pictures of the Year competition. From this list, investigators were able to obtain a cross-section of newspaper circulation sizes that ranged from 12,000 to over one million in daily circulation. Along with the Q sorts, investigators asked the editors to provide some basic demographic information about them and they were asked two open-ended questions about their sorts. They were asked to write comments about why they most agreed with their top two choices and why they most disagreed with their top choices. The condition of instruction provided to the editors was as follows:

Which statements associated with women in photojournalism are most closely aligned with your philosophical beliefs?

Once the Q sorts were returned, the investigators factor analyzed the photography editors' ratings using the public domain PQMethod program that is available from the following website:
The investigators performed a principal components factor analysis and with a hand rotation of factors determined that a two-factor solution was the best interpretation of the factors. To reach this conclusion, they employed procedures outlined in Brown (1980). Factors were viable if they contained at least two significant factor loadings at the .01 level. Factor loadings were significant if they exceeded .342. This significant correlation was calculated from a formula for the standard error of a zero-order loading that also is explained in Brown. Investigators accepted a z-score criterion of +/- 1.0 to consider significant those statements on the factor statement z-score arrays produced by PQMethod. Once significant positive and negative statements were obtained for each factor, investigators compared those statements between each factor to determine the differences between the perceptions of each typical factor type. Again, using a method explained in Brown (1980), the investigators examined factor Q sort values for each statement and if a difference of an absolute score of three was evident between factor rankings for each statement, the statement was declared a significant statement for that particular factor array. Overall, Factor 1 subjects exhibited four statements that were ranked significantly different from Factor 2, and Factor 2 exhibited five statements significantly different from Factor 1.

FINDINGS

Of the 27 Q sorts sent to photography editors, 21 were returned, but only 19 proved usable. The two sorts thrown out were not totally completed by the respondents. Fourteen of the respondents were male, and five were female. All of the editors were responsible for hiring photographers for their newspapers. Job titles for respondents were listed most frequently as either photo editor, director of photography, or assistant managing editor. The average age of the editors was 43. They had spent an average of 20 years in the business and had been in their present job an average of five years. The average size of the photo staff for newspapers included in this study was 15 members, of
which four were female. All of the newspapers had at least one female on the photo staff and females comprised 29 percent of the staffs overall. The smallest photo staff numbered three (three newspapers) and the largest staff totaled 38 photojournalists. Three of the staffs had more than 30 photojournalists working.

Two factors were determined to provide the best analysis of the 19 Q sorts submitted to investigators (See Appendix 2). Eighteen of the editors comprised Factor 1. One male editor comprised Factor 2. All five of the female editors were part of the perceptions provided by Factor 1 respondents. Overall, both factors provided 63 percent of the variance for this analysis and the correlation between both factors was .403.

The investigators labeled the perception pattern evident in Factor 1 as “Professional” with that term connoting an attitude that the job comes first no matter what. Both males and all of the five females comprised the 18 photo editors on this factor. Of the 13 positive statements (See Table 1) that reflect “Unbiased” thinking, 12 of them were considered to be neutral statements when the investigators created the concourse of statements. Factor 1 photo editors were unanimous in their belief that gender did not play a role in how they made out photo assignments or determined pay raises. The editors did not see any differences between males and females when it came to the quality of their work, their commitment to their work, their “eye” for detail, or their sensitivity to the kinds of subjects they were shooting.

One 52 year-old female editor said, “I have seen the same passion, commitment, hard work and extreme devotion from both sexes too often to think it has anything to do with gender.” A 45-year-old male editor echoed those sentiments, “Commitment comes from the heart and mind. Other body parts don’t apply.”

Negative statements chosen by Factor 1 photography editors served to reinforce their feelings that men and women photojournalists perform equally well in the newspaper business and that the editors work well with both genders. The editors disagreed with statements that would restrict women photojournalists from locker rooms or downgrade their abilities as sports
TABLE 1: Factor 1 significant positive and negative statements with corresponding z-scores

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Z-Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>I believe that commitment to photojournalism is not gender related.</td>
<td>1.929</td>
</tr>
<tr>
<td>30</td>
<td>When I make a photographic assignment, it goes to the photojournalist on my staff who can best tackle the job.</td>
<td>1.792</td>
</tr>
<tr>
<td>54</td>
<td>I have seen men and women photographers cover heart-wrenching stories equally well.</td>
<td>1.682</td>
</tr>
<tr>
<td>55</td>
<td>For me, the consistent quality of a photographer's images, not gender, makes the greatest difference in who gets the best assignments.</td>
<td>1.655</td>
</tr>
<tr>
<td>26</td>
<td>As an editor, it makes no difference to me whether a male or female takes a photo assignment as long as the job is done well and meets the deadline.</td>
<td>1.505</td>
</tr>
<tr>
<td>31</td>
<td>I have seen male and female photographers cover sensitive subject equally well.</td>
<td>1.501</td>
</tr>
<tr>
<td>39</td>
<td>Gender is not a factor I consider when determining pay raises for photographers.</td>
<td>1.372</td>
</tr>
<tr>
<td>52</td>
<td>The rigors of photojournalism can take a personal toll on both men and women practitioners.</td>
<td>1.316</td>
</tr>
<tr>
<td>6</td>
<td>From the pictures I have seen, gender makes no difference when determining who has a better eye for details.</td>
<td>1.313</td>
</tr>
<tr>
<td>8</td>
<td>I have seen female shooters steadily rise to the top of the profession.</td>
<td>1.141</td>
</tr>
<tr>
<td>23</td>
<td>At my paper, comparable quality work earns equal salaries for everyone.</td>
<td>1.099</td>
</tr>
<tr>
<td>3</td>
<td>I don't think that gender is an issue when recognizing excellent photojournalism work.</td>
<td>1.099</td>
</tr>
<tr>
<td>22</td>
<td>I am aware that male photojournalists can be just as sensitive to their subjects as their female coworkers.</td>
<td>1.013</td>
</tr>
<tr>
<td>2</td>
<td>I see no good reason why women should carry cameras into locker rooms.</td>
<td>-1.082</td>
</tr>
<tr>
<td>25</td>
<td>I think that male photojournalists have a better eye for detail than women photojournalists.</td>
<td>-1.133</td>
</tr>
<tr>
<td>24</td>
<td>As an editor, I feel over-protective of female photographers.</td>
<td>-1.198</td>
</tr>
<tr>
<td>45</td>
<td>As an editor, I have sensed that women photographers are more committed to their work than men.</td>
<td>-1.422</td>
</tr>
<tr>
<td>46</td>
<td>Around here, the women photographers are more moody than the men.</td>
<td>-1.553</td>
</tr>
<tr>
<td>35</td>
<td>I find it hard to believe that women can be first-rate sport photographers.</td>
<td>-1.591</td>
</tr>
<tr>
<td>56</td>
<td>Most of the male photographers at my paper are more objective in their news coverage than women photographers.</td>
<td>-1.605</td>
</tr>
<tr>
<td>12</td>
<td>As an editor, I am more comfortable working with male photojournalists than female ones.</td>
<td>-1.789</td>
</tr>
</tbody>
</table>

photographers. They did not think that they had to be overly protective of women photojournalists, that there was a difference in commitment between the sexes, or that women were more moody (a common stereotype) than men.

One 54 year-old male editors said, “I see moodiness as equal opportunity with gender having no factor.” Another male editor, who most disagreed with the moodiness statement (46), saw it as “the most absurd statement because anyone is capable of being moody.”

Four statements differentiated Factor 1 thinking from that of Factor 2, all of which were rated most negatively by Factor 1 photo editors:
These significant statements served to reinforce the positive perceptions of photography editors who comprised Factor 1. The editors remained staunchly neutral in their perceptions of the sexes, and how they carry out their professional responsibilities. Their comments reflect this neutrality, much of it coming from photo editors who have spent many years in the profession. One director of photography summed up the situation this way:

Our profession has historically been male-dominated. However, because of that there is a real need for diversity. I think women sometimes have an edge when it comes to hiring and promotion. When you put it all together, it pretty much evens out. I don’t see a big problem with a gender gap. Most journalists are fairly enlightened, forward-thinking people. What we really need are new ways to encourage women to come into our profession.

Although one 49-year-old male sorted on Factor 2, this practical view can be labeled as one contributed by the “Pragmatics” in the newspaper photojournalism business. This editor was from a middle size mid-western newspaper. The view expressed by this factor understands that gender is generally not a factor when it comes to salaries or quality of performance. Of the ten statements that Factor 2 considered to be significant, nine of them would be considered neutral statements by investigators. The pragmatists understand that gender does not influence salary distribution, only performance and quality of work does.

This Factor 2 editor says, “Quality of work and how much initiative a photographers shows is what I use to determine pay raises. I don’t even think of gender issues.”

Consistency of performance is foremost with the pragmatist. Meeting deadlines and quality of the photos produced are prerequisites for how this photo editor distributes the best photo assignments.
Underlying this pragmatic approach, however, is a lingering doubt about the commitment of women photojournalists. This Factor 2 editor believes that a photojournalism career becomes secondary consideration to a woman if she becomes a mother. This belief separates the “pragmatists” from the “professionals” in Factor 1. Factor 1 photo editors did not show any strong feeling toward this statement (#14).

The pragmatist’s doubts about females becomes murkier when negative statements in Factor 2 are examined. On one hand, this viewpoint suggests that women have not shot the best combat images, nor do they necessarily take the best sports photographs. This photo editor does not agree that both sexes are willing to sacrifice a normal family life for their profession. On the other hand,

TABLE 2: Factor 2 significant positive and negative statements with corresponding z-score

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>z-scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>At my paper, comparable quality work earns equal salaries for everyone.</td>
<td>2.000</td>
</tr>
<tr>
<td>39</td>
<td>Gender is not a factor I consider when determining pay raises for photographers.</td>
<td>2.000</td>
</tr>
<tr>
<td>3</td>
<td>I don't think that gender is an issue when recognizing excellent photojournalism work.</td>
<td>1.600</td>
</tr>
<tr>
<td>14</td>
<td>I think a woman's photojournalism career becomes secondhand if she becomes a mother.</td>
<td>1.600</td>
</tr>
<tr>
<td>1</td>
<td>I believe gender barriers are eroding for female photojournalists.</td>
<td>1.600</td>
</tr>
<tr>
<td>5</td>
<td>I doubt gender is an issue when considering how photojournalists “see” pictures.</td>
<td>1.200</td>
</tr>
<tr>
<td>26</td>
<td>As an editor, it makes no difference to me whether a male or female takes a photo assignment as long as the job is done well and meets the deadline.</td>
<td>1.200</td>
</tr>
<tr>
<td>30</td>
<td>When I make a photographic assignment, it goes to the photojournalist on my staff who can best tackle the job.</td>
<td>1.200</td>
</tr>
<tr>
<td>31</td>
<td>I have seen male and female photographers cover sensitive subjects equally well.</td>
<td>1.200</td>
</tr>
<tr>
<td>55</td>
<td>For me, the consistent quality of a photographer's images, not gender, makes the greatest difference in who gets the best assignments.</td>
<td>1.200</td>
</tr>
<tr>
<td>44</td>
<td>Both sexes are willing to sacrifice a normal family life for their photojournalism profession.</td>
<td>-1.200</td>
</tr>
<tr>
<td>49</td>
<td>I think that strong feelings about feminist issues often bias women photographers’ coverage of news events.</td>
<td>-1.200</td>
</tr>
<tr>
<td>21</td>
<td>I think that photojournalists sometimes are reluctant to talk about gender issues with their editors.</td>
<td>-1.200</td>
</tr>
<tr>
<td>53</td>
<td>Gender makes no difference when I choose who is to do a picture assignment.</td>
<td>-1.200</td>
</tr>
<tr>
<td>56</td>
<td>Most of the male photographers at my paper are more objective in their news coverage than women photographers.</td>
<td>-1.200</td>
</tr>
<tr>
<td>51</td>
<td>I have noticed that women take some of the best sports photographs.</td>
<td>-1.600</td>
</tr>
<tr>
<td>12</td>
<td>As an editor, I am more comfortable working with male photojournalists than female ones.</td>
<td>-1.600</td>
</tr>
<tr>
<td>9</td>
<td>I have noted that male photographers usually display more patience when dealing with their subjects than women photographers.</td>
<td>-1.600</td>
</tr>
<tr>
<td>4</td>
<td>In my opinion, women war photographers have shot some of the best combat images.</td>
<td>-2.000</td>
</tr>
<tr>
<td>27</td>
<td>I do not consider gender when hiring photographers.</td>
<td>-2.000</td>
</tr>
</tbody>
</table>
feminist issues do not influence women when they cover news, nor are photojournalists reluctant to talk about gender issues with editors. Men are not more objective than women in their news coverage, nor is there a difference between the sexes when it comes to patience in dealing with their photo subjects. These ambivalent feelings by the photo editors who hold these views are much closer to the professional literature that was reviewed earlier. Women complain about gender bias, physical harassment, and conflicted feelings between profession and motherhood. This Factor 2 view seems to be more reflective of those feelings than the views expressed by photo editors in Factor 1.

Five statements from Factor 2 provide significant differentiation from Factor 1:

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>I think a woman's photojournalism career becomes secondhand if she becomes a mother.</td>
</tr>
<tr>
<td>1</td>
<td>In my opinion, women war photographers have shot some of the best combat images.</td>
</tr>
<tr>
<td>0</td>
<td>I do not consider gender when hiring photographers.</td>
</tr>
<tr>
<td>1</td>
<td>I have noticed that women take some of the best sports photographs.</td>
</tr>
<tr>
<td>2</td>
<td>Gender makes no difference when I choose who is to do a picture assignment.</td>
</tr>
</tbody>
</table>

These statements suggest that some gender bias does exist in the views of the Factor 2 photo editor. He does think women are influenced by the prospect of raising families, and he has some doubts about their abilities with certain kinds of photo subjects—war and sports. In all fairness, however, this editor does not think that women have been given enough combat photo opportunities to prove themselves. Two statements with which he disagrees strongly concern job assignments and hiring. He does consider gender when he makes photo assignments, which would support his beliefs about female performance above and he does consider gender when he hires photojournalists. In terms of hiring, he suggests why: "considering gender is mandated, since we need more women and minorities on our staff to reflect our community. Always tipping it in favor of either women or minorities if the work is comparable." In some respects, this Factor 2 perception pattern may be the more honest of the two factors profiled here.
In summary, two belief patterns emerge from this study of photo editors. The major issue that distinguishes them is one of commitment. Factor 1 editors display a firm belief that gender does not influence how they assess their staff photojournalists, nor does gender create differences in commitment or performance by male and female photojournalists. The editor on the second factor, however, is conflicted. Although he believes in equal pay and equal conditions, he is not convinced that women are as committed to the profession as men. He agrees that men and women should be paid equally, but he does not feel that they necessarily are equal when he makes his photo assignments.

CONCLUSIONS

At the outset of this study, female anecdotes provided personal reflections of what women photojournalists have experienced in their careers. Women talk about sexual bias, sexual harassment, and their personal struggles balancing profession and family commitments. What little research literature that exists discusses the small numbers of females in the photojournalism profession, and how performance drives achievement in the profession, minimizing the effects of gender bias.

With a large number of females pursuing photojournalism degrees in U.S. colleges today, the investigators were interested in assessing the perceptions of a cross section of newspaper photo editors in this country concerning the performance of women in newspaper photojournalism.

This study produced two viewpoints. The most popular view projected by photo editors was that women are equal to men in the profession. Women are equal to men in commitment to the profession, in sensitivity to their photo subjects, in objectivity covering their photo assignments, in their eye for detail, and in their ability to earn the same salaries as men. Although these editors grudgingly conceded that gender bias might exist in some form in the profession, they believe that progress has been made as attested to by this female photo editor:
As in all life, most of the difficulties for women in photojournalism come from the roadblocks already established in society. Sometimes gender comes into play as an important personal attribute, like race, which may make an assignment more or less appropriate. But, natural talents for “seeing,” grasping technology or being a good journalist and sensitive human seem equally distributed between the two sexes. Sexism is a tradition that is slowly subsiding.

The second view that arises from this study talks about on-the-job equality for men and women in photojournalism, but does not feel that the sexes are necessarily equal in all phases of the job. This view projects some reservations about female commitment to the profession. It suggests that there are some photo assignments for which women are not well suited. It also suggests that women entering into the newspaper photojournalism environment will not be totally free from sexist attitudes.

How fast or how slow sexism is subsiding in newspaper photojournalism remains to be seen. The majority of editors in this study, including all the women editors involved, express the feeling that women can expect to be treated equally with their male counterparts in all aspects of the field. But as in any job situation, sexism can still be a problem because there remain those conflicted few who cannot see past gender when dealing with both sexes.
REFERENCES


APPENDIX 1
Q Sort Statements

Statements Favoring Women

1. I believe gender barriers are eroding for female photojournalists.
4. In my opinion, women war photographers have shot some of the best combat images.
8. I have seen female shooters steadily rise to the top of the profession.
11. I think women photojournalists tackle topics such as domestic violence better than men.
15. My experience has been that women photojournalists are more patient with their subjects than male photographers.
20. I sense that women photographers build better emotional connections with their subjects than men.
57. I feel that women photographers have a better eye for detail than men.
51. I have noticed that some of the best sports photographs are taken by women.
48. I think that women excel at covering foreign human rights issues.
45. As a photo editor, I have sensed that women photographers are more committed to their work than men.
50. In today’s environment, I think more women photojournalists are willing to be the breadwinner while their husbands stay home.
43. I wish women photojournalists did not have to choose between a rewarding career and a marriage with children.
16. My opinion is that women photojournalists take directions from their editors better than men.
42. Women photographers are more dependable than men.
18. Interestingly, I have noted that women have more patience with technical photography problems than men.
17. I think women photojournalists are more curious than men.
36. My experience has been that women photojournalists tend to stay focused on long-range photo projects better than men.
29. I have observed that women photojournalists have a stronger instinct to delve beneath the surface of the stories they shoot.
28. I think the influx of women photojournalists is redefining the kinds of photo topics covered by newspapers.

Gender-Neutral Statements

3. I don’t think that gender is an issue when recognizing excellent photojournalism work.
5. I doubt gender is an issue when considering how photojournalists “see” pictures.
6. From the pictures I have seen, gender makes no difference when determining who has a better eye for details.
22. I am aware that male photojournalists can be just as sensitive to their subjects as their female co-workers.
53. Gender makes no difference when I choose who is to do a photo assignment.
31. I have seen men and women photographers cover sensitive subjects equally well.
55. For me, the consistent quality of a photographer’s images, not gender, makes the greatest difference in whom gets the best assignments.
13. I believe that commitment to photojournalism is not gender related.
44. Both sexes are willing to sacrifice a normal family life for their photojournalism profession.
32. Equipment is becoming lighter so that carrying it is not an issue for either gender.
31. I have seen men and female photographers cover sensitive subjects equally well.
21. I think that shift work at newspapers can lead to unstable family life for both male and female photographers.
39. Gender is not a factor I consider when determining pay raises for photographers.
27. I do not consider gender when hiring photographers.
23. At my paper, comparable quality work earns equal salaries for everyone.
54. I have seen men and women photographers cover heart-wrenching stories equally well.
26. As a photo editor, it makes no difference to me whether a male or female takes a photo assignment as long as the job is done well and meets the deadline.
30. When I make a photo assignment, it goes to the photojournalist on my staff who can bet tackle the job.
40. In my experience, I have found that shift work at newspapers can lead to an unstable family life for both male and female photographers.

Statements Favoring Men

2. I see no good reason why women should carry cameras into locker rooms.
7. It is clear to me that men make better combat photographers than women.
9. I have noted that male photographers usually display more patience when dealing with their subjects than women.
19. I think that many women photojournalists are held back by male discrimination in the field.
24. As an editor, I feel over protective of female photographers.
35. I find it hard to believe that women can be first-rate sports photographers.
39. Statements Favoring Men
56. Most of the male photographers at my paper are more objective in their news coverage than women photographers.
49. I think that strong feelings about feminist issues often bias women photographers’ coverage of news events.
14. I think a woman’s photojournalism career becomes secondhand if she becomes a mother.
47. Concerning family versus career, I have seen that it is hard for women photojournalists to have both and do it all well.
46. Around here, the women photographers are more moody than men.
41. Handling heavy lighting equipment is a problem for women photojournalists.
38. Sometimes I think that women have a harder time understanding the technical side of photography than men.
37. My experience has been that it takes a woman photographer longer to do a project than a male photographer.
34. Male newspaper photographers have less of a problem starting out at a small paper, then moving their families as they progress to bigger papers than women in similar circumstances.
33. I have observed that women photojournalists seem to be intimidated when they are around more aggressive male photojournalists.
25. I think that male photojournalists have a better eye for detail than women photojournalists.
12. As a photo editor, I am more comfortable working with male photojournalists than female ones.
10. If one of the men is available, I will send him into a rough part of the city at night before I would assign a female photographer to the same story.
# APPENDIX 2

## Photo Editor Statements with Z-Scores for Each Factor

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Factors</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. 1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>I believe gender barriers are eroding for female photojournalists.</td>
<td>0.88 15</td>
<td>1.60 5</td>
</tr>
<tr>
<td>2</td>
<td>I see no good reason why women should carry cameras into locker rooms.</td>
<td>-1.08 50</td>
<td>0.40 24</td>
</tr>
<tr>
<td>3</td>
<td>I don’t think that gender is an issue when recognizing excellent photojournalism work.</td>
<td>1.10 12</td>
<td>1.60 5</td>
</tr>
<tr>
<td>4</td>
<td>In my opinion, women war photographers have shot some of the best combat images.</td>
<td>0.13 24</td>
<td>-2.00 57</td>
</tr>
<tr>
<td>5</td>
<td>I doubt gender is an issue when considering how photojournalists “see” pictures.</td>
<td>0.11 25</td>
<td>1.20 10</td>
</tr>
<tr>
<td>6</td>
<td>From the pictures I have seen, gender makes no difference when determining who has a better eye for details.</td>
<td>1.31 9</td>
<td>0.80 16</td>
</tr>
<tr>
<td>7</td>
<td>It is clear to me that men make better combat photographers than women.</td>
<td>-0.80 45</td>
<td>0.80 16</td>
</tr>
<tr>
<td>8</td>
<td>I have seen female shooters steadily rise to the top of the profession.</td>
<td>1.14 10</td>
<td>-0.80 47</td>
</tr>
<tr>
<td>9</td>
<td>I have noted that male photographers usually display more patience when dealing with their subjects than women photographers.</td>
<td>-0.92 48</td>
<td>-1.60 55</td>
</tr>
<tr>
<td>10</td>
<td>If one of the men is available, I will send him into a rough part of the city at night before I would assign a female photographer to the same story.</td>
<td>-0.02 27</td>
<td>0.80 16</td>
</tr>
<tr>
<td>11</td>
<td>I think women photojournalists tackle topics such as domestic violence better than men.</td>
<td>-0.04 28</td>
<td>0.40 24</td>
</tr>
<tr>
<td>12</td>
<td>As an editor, I am more comfortable working with male photojournalists than female ones.</td>
<td>-1.79 57</td>
<td>-1.60 55</td>
</tr>
<tr>
<td>13</td>
<td>I believe that commitment to photojournalism is not gender related.</td>
<td>1.93 1</td>
<td>0.80 16</td>
</tr>
<tr>
<td>14</td>
<td>I think a woman’s photojournalism career becomes secondhand if she becomes a mother.</td>
<td>-0.41 34</td>
<td>1.60 5</td>
</tr>
<tr>
<td>15</td>
<td>My experience has been that women photojournalists are more patient with their subjects than male photographers.</td>
<td>-0.68 41</td>
<td>0.40 24</td>
</tr>
<tr>
<td>16</td>
<td>My opinion is that women photojournalists take directions from their editors better than men.</td>
<td>-0.87 47</td>
<td>-0.40 41</td>
</tr>
<tr>
<td>17</td>
<td>I think women photojournalists are more curious than men.</td>
<td>-0.65 40</td>
<td>0.40 24</td>
</tr>
<tr>
<td>18</td>
<td>Interestingly, I have noted that women have more patience with technical problems than their male counterparts.</td>
<td>-0.50 35</td>
<td>-0.80 47</td>
</tr>
<tr>
<td>19</td>
<td>I think that many women photojournalists are held back by male discrimination in the profession.</td>
<td>-0.36 33</td>
<td>-0.80 47</td>
</tr>
<tr>
<td>20</td>
<td>I sense that women photographers build better emotional connections with their subjects than men.</td>
<td>-0.29 31</td>
<td>-0.40 41</td>
</tr>
<tr>
<td>21</td>
<td>I think that photojournalists sometimes are reluctant to talk about gender issues with their editors.</td>
<td>0.19 22</td>
<td>-1.20 52</td>
</tr>
<tr>
<td>22</td>
<td>I am aware that male photojournalists can be just as sensitive to their subjects as their female co-workers.</td>
<td>1.01 13</td>
<td>0.40 24</td>
</tr>
<tr>
<td>23</td>
<td>At my paper, comparable quality work earns equal salaries for everyone.</td>
<td>1.10 11</td>
<td>2.00 2</td>
</tr>
<tr>
<td>24</td>
<td>As an editor, I feel over-protective of female photographers.</td>
<td>-1.20 52</td>
<td>-0.40 41</td>
</tr>
<tr>
<td>25</td>
<td>I think that male photojournalists have a better eye for detail than women.</td>
<td>-1.13 51</td>
<td>-0.40 41</td>
</tr>
<tr>
<td>26</td>
<td>As an editor, it makes no difference to me whether a male or female takes a photo assignment as long as the job is done well and meets the deadline.</td>
<td>1.50 5</td>
<td>1.20 10</td>
</tr>
<tr>
<td>27</td>
<td>I do not consider gender when hiring photographers.</td>
<td>-0.15 30</td>
<td>-2.00 57</td>
</tr>
<tr>
<td>28</td>
<td>I think the influx of women photojournalists is redefining the kinds of visual topics covered by newspapers.</td>
<td>0.51 18</td>
<td>0.00 33</td>
</tr>
<tr>
<td>29</td>
<td>I have observed that women photojournalists have a stronger instinct to delve</td>
<td>-0.63 39</td>
<td>-0.40 41</td>
</tr>
</tbody>
</table>
beneath the surface of stories they shoot.

30 When I make a photographic assignment, it goes to the photojournalist on my staff who can best tackle the job.

31 I have seen male and female photographers cover sensitive subjects equally well.

32 Equipment is becoming lighter so that carrying it is not an issue for either gender.

33 I have observed that women photographers seem to be intimidated when they are around more aggressive male photojournalists.

34 Male newspaper photographers have less of a problem starting out at a small paper, then moving their families as they progress to bigger papers than women in the similar circumstances.

35 I find it hard to believe that women can be first-rate sports photographers.

36 My experience has been that women photographers tend to stay focused on long-range photographic projects better than men.

37 My experience has been that it takes a woman photographer longer to do a project than a male photographer.

38 Sometimes I think that women have a harder time understanding the technical side of photography than men.

39 Gender is not a factor I consider when determining pay raises for photographers.

40 In my experience, I have found that shift work can lead to unstable family life for male and female photographers.

41 Handling heavy lighting equipment is a problem for women photojournalists.

42 I think women photographers are more dependable than men.

43 I wish women photographers did not have to choose between a rewarding career and a marriage with children.

44 Both sexes are willing to sacrifice a normal family life for their photojournalism profession.

45 As an editor, I have sensed that women photographers are more committed to their work than men.

46 Around here, the women photographers are more moody than the men.

47 Concerning family versus career, I have seen that it is hard for women photographers to have both and do it all well.

48 I think that women excel at covering foreign human rights issues.

49 I think that strong feelings about feminist issues often bias women photographers' coverage of news events.

50 In today's environment, I think more women photojournalists are willing to be the breadwinners while their husbands stay home.

51 I have noticed that women take some of the best sports photographs.

52 The rigors of photojournalism can take a personal toll on both men and women practitioners.

53 Gender makes no difference when I choose who is to do a picture assignment.

54 I have seen men and women photographers cover heart-wrenching stories equally well.

55 For me, the consistent quality of a photographer's images, not gender, makes the greatest difference in who gets the best assignments.

56 Most of the male photographers at my paper are more objective in their news coverage than women photographers.

57 I feel that women photographers have a better eye for detail than men photographers.
Sex Appeals that Appeal: The Moderating Role of Women’s Sexual Self-Schema in the Accessibility of Sexual Constructs in Memory

by

John Davies, Doctoral Student, University of Alabama
800 Energy Center Blvd., #1105, Northport, AL, 35471
O – (205) 348-8604, H – (205) 391-4630, davie003@bama.ua.edu

He Zhu, Doctoral Student, University of Alabama
1510 Paul Bryant Drive, #15, Tuscaloosa, AL, 35401
O – (205) 348-9463, H – (205) 366-8704, zhu002@bama.ua.edu

Brian Brantley, Doctoral Student, University of Alabama
P.O. Box 40831, Tuscaloosa, AL, 35401
O – (205) 348-9463, H – (205) 330-0478, brant005@bama.ua.edu

Submitted to the Visual Communication Division
Sex Appeals that Appeal: The Moderating Role of Women’s Sexual Self-Schema in the Accessibility of Sexual Constructs in Memory

ABSTRACT –

In this study, the authors used priming methodology to measure the effects of exposure to magazine advertisements that used sexual appeals on women’s accessibility of constructs in memory. The advertisements were for fragrances and came from women’s magazines. Results indicated that exposure to such advertisements increased accessibility of sexual constructs in female participants’ memory. These priming effects were moderated somewhat by participants’ responses to a sexual self-schema index.
Introduction and Literature Review

Perhaps because of its power to influence, sex has long been both a subject of interest and a topic of concern for advertisers, academics and the general public. As women are generally the focal point of advertisements that use sex appeals, it is not surprising that much of the criticism directed at advertisers comes from individuals and groups concerned with women’s issues. For example, in November 1991, five female employees of Stroh’s Brewery filed lawsuits against the company for sexual harassment. The $450,000 suits claimed that Stroh’s own promotional posters displayed around the brewery (featuring provocative photos of young women) were sexist and degrading. The women alleged that these posters contributed to a climate where sexual harassment was socially acceptable (Teinowitz & Geiger, 1991). While the suits were rejected on legal grounds, the case highlights ethical concerns regarding the use of sex in advertising that are not so easily dismissed.

However, it is not just women who are featured in ads that use sex appeals. Male models in advertisements are more likely to be portrayed in a sexual manner now than in previous years (Reichert, Lambiase, Morgan, Carstarphen, & Zovoina, 1999). While women are still much more likely to be featured in sexy ads than men, the Reichert et al. research marks a transition phase in American advertising where traditional stereotypes are overturned and men are also more likely to be seen as objects.

This same research suggests that advertisers continue to use sex as a promotional tool. Reichert and his colleagues (1999) analysed several general interest magazines as well as men’s and women’s magazines for changes over time in the sexual explicitness of advertisements. In addition to their finding regarding the use of male models in sexually
suggestive ads, they also concluded that both women and men were more likely to be portrayed in a sexually explicit manner in 1993 compared to 1983. Furthermore, portrayals of intimate behavior between the sexes was more likely in 1993, and ads in gendered magazines were more likely than general interest magazines to contain sexual imagery.

This does not imply an absence of sex in the advertisements of general interest magazines, however. A content analysis of a random sample of Time and McCall's showed that 8.6 percent of the ads in those magazines used sex appeals as a promotional device, and that women were about three times as likely as men to appear in such ads (Biswas, Olsen, & Carlet, 1992).

In terms of the ratio of male to female models appearing in sexually suggestive advertising, a study by Lin (1998) of prime time television commercials found similar results to those found in surveys of print ads, with women being about three times as likely as men to be the focus of such ads.

The prevalence of sexually suggestive ads in magazines has fueled criticism from advertisers themselves. From 1972 to 1992, complaints about sexual or gender-oriented ads consistently placed second to only "Ethics and Taste" on a list of concerns in Advertising Age's ads-we-can-do-without letters (Vanden Bergh, Rifon & Ziske, 1995). Others, such as Gould (1994), have emphasized the need for more research into both the ethical and professional implications of sex appeals in advertising.

Perhaps in response to Gould's call for more research, many scholars have turned to the effects of sex appeals. For instance, Jones, Stanaland and Gelb (1998) studied the interaction of sex of the viewer and so-called "beefcake" (sexy male model) and
"cheesecake" (sexy female model) advertisements on ad effectiveness. Women who viewed the cheesecake ads had less favorable attitudes than men toward the ad and the brand, but had higher recall of features of the ad. Similarly, men recognized more things about the beefcake ads than women. However, compared to men, women did not demonstrate significantly more favorable attitudes toward beefcake ads, or to brands in beefcake ads; both sexes appeared to like the beefcake ads and brands about the same. The authors concluded that non-sexy ads appeared to do the most good with the least amount of harm in terms of advertising effectiveness. Their results also suggest that the sexes react differently to female models in sexy ads, but not so differently to male models. Perhaps this difference can be attributed to the prevalence of female models as the central object of ads that use sexual appeals. Given the changing demographics of models in sexy ads and the general social climate, an updated version of this study might not reveal the same pattern of differences.

Other research in the effects tradition has focused on the degree, or explicitness, of sexuality portrayed in advertisements. Grazer and Keesling (1995) exposed male students to jeans and liquor ads containing high, moderate, low or no sexual content and then measured brand recall and purchase intention. LaTour and Pitts (1990) determined that the use of female nudity was detrimental to the effectiveness of perfume ads for female viewers. On the other hand, Simpson, Horton, and Brown (1996) examined the effects of male nudity on ad effectiveness and found females responded more favorably than males to ads with male models; this effect tailed off, however, with the suggestion of full nudity. The results of these studies lead to the conclusion that sex appeals used in moderation may be more effective than highly intense sexual appeals. However, based on
the above studies, little or no conclusion can be reached regarding how these messages are processed in the minds of individual consumers.

A recent study by Reichert, Heckler and Jackson (2001) addresses this limitation by examining cognitive responses to sexual appeals used in public service announcements. The researchers assert that, by inhibiting critical responses (i.e. counter-arguments) to messages through the stimulation of positive affect, sexual appeals can be persuasive if the message is relevant to the topic. It is important to note that this study used messages that were largely relevant to the topic, were designed to be free of sexism, and were equally appealing to both genders; had the messages been designed to specifically target males or females, the messages may have differed. Similar conclusions regarding cognitive processing were reached by Severn and Belch (1990). They found that sexually explicit appeals interfered with the generation of thoughts about the product and message, but increased thoughts about the way the message was presented.

Finally, in a study by Reichert and Alvaro (2001), participants reported that a fragrance commercial that used a sex appeal was more engaging than a non-sexual fragrance commercial. The researchers noted that participants who viewed the sexy commercial also generated more positive thoughts towards the ad’s execution and demonstrated greater recall of the ad than viewers of the non-sexy commercial both immediately after viewing and two months later.

The literature on sex in advertising leads to several conclusions. First, sex is now a mainstay in American advertising. Both the number of ads containing sexual content and the explicitness of those ads have increased over the years. Furthermore, while
females remain the central characters in the majority of sexy ads, the use of male models has increased significantly. Second, carefully constructed ads of moderate sexual intensity may be viable marketing tools with select audiences. Finally, recent research has drawn on insights from cognitive psychology to explain how and why sex appeals work in some cases and not in others.

The psychological research is valuable because it provides a framework for unraveling the complexities involved with using sex as a marketing device. One particularly rich source of understanding comes from the memory and social cognition literature. Although several memory models exist, theorists in this tradition generally agree that judgments are often made on the basis of what concepts are most easily accessible in a person's memory (Berkowitz, 1984; Fazio, & Towles-Schwen, 1999; Higgins, 1996; Schwarz, 1995). Theoretically, media content activates constructs, which an individual then draws upon in making a judgment or decision. This phenomenon is referred to as a priming effect (there are two basic types of priming effects – assimilation, in which ambiguous stimuli are interpreted similarly to the priming stimuli, and contrast, in which ambiguous stimuli are interpreted differently from the priming stimuli). In this sense, the mass media acts as a cue or prime in behavioral decisions or attitude formations. Research in this area utilizes priming methodology to investigate the influence of exposure to media on subsequent decisions and judgments.

Priming and advertising, however, have received relatively little attention from media scholars. In this area, the primary focus has been on the contextual effects of ad placement within a magazine (Schmitt, 1994; Yi, 1990, 1993). Another scholar warns that consumers may have become savvy to advertisers' use of such persuasive priming tactics
and suggests marketers take this factor into account when constructing campaigns (Stafford, 2000).

**Purpose**

Priming and advertising research is important from an economic standpoint. However, as suggested above, there are ethical and social considerations that are just as significant. Pollay (1986) argues that advertising that appeals to sexuality facilitates sexual preoccupation and pornography. Gould (1994) argues that the use of sex appeals not only sexualizes products and services, but also drives people to “relate sexuality in advertising to the rest of their lives” (p. 76).

Although much of the sex in advertising research could fall under the purview of priming, to date, very few studies, if any, have explicitly used priming methodology. Furthermore, despite public and professional criticism of sex in advertising, no studies to our knowledge have experimentally substantiated claims such as Pollay’s and Gould’s. Much of the media priming research has focused on violence and aggression (see Anderson, 1997; Bushman, 1998; Josephson, 1987) and political priming (see Iyengar, Peters, & Kinder, 1982; Krosnick & Kinder, 1990).

The priming research that has been done on sex has typically employed blatantly pornographic stimuli as an independent variable. For example, prior to being interviewed by a female research assistant, McKenzie-Mohr and Zanna (1990) exposed male participants to either a pornographic video or a control video containing no sexual content. As expected, participants who viewed the pornography demonstrated significantly higher measures of behavioral and cognitive sexism. Specifically, the female
Sex Appeals that Appeal

interviewer rated the participants in the experimental condition as being more sexually motivated. This finding was corroborated by the fact that, relative to the control group, viewers of the pornographic video reduced the interpersonal distance between themselves and the female research assistant during the interview. In measures of recall, the experimental group identified significantly more physical features of the female interviewer, and significantly less of what she had to say. It is important to note that these effects were most pronounced among gender-schematic males (i.e. those with a predisposition to treat interactions with the opposite sex in sexual terms).

What McKenzie-Mohr and Zanna’s research demonstrates is that pornography can result in the activation of schemata that are an inappropriate basis for social interaction. This finding raises the following questions: To what extent does less blatant forms of media activate the same type of schemata? Given the prevalence and increasingly explicit nature of sex in advertising, it is surprising that media researchers have not examined this question. Secondly, McKenzie-Mohr and Zanna’s study focused exclusively on male reactions to pornography, which is typically directed towards males. However, females are often the target audience of mainstream media marketing campaigns. Will advertisements that use sex appeals that are targeted at females also activate the same kinds of schemata?

Hypotheses

The general aim of this study is to answer the questions posed above. Specifically, will exposure to sexual imagery found in mainstream advertising activate sexual schemata (cognitions) in a person’s memory? Berkowitz’s (1984) cognitive-association
theory of memory treats cognition, affect and behavior as parts of an integrated system. As stated earlier, the accessibility of constructs can be a factor in evaluative judgments, changes in affective state, or even behavioral decisions. Several studies have found a link between priming and cognition (Anderson, 1997; Anderson et al, 1995; Anderson et al, 1998; Bushman, 1995, 1996, 1998; Iyengar et al, 1982; Krosnick & Brannon, 1993; Krosnick & Kinder, 1990; Miller & Krosnick, 2000) as well as between cognitive accessibility and behavioral responses (Anderson et al, 1995; Berkowitz, 1984; Josephson, 1987; McKenzie-Mohr & Zanna, 1990). Anderson (1997) investigated the influence of violent media on the accessibility of aggression-related concepts by asking participants to view either violent or nonviolent movie clips. He found that violent movies increase aggression by increasing hostile feelings and the accessibility of aggressive thoughts. Similarly, Bushman (1995, 1996, 1998) found that exposure to violent movie clips increases accessibility of aggressive constructs.

Comparable priming effects have been found in pornography studies. In a meta-analysis, Allen, Emmers, Gebhardt, and Giery (1995) concluded that exposure to pornography increases rape myth acceptance in experimental studies (while not an explicit test of priming, this indicates a link between exposure to stimuli and subsequent evaluative judgments). Results from Lo, Neilan, Sun, and Chiang (1999) also show that exposure to pornographic media has significant effects on both sexual permissiveness and promiscuous sexual attitudes and behavior in high school students.

Obviously, the activation of sexual schemata as the basis for behavior is an appropriate goal in some situations, while in others it is not. However, due to the exploratory nature of this study, we have chosen to limit our research scope to advertising
effects on the accessibility of sexual constructs in memory and leave the question of effects on behavior for future consideration.

One way of gauging whether exposure to sexual imagery in advertising will result in the accessibility of sexual constructs in memory is to use priming methodology. Typical priming experiments use a prime (such as violent media content) to activate constructs in memory and then expose participants to some ambiguous stimuli (such as words with both aggressive and non-aggressive meanings) to see if participants will react to the stimulus in the direction that the prime suggests (Berkowitz, 1984; Bushman, 1995, 1996, 1998; Josephson, 1987). Reaction time is often used as a dependent measure to gauge the accessibility of constructs activated by the prime. That is, participants generally react faster to words with aggressive meanings after having been exposed to violent media rather than non-violent media.

In our experiment, we utilize the same principle. That is, we project that participants will react faster to words with sexual meanings if they are exposed to advertisements containing sexual imagery than if they are exposed to ads with non-sexual imagery. This procedure has not, to our knowledge, been applied to the domain of advertising before now.

Reaction time is measured by presenting participants with a string of letters on a computer screen in a lexical decision task. In this task, participants are asked to decide whether the string of letters is a word or a non-word. This procedure is adapted from a study by Bushman (1998). While Bushman’s work used words with aggressive connotations and dealt with effects of violent media content on aggression, our research focuses on priming effects of sexual imagery in advertising. Given that basic aggressive
and sexual behaviors are controlled by similar structures in the brain (Baron, 1998), we feel the use of Bushman's priming methods is a viable means of measuring the accessibility of sexual constructs. In our research we used 25 sexual words, 25 nonsexual words, and 50 non-words to measure the accessibility of sexual constructs.

Research in accessibility has revealed that exposure to a priming stimulus does not always result in homogenous evaluations of an ambiguous target. Rather, individual differences can moderate reactions to a prime and result in either contrast or assimilation effects (Schwarz, 1995). Fazio and Towles-Schwen (1999) theorize that differences in an individual's motivation and opportunity to deliberately process information may result in markedly different attitudes and judgments. Bushman (1995) found that trait aggressiveness played a moderating role in the effects of violent media on aggression and McKenzie-Mohr and Zanna's (1990) research indicated that pornography had the most detrimental effects (in terms of promoting sexism) among gender-schematic males.

Similarly, we predict that individual differences will moderate priming effects of sexual imagery in advertising. One such difference could be a person's general approach to sexual information. In a series of related studies, Andersen and Cyranowski (1994) developed a measure of a women's sexual self-schema, which they assert is "influential in the processing of sexually relevant social information and gives guidance for sexual behavior" (p.1092). From these studies they created the Sexual Self-Schema Scale (SSS), which unobtrusively differentiates between women with a positive sexual-self schema and women with a relatively more negative sexual schema. The former category is associated with a greater likelihood to experience positive emotions in association with sexual information, while the latter category is more likely to express negative or
conservative attitudes towards sexual matters. Thus, in terms of Fazio and Towles-Schwen’s (1999) theory, participants who score lower on the Sexual Self Schema scale, and are therefore less open to sexual information, will be more motivated to deliberately process the sexual information seen in the ads than women who score higher on the scale.

Participants were divided into two groups according to their scores on the Sexual Self-Schema scale (SSS). Those scoring higher than the sample mean (M=4.95) on the seven-point scale were classified as high SSS, while those who scored below were grouped into the low SSS category. In general, participants who score higher on the SSS scale will react more favorably to sexual imagery than participants who have lower scores. Consequently, when sexual imagery is used as a priming stimulus we can expect assimilation effects for the high SSS group and contrast effects for the low SSS group.

Furthermore, research in priming has identified two key moderators influencing priming effects: frequency of exposure and recency of exposure (Higgins, Bargh, & Lombardi, 1985; for a review see D. Roskos-Ewoldsen, B. Roskos-Ewoldsen, & Carpentier, in press). In general, the more frequently a person is exposed to a stimulus, the stronger the influence that stimulus has on accessibility.

Based on the above factors, we make the following predictions:

H1: Within the high SSS group (low SSS group), participants exposed to ads using sexual appeals will have a faster (slower) mean reaction time to sexual words than participants not exposed to ads using sexual appeals. That is, experimental conditions will produce significantly faster (slower) reaction times than control conditions, resulting in an assimilation (contrast) effect.

Related to the above hypothesis, we would expect:
H2a: For experimental conditions, participants in the high SSS group will have faster reaction times to sexual words than the low SSS group.

H2b: For experimental conditions, there will be no significant differences between the two SSS groups in reaction times to non-sexual words.

Since reaction time should be a function of the priming stimulus, and not just a chance difference between reactions to words and non-words, we predict:

H3: All conditions in which high SSS (low SSS) participants are exposed to ads using sexual appeals will produce faster (slower) mean reaction times to sexual words than to nonsexual words.

Because the influence of a prime fades over time, recency of a prime also plays a role in accessibility. Experiments by Srull and Wyer (1979) found priming effects on judgments that lasted up to one hour, and weak effects that lasted over a twenty-four-hour period. However, Roskos-Ewoldsen and colleagues (in press) point out this latter effect has never been replicated. In addition, most research on the influence of priming on subsequent judgments involves a maximum delay of 15 to 20 minutes. Accordingly, we hypothesize:

H4: High SSS (low SSS) participants exposed to ads using sexual appeals in an immediate condition will have a faster (slower) mean reaction time to sexual words than participants exposed to ads using sexual appeals in a 10-minute delay condition.

Method

This experiment used priming methodology. As stated previously, priming methodology involves exposing participants first to a priming stimulus and then to an
ambiguous target stimulus to determine if the prime can influence reactions to the target. The primes in this case were full-color reproductions of print advertisements (scanned from magazines). The target was a word/nonword lexical decision task.

**Priming stimuli**

The advertisements themselves were taken from the magazines *Glamour*, *Vogue*, and *Mademoiselle*, as these are generally regarded as typical women's magazines (e.g., Kolbe & Albanese, 1996; Taylor & Lee, 1994) and are read by millions of Americans. According to a report in *Advertising Age* (Endicott, 1999), *Glamour* has a paid circulation that exceeds two million (2,163,640) and ranks fourteenth among consumer magazines in terms of newsstand revenue. The same report named *Vogue* as the top revenue-earner among fashion and beauty magazines and ranked it thirty-first overall in this respect. *Vogue* has a reported paid circulation of 1,211,711, while *Mademoiselle*’s readership is nearly as large (1,191,719).

Advertisements from these three magazines were used as primes and were divided into two groups: Those using high levels of sex appeal and those using no sex appeal.

**Pilot Study**

A pilot study was conducted to determine the level of sex appeals used in various print advertisements. Eighteen female undergraduates (mean age = 19.6) in sophomore-level communications classes were shown a group of 49 print advertisements for fragrance and perfume products. As students viewed the ads, they rated each on five dimensions: Familiarity with the advertisement, overall feeling toward the advertisement,
perceived attractiveness of each model in the advertisement, attitude toward the brand in the advertisement, and perceived intensity of sex appeals used in the advertisement. The sixteen advertisements rated highest in perceived intensity of sex appeals were selected as sex appeal ads. The twenty advertisements that were classified as non-sex appeal ads featured no models at all. As Table 1 illustrates, the two groups of ads are not significantly different in familiarity with the advertisements, or overall feeling toward the advertisement. However, attitude toward the brand is very near significance. Ideally, there would be no difference on this dimension as well, but as this measure was a peripheral rather than a central concern the decision was made to use the ads inasmuch as they did not differ on other measures. Of critical importance to the present study was the measure of perceived intensity of sex appeal. As expected, there was a significant difference between the two groups of ads on this dimension (t= 2.150, p=. 039).

Table 1: Similarity Between Selected Ads

<table>
<thead>
<tr>
<th></th>
<th>16 ads with sexual appeals vs. 20 ads without sexual appeals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiarity with Ad</td>
<td>t = .351 (p = 0.728)</td>
</tr>
<tr>
<td>Overall Feeling Toward Ad</td>
<td>t = .611 (p = 0.546)</td>
</tr>
<tr>
<td>Attitude Toward Brand</td>
<td>t = 1.981 (p = 0.056)</td>
</tr>
</tbody>
</table>

In addition to rating the advertisements, participants also rated the words used as target stimuli in the lexical decision task. Eighty-seven words were rated for perceived sexual connotations on a seven point semantic differential scale (no sexual connotation =1, high sexual connotation=7). Twenty-five words with a mean score below 2.0 were selected for use as non-sexual words and 25 words with a mean score greater than 3.5 were selected for use as sexual words.
Target stimuli

Participants completed a word/nonword lexical decision task following exposure to the advertisements. Participants were asked to decide whether or not each stimulus presented in front of them on a computer screen was a word. The stimuli were divided into three groups: ambiguous words with at least one sexual meaning (25%), nonsexual words (25%), and nonwords (50%). All of the words used in the task were among the most frequently used words in the English language. Frequency of usage was determined by Thorndike and Lorge’s word inventory (Thorndike & Lorge, 1944), which has been used for similar purposes in aggression priming experiments (e.g. Bushman, 1998). The experimenters created the nonwords specifically for use in this task. Each nonword had a similar number of syllables, vowels, and total letters as one of the words being used in the task.

Participants

Seventy-three female undergraduate students in an introductory human development class were recruited to participate in this experiment. Due to computer failures, data were lost for two participants. Thus, usable data were collected from a total of 71 participants. All students received extra credit for their participation in the study. The mean age of the group was 20.95 years.

Procedure

The experiment had a 2 (exposure to high intensity or no sex appeal advertisements) × 2 (delayed or immediate exposure to target stimuli) design.

In the intensity of exposure conditions, one set of fragrance advertisements (80%) was composed of sixteen sex appeal advertisements out of twenty total, while the
other (0%) was composed of zero sex appeal advertisements out of twenty total, and served as the control group. The advertisements not using high levels of sex appeals were selected on the basis of similarity (familiarity with the ads, overall feeling towards the ads, and overall attitudes towards the brand) to the sex appeal advertisements. All advertisements were for fragrances, and all were shown in a predetermined random sequence. Prior to advertisement exposure, each participant completed a pretest, which consisted of questions designed to determine demographic information, media usage habits, fragrance use habits and Sexual Self Schema (26 items).

After viewing the advertisements, participants were told that they had completed the advertising study and would be moving on to a second, completely unrelated study. Participants performed the lexical decision task in one of two conditions: delayed exposure or immediate exposure. Those in the delayed exposure condition were assigned a ten-minute filler task prior to stimuli exposure, while those in the immediate exposure condition proceeded directly to the lexical decision task. In both conditions, participants were told that their goal for the lexical decision task should be to finish both as quickly and as accurately as possible. The task itself featured a randomly determined word sequence.

After completing the lexical decision task, participants completed a posttest questionnaire, which tested participants for suspicion regarding the true purpose of the experiment. In addition, one item asked the participants to describe the ads they had viewed. This item served as a manipulation check to ensure that the ads in both the experimental and control conditions were indeed perceived as using sex appeals or non-
Sex Appeals that Appeal

sexual appeals, respectively. An analysis of responses confirmed this expectation. Finally participants were debriefed and thanked.

Results

Our analysis of the collected data revealed some anomalies in our sample and the words used in the lexical decision task. In comparing reaction times of participants we noted two students whose reaction times were more than three standard deviations above the mean. We eliminated data from these two participants on the assumption that they did not seriously consider our instructions to complete the lexical decision task as quickly as possible.

Upon inspection of the reaction times we also discovered a potential confound in one of the sexual words used in our experiment. The mean reaction time of the word ‘erect’ was approximately double the average reaction time of all sexual words and had an unusually large standard deviation. This meant that some participants were spending in excess of four seconds to decide if the word was a non-word or a word, whereas for most other stimuli they spent about one-half of a second. It is also significant to note that in the pre-test the word ‘erect’ was rated as being the least ambiguous of all 87 words (i.e. it had the strongest sexual connotation). Because priming effects are contingent upon the presentation of ambiguous stimuli this word could represent a potential confound. With this in mind we compared reaction times to the word ‘erect’ with reaction times to the other sexual words and found statistically significant differences ($t=7.011$, $p=.000$). However we found no significant differences when we compared the remainder of the least ambiguous words with the most ambiguous words. Based on these findings we
decided to eliminate this word from our data analysis. Thus, the results reported below should be interpreted with these caveats in mind.

**H1:** As shown in Table 2, within the high SSS group, marginally significant differences were found between experimental and control groups in reaction times to sexual words ($t=1.721$, $df=33$, $p=.095$). However, the observed direction was opposite to the one predicted; participants exposed to sexy ads had slower reaction times to sexual words than participants in the control group. For the low SSS group we found no significant difference in reaction times to sexual words between participants exposed to advertisements with sexual imagery and those not exposed to advertisements with sexual imagery. However, the observed difference was in the predicted direction. Thus, H1 is not supported.

Table 2: Difference of Reaction Time to Sexual Words between Subjects Exposed to Sex Ads and Subjects Not Exposed to Sex Ads

<table>
<thead>
<tr>
<th>Subject</th>
<th>Reaction Time to Sexual Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SSS Subjects Exposed to Sex Ads (n=16)</td>
<td>611</td>
</tr>
<tr>
<td>High SSS Subjects Not Exposed to Sex Ads (n=19)</td>
<td>561</td>
</tr>
<tr>
<td>$t=1.721$ ($p=.095^*$)</td>
<td></td>
</tr>
<tr>
<td>Low SSS Subjects Exposed to Sex Ads (n=18)</td>
<td>620</td>
</tr>
<tr>
<td>Low SSS Subjects Not Exposed to Sex Ads (n=16)</td>
<td>614</td>
</tr>
<tr>
<td>$t=.183$ ($p=.856$)</td>
<td></td>
</tr>
</tbody>
</table>

(Reaction time is in milliseconds; $t$ value is a two-tailed test. *Significant at $p<.10$)

**H2a:** A test of this hypothesis revealed results in the direction opposite than predicted. The high SSS participants had slower reaction times to sexual words after being exposed to sexy ads, whereas the low SSS participants reacted faster. However, as shown in Table 3, this difference was not statistically different.
Table 3: Reaction Time to Sexual Words for High SSS Subjects vs Low SSS Subjects in Experimental Conditions

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Reaction Time to Sexual Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SSS Subjects (n=16)</td>
<td>630</td>
</tr>
<tr>
<td>Low SSS Subjects (n=18)</td>
<td>620</td>
</tr>
<tr>
<td>t=.278 (p=.783)</td>
<td></td>
</tr>
</tbody>
</table>

(Reaction time is in milliseconds; t value is a two-tailed test.)

H2b: The prediction of no differences in reaction times to non-sexual words between the high SSS group and low SSS group was confirmed, as shown in Table 4. However, claiming unequivocal support for this set of hypotheses is somewhat questionable, given the results of non-significance for hypothesis H2a.

Table 4: Reaction Time to Non-Sexual Words for High SSS Subjects vs Low SSS Subjects in Experimental Conditions

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Reaction Time to Non-Sexual Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>High SSS Subjects (n=16)</td>
<td>619</td>
</tr>
<tr>
<td>Low SSS Subjects (n=18)</td>
<td>594</td>
</tr>
<tr>
<td>t=-.817 (p=.420)</td>
<td></td>
</tr>
</tbody>
</table>

(Reaction time is in milliseconds; t value is a two-tailed test.)

H3: This hypothesis is the crucial test for evidence of the priming effect. We predicted that all conditions in which high SSS (low SSS) participants are exposed to ads using sexual appeals would produce faster (slower) mean reaction times to sexual words than to nonsexual words. The results of this test are summarized in Table 5 and show that, contrary to predictions, the high SSS group demonstrated a contrast effect (t=2.005, p=.063). Participants in the low SSS group, as expected, demonstrated a contrast effect (t=4.070, p=.001). These findings are supported by the fact that no significant differences were found in reaction times of control groups. Thus H3 was partially supported.
Table 5: Difference of Reaction Time to Sexual Words and to Non-sexual Words in Subjects Exposed to Sexual Ads

<table>
<thead>
<tr>
<th>Subject / Word</th>
<th>Reaction Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(High SSS) Sexual Words (n=16)</td>
<td>629</td>
</tr>
<tr>
<td>(High SSS) Nonsexual Words (n=16)</td>
<td>619</td>
</tr>
<tr>
<td>t=2.005, p=.063*</td>
<td></td>
</tr>
<tr>
<td>(Low SSS) Sexual Words (n=18)</td>
<td>620</td>
</tr>
<tr>
<td>(Low SSS) Nonsexual Words (n=18)</td>
<td>594</td>
</tr>
<tr>
<td>t=4.070, p=.001**</td>
<td></td>
</tr>
</tbody>
</table>

(Reaction time is in milliseconds; t value is a two-tailed test. *Significant at p<.10; **significant at p<.01)

H4: This hypothesis predicted that a delay between exposure to ads and testing for accessibility of sexual constructs would show a fade in the priming effects. The priming effect appears to fade in the case of the high SSS participants, but not in the low SSS groups. However, neither difference is significant. Unfortunately, the small numbers of participants in these cells makes interpretation of these results somewhat difficult. Table 6 summarizes these results.

Table 6: Difference of Reaction Time to Sexual Words Between Immediate and Delay Conditions for Subjects Exposed to Sexual Ads

<table>
<thead>
<tr>
<th>Subject / Condition</th>
<th>Reaction Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(High SSS) Immediate (n=5)</td>
<td>623</td>
</tr>
<tr>
<td>(High SSS) Delayed (n=11)</td>
<td>633</td>
</tr>
<tr>
<td>t=.220, p=.829</td>
<td></td>
</tr>
<tr>
<td>(Low SSS) Immediate (n=13)</td>
<td>634</td>
</tr>
<tr>
<td>(Low SSS) Delayed (n=5)</td>
<td>586</td>
</tr>
<tr>
<td>t=.780, p=.447</td>
<td></td>
</tr>
</tbody>
</table>

(Reaction time is in milliseconds; t value is a two-tailed test.)
Sex Appeals that Appeal

Discussion

Despite the fact that some of our hypotheses were not supported, the data obtained from this study still tell an important story. We predicted that exposure to sexual imagery in advertising would result in the activation of sexual constructs in a person’s memory. Support for this prediction was found in the fact that participants who viewed sexy ads displayed statistically significant differences in reaction times to sexual words compared with non-sexual words.

However, contrary to our predictions, women who scored high on the Sexual Self-Schema scale (SSS) did not react faster to sexual words than non-sexual words. In fact, exposure to sexual imagery appeared to have the opposite effect on these women. That is, they reacted slower to the sexual words than the non-sexual words after seeing sexual imagery in ads. We theorized that participants in the high SSS group would be relatively more open to sexual information found in advertisements and would therefore display faster reaction times to words with sexual connotations. We hypothesized that, for these women, the activation of sexual constructs in memory would not be problematic, as they have generally positive attitudes towards sexual matters (Andersen & Cyranowski, 1994). Our results seem to indicate the opposite. It seems the sexual appeals in the ads were not very appealing to the participants. One possible explanation for this finding may be the type of advertisements used. The literature suggests that ads that use a moderate sex appeal are generally the most effective (LaTour, & Pitts, 1990; Severn & Belch, 1990; Simpson, Horton & Brown, 1996). Although our experiment was not concerned with ad effectiveness per se, the use of certain ads in our study may have caused negative reactions to the sexual imagery contained in the ad. For example, one ad for Calvin
Klein's *Obsession* featured a nude couple on a swing. LaTour (1990) found that use of a nude female model in print advertisements caused tension and fatigue in women who saw those ads, while a semi-nude model elicited more pleasant feelings. The Calvin Klein ad used both a male and female model, but it is possible that the use of nudity in the ad caused negative reactions, even among women in the high SSS group. This explanation could also account for the finding of no difference between the low and high SSS groups.

For women in the low SSS group, it appears that exposure to sexy advertisements also results in a substantial effect on the accessibility of sexual constructs. Evidence for this is found in a comparison of reaction times to sexual words and reaction times to non-sexual words. For these women, accessibility is also manifested by contrast rather than assimilation effects. Andersen and Cyranowski (1994) reported that low scores on the SSS are associated with "more negative and conservative attitudes towards sexual matters" (p. 1090). Therefore, it could be that women in this group habitually suppress the activation of sexual constructs either due to the dissonance or mental discomfort that sexual information produces or because of some inherent conservative bias.

Not all of our hypotheses yielded significant results. In particular, we did not find significant differences between low and high SSS groups in terms of reaction times to sexual words. One reason, in addition to the type of ads used, that would explain the lack of statistically significant differences between these two groups is the notion of chronic accessibility. A chronically accessible construct is one that is always highly accessible in memory irrespective of priming stimuli. (Price & Tewksbury, 1997). Given the age of participants in our sample (mean of 20.95 years), we should seriously consider the idea that stereotypes regarding young people's interest in sexual matters are true; constructs
regarding sex are highly accessible in young people even without exposure to the ads in our study. Since Roskos-Ewoldsen et al (in press) point out that chronically accessible constructs are also subject to priming influences, chronic accessibility could account for the lack of differences between groups.

**Future Research**

In terms of strengthening the present study, a potential future avenue of research could be to manipulate the intensity of priming stimuli by increasing either the number of ads or their explicitness. In addition to this, duration of priming stimuli (the other aspect of priming intensity) could be manipulated by showing the primes for varying lengths of time. The type of priming stimulus could also be manipulated to determine the effects that ads featuring only male or female models have on accessibility. The literature suggests that more moderate sexual appeals than the ones used in our study might result in assimilation effects for high SSS women and contrast effects for low SSS women.

Perhaps more important are the questions raised by the findings of this research. Inasmuch as sexual imagery in fragrance ads resulted in contrast priming-effects for women who viewed them, it would be important to ascertain the valence of constructs activated in memory. It appears after being exposed to sexual imagery in fragrance ads the participants in our study reacted negatively. Future research needs to confirm this assertion and explore whether these effects carry-over into interactions in social situations, or perhaps have consequences (negative or positive) for self esteem, or life satisfaction. This information would aid advertisers in creating more effective messages,
it would benefit individuals in making media consumption decisions, and it would aid those concerned with sexual images in advertising in advocating appropriate policy.

Future research might also compare performance on the lexical decision task for those who have viewed ads with sexual appeals among varying age groups, or those with different life experiences. According to Andersen and Cyranowski (1994) sexual self-schemata are in part the result of past experiences, thus different findings might be obtained from women who have had negative or traumatic sexual histories. Perhaps women with more mature perspectives towards sexuality might demonstrate different reactions to sexual imagery in advertising. Finally, having found a relationship among women and accessibility of sexual constructs how would men react to sexual imagery targeted specifically to males? Gender differences could be tested using the Men's Sexual Self-Schema Scale (Andersen, Cyranowski & Espindle, 1999).

Conclusion

Upon examination of our results we can state with some confidence that advertisements using sexual imagery can activate sexual constructs in memory of college-aged women. Given the ubiquity of advertising in our daily lives as well as the ubiquity of sexual appeals in advertising, the fact that we were able to produce any kind of priming effects under these limited experimental conditions is somewhat troubling. If these results can be replicated, then advertisers, magazine readers, and concerned groups should recognize that the use of sexual imagery in advertisements might achieve something entirely different than increased sales figures.
Sex Appeals that Appeal

References


Perceptions, Exceptions, and Stereotypes: Visual Representation and the Monster's Ball

By

Yolanda R. Cal, Ph.D. Candidate
The University of Texas at Austin
ycal@mail.utexas.edu

Presented to the Visual Communication Division
AEJMC Convention
August 2002
Perceptions, Exceptions, and Stereotypes: Visual Representation in the *Monster's Ball*

Abstract

Appearances by Black actors has increased over the past forty years beginning a pivotal emergence of multi-dimensional, on-screen characters which illuminates those in real-life. This paper explores one such character, Leticia Musgrove, a poor, rural southern woman, in Halle Berry's filmic representation in the *Monster's Ball*. Berry's performance is significant because it is the first to break dual barriers of color and gender in the seventy-four year history of the Academy Awards --making it the most visible example of her work to mainstream audiences. *Monster's Ball* also illustrates Berry's "exceptional" status, a positioning strategy used by Hollywood and embraced by mainstream audiences to group minority actors in opposition to the stereotypes normally reserved for them. The author examines the visual representation of African-American women and how this representation impacts current discussions of race in America.
Perceptions, Exceptions, and Stereotypes: Visual Representation in the Monster's Ball

Introduction

Historically, cultural representations of Blacks were often negative, offensive, or simply non-existent (Ward 1992). Contemporary film is no exception. Appearances by Black actors has increased over the past forty years beginning a pivotal emergence of multi-dimensional, on-screen characters which illuminates those in real-life. This paper explores one such character, Leticia Musgrove, a poor, rural southern woman, in Halle Berry's filmic representation in the Monster's Ball. Berry's performance is significant because it is the first to break dual barriers of color and gender in the seventy-four year history of the Academy Awards --making it the most visible example of her work to mainstream audiences. Monster's Ball also illustrates Berry's "exceptional" status, a positioning strategy used by Hollywood and embraced by mainstream audiences to group minority actors in opposition to the stereotypes normally reserved for them. Although Berry's characters are considerably more diverse than the conventional and satiric roles of previous African-American actors, they form a ritual space in which to investigate the symbolic and important role of African-American women in the white imagination (Collins 1990; Reeves and Campbell 1994).

The paper's purpose is not to examine the totality of Halle Berry's work and deem them either "all-good" or "all-bad," but to use this site as a place to further a "discourse of discrimination" or a discussion of visual representations beyond historical stereotypes (Reeves and Campbell 1994). As Hollywood begins to negotiate a place for Berry and
other actresses of color, it is important to first examine the evolution of minority roles and the importance of the intersection of gender, class, and ethnicity in visual representations. This examination provides a framework from which a new dialogue of race can evolve.

As I further my scholarship in textual analysis, I am comforted by the fact that intentionally or not, I have become an expert at "resistant reading," or the active examination of sexual, racial, and gender images and biases in representation" (Staiger 1992). Texts are read differently based upon readers' communities and locations (Henke 2000). Advertising, TV, and movies captivated me as a child, and I still take delight in screens both big and small. Some of the most intense images revealed the possibilities that exist as I make my place in the world, and still others give me a blueprint on how to get there. I situate myself at the intersection of my experience, background and exposure, and with the prevalent images of African-Americans in TV comedy and drama, news, sports, and cinema today it is difficult to imagine a world with no Black presence in media. I can only speculate on how a total lack of images affected the collective psyche of African-Americans.

Who I am in large measure is due to the strong influences of my family and peers, but just like millions of other African-American women, I needed something more. In Reel to Real, bell hooks describes what was lacking as "movie magic," where an audience fixes its gaze on something far more compelling than everyday life, where everyday events take on symbolic and powerful meaning (hooks 1996). Growing up a child of the seventies, I was unaware of the recent past--the sixties’ images of the real-
life, "Black is beautiful" Angela Davis, the illusory yet successful Julia, and the powerful Foxy Brown. Seeking this "magic" we rushed home from school to watch Thelma and Florida Evans (Good Times), Louise Jefferson and Florence (The Jeffersons), and Aunt Esther (Sanford and Son) with hopes of catching a glimpse of a self-recognized trait—a tuft of cottony-hair or full lips—anything that would affirm our existence.

When this insatiable need for images that resembled me couldn’t be met, true representation was left to my imagination. Since there was no proliferation of stations that carried Black programming (problematic or not) like UPN and the WB, these images came few and far between. My identity was shaped well before the WNBA and "Girl Power" were ever actualized. And while the heroic deeds of women leaders like Barbara Jordan and Rosa Parks were mentioned, they were rarely referenced, and these images were somewhat eclipsed by those of George Wallace in the "schoolhouse door". The "sheroes" that covered the walls of my room, Wonder Woman, Charlie's Angels, and Isis reflected my gender but were always white. Even Tootie (Facts of Life) was socio-economically different because her parents were wealthy enough to send her to a private school for girls.

In fact, it was not until my late teens that I even sporadically saw Black women characters such as Claire and Denise Huxtable—who not just looked, but spoke, interacted, and lived similar to my experience. This paucity of well-rounded images has made an indelible mark on a society that primarily uses mass media to interpret and understand its individuals. I draw on several theoretical influences which impact this research including cultural studies (hooks 1994; Shohat and Stam 1994; Giroux 1996),
feminist scholarship (Diawara 1986; Mulvey 1988), and other theories of power and representation (Bakhtin 1981; Shohat and Stam 1994; Hall 1996). This paper draws on these theories as well as my experience to enhance analysis and critique.

The roots of textual analysis

A film’s most apparent goal is entertainment, yet its images also serve as a reflection of society’s opinions about the individuals who compose it. Indeed any portrayal impacts society’s beliefs about its members. However, the multiple readings associated with these images include the behavioral, psychological, and moral meanings that shape how individuals make sense of people, places and things--the world around them. The crucial role of all visual media lies in its ability to allow close study of the "Other" and to promote, in Foucault’s words:

"...The 'normalizing' gaze, a surveillance that makes it possible to qualify, to classify and to punish. It establishes over individuals a visibility through which one differentiates them and judges them" (Lutz and Collins 1993 p. 192).

Making sense of film is significantly the same task as making sense of the world (Anderson 1997). Images, as simulacra "precede the real to the extent that they invert the causal and logical order of the real" and its reproduction (Poster 1988). One way to explore the issues of image and identity is to identify prevailing roles offered and accepted by African-American actresses on stage and screen. Of course all actors are subject to stereotyping or typecasting. Black women, however, are especially vulnerable because they represent the juxtaposition of two minorities in one. And because cultural representations of Black women are limited, audiences may often suffer from the
inability to separate fact from fiction. Structuralist theory provides a framework to guide this exploration.

Structuralist theory developed from three loci. Gramsci's *hegemony* describes how society's views are distorted as "naturally correct". De Saussure's *language of film* provides a structure that not only disallows freethinking, but also limits thinking to the structures we already access and use. Lacan's idea of *misrecognition* suspends reality through a juxtaposition of opposing images, which sustains an insatiable desire in the audience. Structuralist theory assumes "an already compiled 'history' which the viewer has to accept to participate in the viewing process" (McCabe 1975). This structure creates a dominant discourse and frames the discussion for *Monster's Ball*.

Photographs and film are inherently different by action. In photos, the audience assumes a story based on visual cues, modifications of light and shadows, and absence or presence of color. In film, the same visual effects are observed, but different information is shared with its audience through character dialogue, and plot development. More importantly, the audience reads the context of the film based on background, prior experience with the creators, knowledge of the cast, and information gleaned in publicity prior to a film's release. Films are variations of such photographs, strung together for maximum impact and emotion. As Lutz and Collins continue, "all photographs tell stories about looking" (p.187).

*Scopophilia*, or the pleasure of looking, is described by Neale as a "drive that is dependent upon the maintenance of a distance between subject and object" (1980). Feminist theorists (Berger 1972; Mulvey 1988) have often defined the gaze as "white and
masculine," treating Blacks and women as objects to be viewed. It is the "social context of patriarchy, rather than a universal essential quality of the image, that gives the gaze a masculine character" (Lutz and Collins 1993). Film spectatorship, as an open space for discussion, invites resistance, re-appropriation, and rereading of the nature of social and cultural boundaries. Spectatorship, according to Shoat and Stam, is on one level "structured and determined, on another it is open and polymorphous, it has a ludic and adventurous side... on a certain level it transcends the determinations of local morality, social milieu and ethnic affiliation" (Shohat and Stam 1994).

Mulvey proposes that mainstream film is constructed to create pleasure in the male viewer (Mulvey 1988). Women, and Black women in particular, "appear not as people or potential partners, but as objects of others' stares, a sort of visual capital" (Snead 1994). Manthia Diawara adds that when Black characters are on the screen their presence is there "primarily for the pleasure of white spectators (male or female), there as the spectacle, as the object of the gaze" (1986). Under these conditions, it is essential that the "Other" remain passive (are acted upon) as not to disturb the manner in which the formula will evolve. Therefore, those able to decode the message inferred by the gaze will be less likely to generate "learned expectations" of about people of certain groups and other effects of a constructed reality.

This primer of feminist film criticism delivers an understanding of gender/class/racial constructions that apply to discussions of the Monster's Ball. The repackaging of African-American stereotypes in movies, television and other media late in the 20th century "influence(s) everything from the selling of pancakes to the
structuring of welfare benefits“ (Snead 1994). According to Patricia Hill Collins as quoted by Reeves and Campbell:

“...as figures in the projection of white fantasies, desires, and fears, this objectification of women of color as the Other has been primarily accomplished by four controlling visions: the mammy, the matriarch, the welfare mother, and the Jezebel” (Reeves and Campbell 1994). Research literature and media analysis of the representation of African-American women has also focused on negative stereotypes such as the Aunt-Jemima or "happy mammy" figure and the tragic mulatto (Anderson 1997; Bogle 1997). The jezebel--a light-skinned "hyper-sexed" woman, uses her physicality to achieve success and pleasure. Despite the "relentless reinforcement of male (and ethnic) dominance present in virtually every culturally recognizable representation of women, there is a way out of the cycle of representation” (Ruppert 1986). An initial step in a positive transformation of this caricature requires a re-visioning of Black women (Anderson 1997).

**Berry's time is ripe**

With her film debut in *Strictly Business* (1991), Halle Berry made an indelible mark on the entire entertainment industry. An "actress du jour" in the last decade, Berry starred in many feature length films, made for television movies, and notable television guest appearances. With the latest nod from mainstream America--a Best Actress Oscar for her role in *Monster's Ball*--she joins a select group of African-Americans who have risen to competitive levels of achievement in cinema. But acceptance comes with a cost.
Is Halle Berry's grand reception laudable or problematic? Before we explore these issues, it is necessary to examine the characteristics that make her a star.

An actor is a "re-presenter of signs" as he or she activates or deactivates certain aspects of cultural markers for character portrayal (public use) that most bear only as a private individual (Gledhill 1987). The star system relies on the premise that the public accepts a star in terms of a certain set of personality traits that permeate all of his or her film roles (Harris 1991). Successful stars are those whose appeal can be catalogued into a series of such traits, associations, and mannerisms. Biographical information, family background, and other "real" personality traits are used as leverage to accept some actors and reject others. Due to extreme competition and scarcity of parts, emphasis shifts from what makes the actor *good*, to what makes the actor *unique* (emphasis mine, King, p. 178). Although Berry identifies as African-American, she possesses the appearance and mannerisms coveted by Hollywood. Often there is no separation between character and the personality created by publicists off-screen. The lines between character and person are blurred, as the actor must rely on behavioral capital to become successful (<biblio>).

The motion picture industry depends on a three-tiered system to create and manage images: publicity, advertising, and exploitation. This triumvirate provides channels for communicating these symbolic images to the public (Harris, pp. 40-41). From a sociological perspective, stardom negotiates the limits and pressures placed upon individuals in a public arena. Barry King (1991) lists the systems used to control this negotiation: 1) the cultural economy of the human body as sign, 2) the economy of signification in film, and 3) the economy of the labor market for actors (Gledhill, p. 167).
The most economical of cultural signs is beauty. Wilson defines this beauty three ways: 1) perceptually, 2) pragmatically, and 3) cinematically. Perceptually, beauty depends on a compromise between outside consensus and personal appraisal. Pragmatically, beauty needs a function, a "congruence of appearance and task" (Wilson 1994). Cinematically, "beauty becomes sexuality". A star must convince its audience not only that she possesses this trait, but also that it is one worthy of possessing (men) or achieving (women).

Halle Berry's beauty translates into "cultural capital" Reeves and Campbell, Bourdieu). Earning her first commercial success as a model, Berry's striking appearance was immediately recognized. As a biracial daughter of a white mother and Black father, Berry could be the poster child for the beneficial results of a multicultural society. Her fair, flawless skin, a warm smile, and perfect figure embodies what can only be described as a "down-to-earth, drop-dead gorgeous woman" (Norment, p. 2). John Simon similarly characterizes Berry in a movie review for Bulworth: "This black has gorgeous, perfectly Caucasian features and barely milk-chocolate skin; she could be a Park Avenue debutante who just sunned herself a bit too intensely at Boca Raton" (1998).

This displacement "allows the audience a safe or non-reactionary dialogue" at the expense of Blacks who are seen as Black (Winokur, et al. 1996). Friedman calls this process "testing the artist," or part of an exclusionary ideology in which the very ability of some Blacks to play roles is the proof that not all Blacks can play these roles, that somehow certain Blacks are "special" (Friedman 1991). Such roles create a population of Black actors and actresses whose inclusion is by exception. These actors reach greatness
by acting in opposition to the stereotype, thereby confirming it for non-celebrities. A white person who is bad "fail(s) to be 'white,' whereas a Black person who is good is a surprise, and one who is bad merely fulfills expectations" (Dyer 1997).

Furthermore, Hollywood builds her success upon an oft-manufactured and repeated ideal. Berry's resemblance to legendary actresses like Lena Horne and the stunning Dorothy Dandridge provides constant comparison. Such actresses' features and mannerisms are most often described with language usually reserved for white actors. Donald Bogel comments that Halle's carries no "ghetto cultural baggage" and therefore can be separated from the totality of other African-Americans (Bogle 1997). This phenomenon harks back to the idea of "passing," a vestige of slavery and segregation where light-skinned Blacks or Mulattos gained access and privilege by "passing for white" to escape the hardships of discrimination. "Passing," as a strategy of racial compatibility in film, perpetuates the notion that America has solved its "race problem," and denies the depiction of authentic empowerment and agency. This pattern of acceptance emerges throughout the entirety of Berry's work as well as the work of other notable talent such as Sidney Pointer and Denzel Washington.

The attention to such distinctions should not detract, however, from the obvious ability of such artists nor their phenomenal performances in breakthrough roles, but it does amplify the disparities in roles for minority actors heretofore. On the surface Berry's inclusion is remarkable. Her very presence, control of, and success in films such as Monster's Ball gives the audience a glimpse of alternatives to stereotypical casting and story lines. However her situation only illuminates the plight of other minority actors who
struggle to reach such status without similar "exceptional" traits. In this way provides an excellent terrain for investigating the visual representations of one African-American woman in contemporary cinema.

Monster's Ball: servitude, sexuality, and spectacle

Halle Berry's role in Monster's Ball presumes to view the often touchy and taboo discussion of race in society by shifting our focus on the relationship between two people--emphasizing their sameness yet visualizing their difference. Unfortunately, the characterization contributes to the trend of the “long-standing objectification of women of color as ‘outsiders within’” (reeves and Campbell p. 213). In Cracked Coverage, Reeves and Campbell (1994) designate 1965 as the key date where Black culture takes center stage as the “tangled web of pathology” (p. 95). This fallacy stems from a belief that there is a common Black culture in America and that race has a much greater influence than economic, geographic or religious factors. This moral and political debate revolves around the slanted belief that women of color are “subject to the multiple jeopardies of a sex/gender system that blames mothers for family problems and a race/class system that blames the pathological Black family for economic problems” (p 217).

Somehow, Berry paradoxically contests and resists hegemonic representations of race and gender while at the same time confirming them. Through resistant reading of film as text, audiences can uncover contradictory images embedded within the visual landscape. We can explain how Monster’s Ball furthers this premise by incorporating
Reeves and Campbell’s idea of a chronotope, the inseparability of the spatial and the temporal dimensions of any drama. For the audience, the South maintains a postmodern negatively charged chronotope through a “therapeutic narrative” full of both redeemable and condemnable characters. Every scene, character, and visual element in Monster’s Ball resonates in the collective memory of a society wrought with anger, resentment, and fear hovering over the racial divide. Images are not so much a social truth as much as a socially-constructed (re)presentation of this truth—a myth promulgated through the collective cultural unconscious of the nation's past transgressions (Henke 2000). From the rusty "Georgia is Peachy" signs in the dilapidated gas station to the unforgiving shock of the electric chair, the visual imagery in the film is reminiscent of another time and place.

Plots are never neutral—"they are often inscribed on bodies in a matrix of meanings coded primarily by race and socioeconomic status" (Henke 2000). From the beginning of the film, Leticia’s a bundle of under-developed contradictions. She's poor, downtrodden, and in need of someone to take care of her. She’s a refashioned light-skinned mammy serving as a waitress in the diner. She’s a welfare mother without the welfare. She’s a bandanna-clad crack head on alcohol with an overweight chocolate-addicted child. She’s the aggressive Jezebel on her first date with Hank. She’s the failed Matriarch who can’t keep her husband out of jail or the rent paid. Yet Leticia's behavior is interpreted as a consequence of her environment. She elicits a genuine goodness that seems to compensate for her inherent faults. Moreover, she is repeatedly designated as

---

1 Chronotope literally means “time space.” For a more detailed discussion of Bakhtin’s use of analytic concept (borrowed from mathematics) see in “Forms of Time and of the Chronotope in the Novel,” in The Dialogic Imagination: Four Essays 1981 University of Texas Press, p. 84.
the “one good thing” that happens to other characters in the movie. Their transgressions are be purged through her will to survive. The plot's over-simplistic resolution is quite problematic for it rides an ideological undercurrent of Leticia’s dependence on Hank for familial and economic survival.

Although director Marc Forster's story holds the potential to examine difference on many levels, as the drama enfolds, the audience encounters implausible one-dimensional treatments of a very complex series of events. His portrayal of the modern South relies on starkly polarized racial opposition, not complex and conflicting racial attitudes. The themes of redemption and reconciliation are clear but the actual transformation is all too remarkable and effortless. The audience is left with visual images of the apparent importance of “the significance of belonging” (Collins p. 68).

For Leticia, the consequences of belonging includes sacrifice, loss and detachment, for Halle Berry it means the same things—maintaining a relationship with both Hollywood and the African-American community.

Refocusing the gaze

Achieving equity in Hollywood and its created images remains an undeniable yet elusive goal. Berry's role in Monster's Ball necessitates the need for other groundbreaking characters and serves as an example of the problems with exceptional status practiced by Hollywood. The scarcity of accurate Black representation in film are manifestations of a deeper economic, social, and cultural problem (Friedman 1991).

Berry's combination of beauty, style, and acting talent makes it easy to sell her "star package" to mainstream America, earning her roles that may open doors for
actresses of any ethnicity. It is my hope that continued access to the quantity and quality of roles by minority actors and jobs in the industry will make up for the history of (mis)representations, so that "real images" or what Mary Ellison (1981) describes as "enough glimmerings of real characters in genuine situations for there to be hope for change" will be commonplace (Ellison 1981).

belle hooks, when discussing patriarchy and representation suggests that only through focusing on conscious resistance of repression and closure (of female spaces) will we discover a location free from boundaries and repressive ideals.

"In our culture, women of all races and classes who step out on the edge, courageously resisting conventional norms for female behavior, are almost always portrayed as crazy, out of control, (1996) set apart. Captured in a circus of raging representations, women’s serious cultural rebellion is mocked, belittled, and trivialized." (hooks 1994).

I would argue that these limitations are doubly hard in the case of Halle Berry, for these images define both "represented role" and "actualized self" for her and ultimately perpetuate myths of African-American women in contemporary film.

Some might argue that Berry's roles extend the limits for African-American and women actors. Still others recognize the increasing Black presence in television and other media, while understanding that visual equity is a relatively distant ideal (Bowen and Schmid, 1997; Bristo, Lee, and Hunt, 1995; Licata and Biswas, 1993; Zinkhan, Qualls and Biswas, 1990). However, her success does provide hope for future representations of Black women in visual media.

I anticipate a future in film similar to what Herman Gray calls an "inaugural moment" that addresses the "nuances and sensibilities of African American culture" that
have heretofore been restricted and omitted (Gray 1995). Movies such as *Monster's Ball* courageous enough to examine cultural differences, racism, and power distance should argue against quick-fixes and by offering systematic change. One way to achieve such visual representation will not be the tempting color-blind resolutions offered heretofore, but an in-depth discussion of how individuals uniquely impact life in America.²

²The New York times offered a six-week, fifteen-part series on race that was awarded a Pulitzer Prize and appeared as a book, How Race Is Lived in America: Pulling Together, Pulling Apart.
Works Cited


Visual components of source credibility for non-profit organizations on the World Wide Web

A submission to the
Association for Education in Journalism & Mass Communication
Miami, Florida

Linda Jean Kensicki
School of Journalism & Mass Communication
University of Minnesota, Twin Cities
304 Murphy Hall
206 Church Street S.E.
Minneapolis, MN 55455
612.625.9388
kensicki@umn.edu
Abstract
Visual components of source credibility
for non-profit organizations on the World Wide Web

Limited research has examined the impact of visual communication on the web and none has explored how wired visual constructions influence an organization's credibility. This research tested a model of visual credibility on 133 individuals through sample web pages for two types of non-profit organizations. Contrary to previous work, a structured design was not uniformly seen as more credible than an organic design. Regardless of the issue, photographs and bright colors on the web were found to confer more credibility to an organization. The credibility gained through visual representation was found to engender actual participation for specific issues.
Introduction

The Internet has been heralded, as a powerful communication tool for several reasons, not the least of which is its fundamental integration of visual and textual information. Despite this strength, little research has examined the visual implications of having a web presence for those who may have the most to gain with a wired presence – non-profit, social change organizations. Previous research has suggested that the World Wide Web can be a strong democratizing force for citizens, non-profits and change agents across the globe. Because of this, and the relatively quick diffusion of this technology, non-profits have created a formidable presence on the web. Yet, the impact of this presence on the organization itself has yet to be fully realized.

The proliferation of non-profit organizations on the web has created a level of expectation from possible constituents and clients. It has been suggested that today’s non-profit enjoys a certain level of credibility by the public merely for having a website in the first place. But what of the well-organized organization with a dis-organized website? Can having a poorly designed website actually do a non-profit damage? Since visual constructions are the primary and immediate force involved in cognitive recognition, are there certain design techniques, photographic uses, and color palettes that are more credible standing alone, without any text?

To better answer these questions, this research first reviewed why the Internet has grown to such a powerful position for non-profits. This work then examined the issue of credibility and constructed a model of visual credibility that was tested for two hypothetical types of non-profit organizations. Sample web pages were created and then shown to 133 college students, who serve as the central demographic group involved in political/non-profit membership. These individuals were asked to answer specific questions along Likert scales regarding credibility, ‘likeability’ and their own propensity to join after viewing the site.
Citizen Organizations and the Web

The strength of any democracy is measured against several factors: the ability for citizens to organize, the levels of exposure citizens have to alternative positions, and the range of common experiences citizens share (Sunstein, 2001). With no central control point (Berman & Weitzner, 1997), the Internet has allowed organizations to produce, receive and distribute information almost instantaneously (Fisher, et al., 1996, Lunenefeld, 1999). In addition, the technology of the Internet has unlocked horizontal and vertical flow of communication (Stromer-Galley, 2000), physical connectivity, data communality, and interactivity – all with a relatively high ease of use (Flanagin et al., 2000). While other media remain one-way, top down forms of communication that effectively remove public citizenry from the process (Rucinski, 1991), Internet users can interactively exchange information and participate directly (Bertelson, 1992) – making the system more responsive to those traditionally outside of the political sphere (Hacker, 1996). This flexible network of communication has led thousands, if not millions, of citizen organizations to the Internet for their cause.

Once citizen organizations arrived to the World Wide Web, they soon realized that the Internet presented a certain level of ownership not available through other mass media. Within the modern, self-represented Internet environment, the organization itself was now charged responsible for controlling its own message directly for the viewer. This increased level of jurisdiction required activist organizations to explore their own visual and verbal representations within a medium that intrinsically unites both forms of communication (Dyson, 1997). While still focused on public relation campaigns with mass and alternative newspapers, television and magazines, the modern activist organization was now solely responsible for crafting credible messages that encouraged membership and participation.

Credibility as an evaluative construct is an essential, but often overlooked, area for research exploring citizen organizations. Previous studies have found that messages are more likely to be ignored if they are perceived as less credible (Johnson & Kaye, 1998). If ignored by the public, citizen organizations effectively lose their ability to create public awareness (Gitlin,
Visual components of source credibility for non-profit organizations on the World Wide Web

1980; van Zoonen, 1992), generate status (Barker-Plummer, 1995), recruit new members and offer psychological support to already present members of the movement (Molotch, 1979). Thus, organizations must be perceived as credible on the World Wide Web if they are to survive in a modern, new media environment. Research has consistently found that highly credible sources are more effective in causing positive attitude changes and behavioral intentions (Gotlieb & Sarel, 1991; Homer & Kahle, 1990; Ward & McGinnies, 1974)—the goal of any activist organization.

Credibility

Examining the source credibility has been one of the principle areas of research in mass communication scholarship. Whether messages are through interpersonal contact, at the organizational level or through mass-mediated communication, this stream of research has traditionally examined how receivers of information process messages differently contingent upon various characteristics (e.g. Hovland & Weiss, 1951; Mulac & Sherman, 1975; O'Keefe, 1990). Throughout the past fifty years of credibility research, source credibility has generally been found to derive principally from three areas: audience's perceptions of the source, their influencing opinions about the medium and/or qualities of the message itself.

Source credibility based on audience’s perceptions of the source has proven to be multifaceted, with several factors affecting credibility. For example, previous knowledge about the source itself has been shown to have a strong impact on resulting source credibility levels (e.g. Srull, Lichtenstein & Rothbart, 1985), but audience perceptions of credibility have also been inferred from source credentials (e.g. Austin & Dong, 1994). Safety, qualifications, and dynamism (Berlo, Lemert, & Mertz, 1970); competency and objectivity (Whitehead, 1968); as well as expertise, trustworthiness and attractiveness (Yoon, Kim, & Kim, 1998) within the source have all been suggested to enhance source credibility.

More recently, with the development of new technologies, research has examined the medium itself as a predictor of credibility (Schweiger, 2000). Early medium credibility studies
generally compared television content to that of newspapers (Carter & Greenberg, 1965; Rimmer & Weaver, 1987). With the advent of the Internet, several studies have examined the credibility of online news in relation to television and print (Brady, 1996; Flanagin & Metzger, 2000; Kiousis, 2001). These studies have produced mixed results, with some research finding Internet sources more credible and others finding higher perceptions of credibility within traditional media. However, the majority of medium credibility studies have found that television is the most credible medium (Johnson & Kaye, 1998). Regardless of the outcome, there is a clear overlap between source and medium credibility. If one does not believe the veracity of television news, it certainly won't matter how one network fares against another on a personal credibility scale.

Finally, qualities intrinsic to the message itself influence source credibility (e.g. Kaplowitz, Fink, Mulcrone, Atkin, & Dabil, 1991). Qualities within the content, such as high levels of evidentiary message support (Luchok & McCroskey, 1978) and the quantity of information provided (Lashbrook, Snavely, & Sullivan, 1977) have been found to boost source credibility. Further, the quality of writing (Slater & Rouner, 1996), the apparent reality of a message (Austin & Dong, 1994) and the organization of the message (McCroskey & Mehrley, 1969) all influence source credibility as well. Audience evaluation of messages has been so overwhelmingly correlated with source credibility judgments that “although source credibility is supposed to influence perceptions about the message, in fact, messages also influence perceptions concerning the credibility of the source” (Slater & Rouner, 1996, 975).

This transference of message evaluations to source credibility is based on three perspectives of social-science (Slater & Rouner, 1996). Specifically, cognitive judgments tend to follow only after affective judgments have been made (Zajonc, 1980). Thus, cognitive conclusions about the source will be based on earlier affective judgments of the message. Second, in accordance with advertising research, the initial attitudes of audience members after exposure to the message presentation are often transferred to attitudes toward the product (Batra & Ray, 1985). Finally, following the elaboration likelihood model, audience members are
much more likely to seek helpful cues in simplifying their belief-forming process rather than decoding and comparing messages to one another through a labor-intensive process (Petty & Cacioppo, 1986). These fields of research, taken concurrently, strongly suggest that the message itself plays a fundamental role in transferring credibility to the source itself.

While the research completed to date has been extensive, studies have paid little attention to the visual components of messages. Rather, the preponderance of research has relied heavily on textual communication (e.g., Chartprasert, 1993; Newhagen, 1997). Credibility studies that have dealt with the visual aspect of communication have largely dealt with interpersonal communication issues such as dress (Chaiken, 1979; Gorham, Cohen, & Morris, 1999) and body language (Woodall, Burgoon & Markel, 1980). These threads of research do little to explain how visual components of messages influence source credibility within a mediated context.

A Model for Visual Credibility

Visual imagery reproduces informational cues that individuals use to construct their perception of social reality (Messaris, 1994). This reliance on available visual information to construct reality, calls for a much thorough examination of imagery used in mediated contexts. Gattegno (1969) noted that sight itself is simultaneous, comprehensive and synthetic in its analysis. Indeed, visual imagery instantly affects how we perceive the message and the messenger. Visual images are central to how we "represent, make meaning, and communicate in the world around us" (Sturken, M. & Cartwright, 2001, 1). This is fundamentally important in a culture that has become increasingly visual (Fetveit, 1999; Sturken & Cartwright, 2001) and within a medium, such as the Internet, that relies heavily on the synergy between visual and textual messages (Dyson, 1997).

While not directly related to credibility, several scholars have explained elemental visual imagery in descriptive terms. These broad categorizations of visual communication components help provide a framework for building several hypotheses. For example, it has been found that
structured designs within a grid formation denote a level of seriousness and professionalism (Lauer & Pentak, 2002). This finding leads to the research assumption that any perceived visual seriousness would translate to credibility for an organization. Therefore, respondents will be shown websites with formal design structures to ascertain any influence on source credibility.

Hypothesis 1: The activist organization that has a website with a structured, grid design will be judged as more credible than the activist organization with a website demonstrating an informal, organic design structure.

There is some evidence to suggest that visual imagery – photographs in particular – provide more credibility than text alone (Huxford, 2001). In reference to news photographs, Goldman and Beeker (1985) write that the mere proliferation of photography in our culture has resulted in an atmosphere where the image itself is not challenged. Photographs have historically been construed as solidifying the objectivity of the messenger (Hall, 1973). Yet, in an environment where the manipulation of imagery is infinitely possible, this lack of oppositional reading may be less likely. The news industry has accepted much, well-publicized, criticism over recent years after digitally manipulating photographs (Foss, 1992; Hundertmark, 1991). Thus, the rather widespread knowledge that images can easily be subjected to manipulation (Fetveit, 1999, Huang, 2001) may have interesting implications for credibility.

Hypothesis 2: The activist organization that has a website with photography will be judged as more credible than the activist organization that has a website that does not use photography.

Colors evoke emotions and have an impact on mood (Poynter Organization, 2002). Bright colors have been found to denote youthfulness (Lauer & Pentak, 2002; Lester, 2000). This conclusion would appear to have some relationship to credibility given the common conception that older individuals are more psychologically mature (Sheldon & Kasser, 2001). This conception of age, could translate to color perception as well. Therefore, respondents were shown websites with bright colors to ascertain any influence on source credibility.

Hypothesis 3: The activist organization that has a website with bright colors will be judged as less credible than the activist organization that has a website that uses muted colors.
Visual components of source credibility for non-profit organizations on the World Wide Web

Research has consistently found that highly credible sources are more effective in causing positive attitude changes and behavioral intentions (Gotlieb & Sarel, 1991; Homer & Kahle, 1990; Ward & McGinnies, 1974)—the goal of any activist organization. However, none of these studies examined visual elements in a mass mediated context. Thus, respondents were asked which website would most likely motivate them to join the represented organization.

Hypothesis 4: The activist organization that has a website that is viewed as more credible will be more likely to engender participation.

Methodology

As the review of literature elucidated, source credibility has generally been found to derive principally from three areas: audience's perceptions of the source, their influencing opinions about the medium and/or qualities of the message itself. The first two components of source credibility (audience's perceptions of the source and the medium) were accounted for in this study in order to better ascertain the impact of the actual message qualities on perceived credibility. Also, the entirety of the text throughout all of the screen-captures was jumbled to ensure the text had no impact on their decisions.

Within this study, the source itself was created as purposively un-specific and generalized to the political position of the receiver. For each issue, respondents were first asked which side of the issue they most agreed with. They were then asked to view the upcoming generic subject-specific sites in that perspective. For example, in regards to the abortion issue, respondents were first asked if they were in support of abortion or against abortion. If they stated they were against abortion, then they were told to examine the generic abortion-oriented website as if it was an organization's website that was against abortion (see Appendix I for questionnaire). If they stated the opposite, then they examined different visual treatments of a generic website that they viewed as in support of abortion. This ensured that the audience's perceptions of the specific source did not play a role in determining the credibility of the media messages.
Controversial topics of abortion and the death penalty were chosen in this study in an effort to ensure that respondents would give clear opinions that were not confounded by lackluster emotions about the issue itself. Presumably, most individuals have an opinion about both of these contentious issues, suggesting that responses, after dividing the subject into a pro or con position, would focus more on the design itself and not the issue.

The medium credibility was accounted for as respondents were asked about their general Internet usage and communication preference patterns on the World Wide Web as well as their uses of the Internet in regards to political and activist information gathering. Respondents' usage of the web was an integral question because although respondents were examining screen captures and not engaging actual web sites, they were told that they were evaluating content from the Internet and presumably recognized the standard formatting of the web browser. This level of questioning is additionally important as previous studies have suggested a correlation between how often one uses a medium and the perceived credibility (Wanta & Hu, 1994; Westley & Severin, 1964). Further, past research has shown a correlation between an individuals preferred medium and high levels of perceived credibility (Rimmer & Weaver, 1987).

Demographic variables were also coded to elucidate how these variables impact credibility dispersions. Previous research has found that young adults are more likely to view the media as credible in general (Greenberg, 1966; Westley & Severin, 1964). In addition, young people have been found as more likely to use the Internet, rather than other media, for information gathering (Birdsell, Muzzio, Taylor & Krane, 1996; Stempel & Hargrove, 1996). Further, liberals have been more likely than conservatives to consider media credible and self-proclaimed liberals are more likely to use the Internet (Johnson, 1993). These factors were teased out of the data to see if previous findings persisted.

College students were selected since they constitute the core demographic component of most activist organizations. Respondents were selected exclusively from their membership within an Introduction to Mass Communication course. Their presence in this course indicated
a certain level of interest in media issues, suggesting they had some conceptions of why and how often they engaged the Internet. But, perhaps more importantly, these students were only beginning their college career in mass communications, which indicated they had not yet learned the principles and influences of visual communication.

The images were first created in QuarkXPress and then transferred to Adobe Photoshop for the creation of a TIFF file. This enabled the graphics to be placed within a screen capture of the Microsoft Internet Explorer browser. By combining these two images, the final result was a simulated web page that was captured from the Internet (see Appendix II for complete web images). A total of eight images were used for each topic. Again, these were generalized so that the viewer could decide if the website represented an anti-abortion or pro-abortion organization, for example. Conversely, for the next issue, the sites were generalized so that the viewer could decide if the website represented an anti-death penalty or pro-death penalty organization. There were four design structures used according to previous research of structured versus unstructured sites. These four structures were:

- text only/structured:
- asymmetrical/structured
- symmetrical/structured
- organic/unstructured
Results

The experimental survey was completed by 133 students who were principally white/anglo/caucasion (85.7%) freshman and sophomores (accounting for 73.6%) that considered themselves ‘generally liberal’ (57.9%). A majority, 63.9% of students said they were not, and have never been, involved in a political/non-profit organization, and 58.6% of the total sampled said they were generally ‘not politically active’ or ‘not politically active.’

In reference to medium credibility, just over half of those who answered the questionnaire believed that ‘about half’ of the information on the World Wide Web is reliable and accurate. However, another 27.8% believed that ‘most’ of the World Wide Web is reliable and accurate. In addition, over 70% of these same respondents accessed the World Wide Web at least several times a day and an overwhelming 84.2% said that if they were interested in finding more information about apolitical/non-profit organization, they would be ‘very likely’ or ‘somewhat likely’ to check the World Wide Web for information about that organization. Only slightly less (80.5) said they would be ‘very likely’ or ‘somewhat likely’ to rely on that same information and 44.4% of respondents stated it would be unlikely that they would seek out information about a non-profit organization through other means than the Internet. Just over half of the respondents stated that it would be ‘somewhat unlikely’ or ‘very unlikely’ that they
would later join an organization they were interested in if they did not locate them on the World Wide Web.

**Generalized Abortion Website**

Sixty-eight percent of the respondents claimed to be extremely in support of abortion or generally in support of abortion. Respondents were first asked what website they 'liked' more, between two visual options. When comparing only design styles (text only/structured, asymmetrical/structured, symmetrical/structured, organic/unstructured) this important predecessor to credibility found differences between the death penalty website and the abortion website. When abortion sites were shown in contrast to one another along design styles, the organic website was consistently found to be most 'liked' (78.9% when compared against the text only site; 69.2% when compared to the asymmetrical site; and 61.7% when compared to the symmetrical site). Thus, the average 'likeability' of the organic site when compared to other design structures was 69.9 percent.

When comparing bright versus muted colors along all of the four design styles, the bright colors were preferred in every category (organic, text, asymmetrical, and symmetrical). The correlation between these design styles was fairly strong (ranging from .838 to .439) and the associated p value was very small (p =.000), indicating that the correlation differed significantly from 0. This demonstrated correlation suggested a greater advantage in using the paired t-test design rather than a design with two independent groups (SPSS, 1999). While the correlation found was substantial, the paired samples test produced a very small p value (ranging from .000 to .001), indicating that a mean paired difference ranging from -7.52 to .97 departs significantly from 0 (Figure 1). The preferred design styles were not chosen by chance alone.

The largest percentage that a mute colored website received in relation to a bright colored website with the same design style was 20.3% when the paired symmetrical sites were shown. Following these trends of 'likeability', when all eight options were shown for the general anti/pro-abortion sites, the bright organic site was chosen as the most 'liked.' Fifty five
percent of the 133 students sampled found that the bright organic site was their favorite anti or pro abortion website (Table 1).

Credibility of an organization largely depended upon what sites were compared. For example, the symmetrical site had the largest percentage of people finding the organization credible if they felt strongly about the issue (71.4%). Yet, the same organization had lower 68.4% credibility when it was compared to the asymmetrical site for the same criteria. Conversely, the organization with an asymmetrical site wasn’t even chosen as credible when juxtaposed against the symmetrical site, but was viewed as highly credible when compared to the text only site (64%). However, the ‘likeability’ of a website was directly proportional to the credibility index of each organization. Sites that were found to be more well-liked were also representative of more credible organizations.

Because these variables are both interval and nominal, the Eta test was used to test the proportion of the variability of the dependent variable (credibility) that was explained by knowing the values of the independent variable (design type) (SPSS, 1999). Using the respondents’ preference for design type as an independent variable to predict their level of perceived organization credibility accounted for anywhere between 58.1% to 80.9% of the variability of the later item. If the roles of the independent and dependent variables were reversed, the percentages uniformly rose. In all of the cases, the Pearson chi-square was significant at \( p = .000 \) suggesting a strongly significant association between credibility and design type.

Overall, the credibility of all the organization was found to be relatively high, with an average of 64.4% of respondents who already supported the cause that felt that the organization was ‘somewhat credible’ when compared to one other site (Table 2). Thirteen percent, on average, felt that the sites were extremely credible if they already supported the cause. These numbers all dropped if the respondent did not feel strongly about the issue: 61% viewed the organization as ‘somewhat credible’ and 7.5% viewed the organization as ‘extremely credible’ under the same constraints.
The question then was slightly revised to monitor any change after exposure to the website that the respondents ‘liked.’ It was asked, ‘If you already had positive information about this organization, and were inclined to join, would this website change your view?’ (Table 3). This resulted in an average of 41.73% of respondents who stated that their view was changed positively and that they would be ‘more inclined to join after viewing.’ A much smaller 5.8% of respondents said that after viewing the same website that they liked they would be ‘much more inclined to join after viewing.’ After combining these averages to roughly 47%, the overwhelming majority of the remainder of respondents stated no change in opinion. Yet, the organic site was found to be so credible and likable by respondents that it was the only design style to evoke a larger percentage of individuals that felt they would be more inclined to join the organization after viewing the site than those having no change in opinion after the viewing.

It was also asked, ‘If you already had negative information about this organization, and were not inclined to join, would this website change your view?’ This resulted in an average of a much smaller 19.6% of respondents who stated that their view was changed positively and that they would be ‘more inclined to join after viewing.’ When the question was ‘If you already had negative information about this organization, and were not inclined to join, would this website (the one that you ‘like’) change your view?’ an even smaller two percent of respondents said they would be ‘much more inclined to join after viewing.’

After all of the websites were compared in pairs, all eight of the options where again shown to respondents and they were asked to select one that they preferred. As it was stated earlier, the bright, organic site was selected. Further, there was a large majority of respondents (63.2%) that found this organization to be credible if they already felt strongly about the issue. A higher 65.4% of respondents stated that they felt the organization was credible even if they did not feel strongly about the issue. Finally, roughly half of the respondents said that, if they felt positively about the organization before viewing, they would be more inclined to join the group after seeing the website.
Generalized Death Penalty Website

Fifty-seven percent of the respondents claimed to be extremely in support of the death penalty or generally in support of the death penalty. Respondents were first asked what website they 'liked' more, between two visual options. When death penalty sites were shown in contrast to one another along design styles, the symmetrical website was consistently found to be most 'liked' (73.7% when compared against the organic site; 54.9% when compared to the text only site; and 57.9% when compared to the asymmetrical site). Thus, the average 'likeability' of the symmetrical site when compared to other design structures was 62.1 percent.

The correlation between these design styles was high (ranging from .985 to .945) and the associated p value was very small (.000), indicating that the correlation differed significantly from 0 and that there was a strong linear relationship between the variables. Again, this strong correlation demonstrated a greater advantage in using the paired t-test design rather than a design with two independent groups (SPSS, 1999). The paired samples test produced large p values (ranging from .083 to .319), indicating that the design styles may have been chosen by chance alone (Figure 2).

When comparing bright versus muted colors along all of the four design styles, the bright colors were preferred in every category (organic, text, asymmetrical, and symmetrical). The largest percentage that a mute colored website received in relation to a bright colored website with the same design style was 19.5% when the symmetrical sites were shown. Following these trends of 'likeability', when all eight options were shown for the general anti/pro-death penalty sites, the bright symmetrical site was chosen as the most 'liked.' Twenty eight percent of the 133 students sampled found that the bright symmetrical site was their favorite (Table 4).

The credibility ratings for the organizations with a symmetrically-designed death penalty website were much more evenly distributed than the credibility variation found in the abortion groups. An organization with a symmetrical site consistently had credibility scores in
the mid to upper 60 percentile range. Regardless of what design style it was compared to, the organization’s symmetrical site maintained these high credibility rankings.

Using the respondents’ preference for design type as an independent variable to predict their level of perceived organization credibility accounted for anywhere between 53.3% to 80.6% of the variability of the later item. If the roles of the independent and dependent variables were reversed, the percentages uniformly rose. In all of the cases, the Pearson chi-square was significant at p = .000 suggesting a strongly significant association between credibility and design type.

Overall, the credibility of all the organizations was found to be high, with an average of 63.3% of respondents who already supported the cause feeling that the organization that they liked was also viewed as ‘somewhat credible’ when compared to one other site (Table 2). Twelve percent, on average, felt that the organizations were extremely credible if they already supported the cause. Similar to what was found for the general abortion sites, these numbers all dropped if the respondent did not feel strongly about the issue: 52% viewed the group as ‘somewhat credible’ and 7.9% viewed the organization as ‘extremely credible’ under the same constraints.

The question then was slightly revised to monitor any change after exposure to the website that the respondents ‘liked.’ It was asked, ‘If you already had positive information about this organization, and were inclined to join, would this website change your view? (Table 3)’ This resulted in an average of 35.6% of respondents who stated that their view was changed positively and that they would be ‘more inclined to join after viewing.’ A much smaller 3% of respondents said that after viewing the same website that they liked they would be ‘much more inclined to join after viewing.’ After combining these averages to roughly 38%, the overwhelming majority of the remainder of respondents either stated no change in opinion or would be less likely to join the organization after viewing.

It was also asked, ‘If you already had negative information about this organization, and were not inclined to join, would this website change your view?’ This resulted in an average of
a much smaller 15.5% of respondents who stated that their view was changed positively and that they would be 'more inclined to join after viewing.' When the question was 'If you already had negative information about this organization, and were not inclined to join, would this website (the one that you 'like') change your view?' an even smaller 1.7% of respondents said they would be 'much more inclined to join after viewing.'

After all of the websites were compared in pairs, all eight of the options where again shown to respondents and they were asked to select one that they preferred. As it was stated earlier, the bright, symmetrical site was selected. However, there was not an overwhelming majority chosen when all of the options were visible. Twenty eight percent did select the bright symmetrical version, but a close 24% selected the bright text-only version.

Overall Results

Based on the conclusions found here, hypothesis one was not supported. This hypothesis suggested that a website with a structured, grid design would be judged as more credible than an activist organization with a website demonstrating an informal, organic design structure. The organic, unstructured general abortion site was overwhelmingly found to be preferred — and more credible. While the symmetric, structured general death penalty website was found to be the most 'likable', it barely qualified as first with a 28.6% rating among eight options. The credibility scores corresponded to likeability across the two issues. Therefore, the organic generalized abortion organization was seen as more credible than the symmetrical, structured death penalty organization. Within each generalized issue, the organizations with structured sites were not found to be more credible than the organizations with non-structured, organic sites.

Hypothesis two suggested that an organization with a website that has photography will be judged as more credible than an organization that has a website that does not use photography. Because this study was constructed in a paired comparison, it is impossible to say if this was indeed true because only rarely did the majority of respondents select the text only
site as the most ‘likable’ and thus have the opportunity to judge the organizations credibility. One can assume, given the strong relationship between credibility and likeability ($p=.000$), that since a text-only site was selected only once as the most ‘liked’ site that this hypothesis was proved true. Further, the organization with the text-only site, in comparison to an organic death penalty site, had one of the lowest credibility ratings of any organization whose website was selected as most ‘likable.’ However, because of a lack of strong and persuasive evidence, this hypothesis was neither accepted nor rejected.

The third hypothesis suggested that an organization with a website that has bright colors will be judged as less credible than the activist organization that has a website, which uses muted colors. This hypothesis was found to be overwhelmingly rejected. In every comparison made through both the death penalty sites and the abortion sites, the bright colored websites were found to be much more ‘liked’ and also far more credible than organizations with websites that had muted colors.

Hypothesis four stated that the activist organization with a website that is viewed as more credible will be more likely to engender participation. Of the nine organizations that had a positive ‘somewhat credible’ rating over 65%, at least 40% of respondents stated that they would be more inclined to join after viewing the websites for only four of the nine organizations. While this is not quite 50%, the numbers shift dramatically when this same hypothesis is examined according to the specific issue. Of the four abortion organizations that had a positive ‘somewhat credible’ rating over 65%, at least 40% of respondents stated that they would be more inclined to join after viewing the websites for three of the four abortion organizations. This equals a 75% increase, as three out of four ‘somewhat credible’ organizations would see a boost in those who would be more inclined to join after viewing the website.

Because these variables are both ordinal (containing ordered values), Somers’ $d$, a modification of gamma that includes the number of pairs not tied on the independent variable (SPSS, 199), was utilized. Somer’s $d$ was used to test the proportion of the variability of the
dependent variable (participation) that was explained by knowing the values of the
independent variable (credibility) (SPSS, 1999). Using the respondents’ perceived credibility of
an organization via their website as an independent variable to predict their level of predicted
participation accounted for anywhere between 64.4% to 79.9% of the variability of the later item
when focused on generalized abortion websites. These numbers shifted slightly to 66.0% to
88.4% for generalized death penalty websites. In all of the cases, the Pearson chi-square was
significant at p = .000 suggesting a strongly significant association between perceived credibility
of the organization via the website and predicted participation within the organization itself.

Discussion

Contrary to previous work in this area, structured websites were not found to be
uniformly more credible across organizations. The symmetrical site was chosen as most credible
for issues related to the death penalty but the organic site was chosen as most credible for
abortion issues. This may be a reflection of the issue itself. The death penalty may be seen as a
more somber, stringent topic whereas abortion may be seen as a more personalized, woman’s
issue. Therefore an organic site may have been deemed more credible based on perceptions of
the issue itself.

In reference to medium credibility, a large majority of students did not believe that most
of the web was reliable and accurate. However, over 70% of these same respondents accessed
the World Wide Web at least several times a day and an overwhelming 84.2% said that if they
were interested in finding more information about apolitical/non-profit organization, they
would be ‘very likely’ or ‘somewhat likely’ to check the World Wide Web for information about
that organization. This suggests that while the respondents did not verbalize a high level of
credibility in the web, their behavioral patterns suggest an elevated credibility of the medium.

Yet, there was some level of varying credibility scores for organizations whose websites
were viewed in context with another websites. For example, the symmetrical death penalty site
had the largest percentage of people finding the website credible if they felt strongly about the
issue (71.4%). Yet, the same death penalty website had a lower 68.4% credibility when it was compared to the asymmetrical site for the same criteria. This seems to suggest that the websites shown alongside of the symmetrical site had an impact on that organization's credibility.

However, the overall credibility and resulting propensity to join (particularly if positive information already existed about the organization prior to the web viewing occurred) was relatively high across all types and subjects – although even higher for abortion sites (Table 2 & 3). Overall, credibility ratings were generally higher than a propensity to join. This may be a reflection of the respondent's earlier admission of little political interest. Yet, it makes intuitive sense that many more organizations can be deemed credible than those who actually receive participation from viewers. This helps to explain relatively low volunteer rates across the country as well.

While credibility ratings of those who already had a positive impression of an organization were fairly high, the numbers were lower from those who received negative information prior to viewing the site. This suggests that first conceptions of the organization play an important role in the effectiveness of a website – even a website that is well liked and seen as credible.

Less respondents were willing to join a death penalty organization rather than an abortion organization after viewing a site that they had already received positive information about (Table 3). This conclusion may be due to the nature of the organization itself. The respondents to this questionnaire were much less polarized than they were when answering their position on the abortion issue. In fact, it may be because of this issue neutrality that there was a concomitant neutrality on selecting an overall 'likable' site. The same eight design styles and similar colors were exhibited for the abortion issue and the death penalty issue, yet almost twice the number of respondents were able to select one particular website as the most 'likable.'

When all eight options were presented for both types of organizations, the levels of credibility and propensity to join were consistently higher than when only two options were given. Thus, when respondents are given a broad variety of choices, it may be that they value
the final selection that much more and deduce that their selection is the most credible. This preliminary conclusion needs much more research before any conclusive statements can be made.

Limitations & Future Work

This research could have important implications for the development of websites by non-profits in the future. However, much more research needs to be done before conclusive statements can be made regarding visual credibility. As credibility was found to be dependent upon the context that the site was viewed, it would be instructive to create a study that patterned vastly different visual sites in succession to see distinctions in patterns. This methodology has already been done in other areas of study (mostly related to advertising). Yet, it has not been conceptualized with purely visual information.

More research exploring the discrepancies within different components of visual imagery would be useful. For example, future studies should examine how various types of photography, rather than using one image throughout, effect audience member's perception of source credibility.

A future version of this research plans to utilize more descriptive statistics that will illuminate specific relationships across variables. Further, it would be worthy to replicate this study across age groups and demographic variables. As the respondents’ characteristics in this sample were fairly monolithic, it was extremely difficult to ascertain any variance according to demographic variables.
Table 1

Overall Likability of Visual Abortion Websites

Percent

Website Types

Bright Text
Bright Symmetrical
Bright Asymmetrical
Bright Organic
Mute Text
Mute Symmetrical
Mute Asymmetrical
Mute Organic

BEST COPY AVAILABLE

175
Table 2

Organization Credibility for Death Penalty and Abortion Organizations After Viewing Visual Websites

- "Somewhat credible...already did not support cause"
- "Somewhat credible...already support cause"
- "Extremely credible...already did not support cause"
- "Extremely credible...already support cause"

![Bar diagram showing organization credibility for death penalty and abortion organizations after viewing visual websites.](image)
Table 3

Propensity to Join Death Penalty and Abortion Organizations After Viewing Visual Website

![Bar chart showing propensity to join death penalty and abortion organizations after viewing visual website.]

- "Positive change...already not inclined to join"
- "Positive change...already inclined to join"
- "Very positive change...already not inclined to join"
- "Very positive change...already inclined to join"

Percent

Abortion Organizations
Death Penalty Organizations
Table 4

Overall Likability of Visual Death Penalty Websites

![Bar chart showing the likability of visual death penalty websites for different text and layout styles. Bright Text, Bright Symmetrical, Bright Asymmetrical, Bright Organic, Mute Text, Mute Symmetrical, Mute Asymmetrical, Mute Organic. The chart shows the percent likability across different styles.]

BEST COPY AVAILABLE
### Visual components of source credibility for non-profit organizations on the World Wide Web

**Figure 1**

<table>
<thead>
<tr>
<th>Paired Samples Test: Abortion Organizations</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>(abortion) felt strongly, liked, credibility of org based on web - (abortion) likability of mute organic/mute symmetrical</td>
<td>0.97</td>
<td>0.43</td>
<td>3.69E-02</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>likability of mute organic/mute asymmetrical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>(abortion) likability of mute organic/mute text - (abortion) likability of mute asymmetrical/mute symmetrical</td>
<td>-0.42</td>
<td>0.50</td>
<td>4.30E-02</td>
<td>-0.51</td>
</tr>
<tr>
<td></td>
<td>likability of mute asymmetrical/mute text</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 3</td>
<td>(abortion) likability of mute asymmetrical/mute text - (abortion) likability of mute symmetrical/mute text</td>
<td>-7.52E-02</td>
<td>0.26</td>
<td>2.30E-02</td>
<td>-1.12</td>
</tr>
</tbody>
</table>
### Figure 2

**Paired Samples Test: Death Penalty Organizations**

<table>
<thead>
<tr>
<th>Pair</th>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>(death penalty) likability of bright organic/bright asymmetrical - (death penalty) likability of bright organic/bright symmetrical</td>
<td>-2.26E-02</td>
<td>.15</td>
<td>1.29E-02</td>
<td>-4.81E-02 to 3.01E-03</td>
<td>-1.745</td>
<td>132</td>
<td>.083</td>
</tr>
<tr>
<td>Pair 2</td>
<td>(death penalty) likability of bright organic/bright text - (death penalty) bright asymmetrical/bright symmetrical</td>
<td>2.26E-02</td>
<td>.15</td>
<td>1.29E-02</td>
<td>-3.01E-03 to 4.81E-02</td>
<td>1.745</td>
<td>132</td>
<td>.083</td>
</tr>
<tr>
<td>Pair 3</td>
<td>(death penalty) bright asymmetrical/bright text - (death penalty) bright symmetrical/bright text</td>
<td>-7.52E-03</td>
<td>8.67E-02</td>
<td>7.52E-03</td>
<td>-2.24E-02 to 7.35E-03</td>
<td>-1.000</td>
<td>132</td>
<td>.319</td>
</tr>
</tbody>
</table>
Appendix I

ABORTION
Which of the following, would you say best characterizes your position on abortion?
- extremely in support of abortion
- generally in support of abortion
- generally against abortion
- extremely against abortion

What you see on your screen is a generalized website that corresponds to your political position on the abortion issue. Each website should be thought of in terms of your political position on the abortion issue. For example, if you stated that you are in support of abortion in the previous question, then the sites you are about to see are for a non-profit organization that supports abortion. Conversely, if you stated that you are against abortion in the previous question, then the sites you are about to see are for a non-profit organization that is against abortion.

You will see different abortion websites (each corresponding to your political position on the abortion issue) treated in different visual styles. You will be asked specific questions for each website.

SECTION 1-10: ABORTION [REPEAT QUESTIONS FOR EACH PAIR OF WEBSITES]
Which website do you ‘like’ the most?
- The one on the left
- The one on the right

If you felt strongly about this issue, how credible would you view this organization, based on this website alone (the one that you ‘like’)?
- would view this organization as extremely credible
- would view this organization as somewhat credible
- am unsure
- would view this organization as somewhat not credible
- would view this organization as extremely not credible

If you did not feel strongly about this issue, but supported its cause, how credible would you view this organization, based on this website alone (the one that you ‘like’)?
- would view this organization as extremely credible
- would view this organization as somewhat credible
- am unsure
- would view this organization as somewhat not credible
- would view this organization as extremely not credible

If you already had positive information about this organization, and were inclined to join, would this website (the one that you ‘like’) change your view:
- positively... much more inclined to join after viewing
- positively... more inclined to join after viewing
- no change in opinion
- negatively... less inclined to join after viewing
- negatively... much less inclined to join after viewing
Visual components of source credibility for non-profit organizations on the World Wide Web

If you already had negative information about this organization, and were not inclined to join, would this website (the one that you ‘like’) change your view:
  positively...much more inclined to join after viewing
  positively...more inclined to join after viewing
  no change in opinion
  negatively...less inclined to join after viewing
  negatively...much less inclined to join after viewing
SECTION 11: ABORTION
Which website do you 'like' the most overall? (pick ONE from all eight seen on the screen):
- top left
- top mid-left
- top mid-right
- top right
- middle left
- middle mid-left
- middle mid-right
- middle right

If you felt strongly about this issue, how credible would you view this organization, based on this website alone (the one that you 'like')?
- would view this organization as extremely credible
- would view this organization as somewhat credible
- am unsure
- would view this organization as somewhat not credible
- would view this organization as extremely not credible

If you did not feel strongly about this issue, but supported its cause, how credible would you view this organization, based on this website alone (the one that you 'like')?
- would view this organization as extremely credible
- would view this organization as somewhat credible
- am unsure
- would view this organization as somewhat not credible
- would view this organization as extremely not credible

If you already had positive information about this organization, and were inclined to join, would this website (the one that you 'like') change your view:
- positively...much more inclined to join after viewing
- positively...more inclined to join after viewing
- no change in opinion
- negatively...less inclined to join after viewing
- negatively...much less inclined to join after viewing

If you already had negative information about this organization, and were not inclined to join, would this website (the one that you 'like') change your view:
- positively...much more inclined to join after viewing
- positively...more inclined to join after viewing
- no change in opinion
- negatively...less inclined to join after viewing
- negatively...much less inclined to join after viewing
DEATH PENALTY
Which of the following, would you say best characterizes your position on the death penalty?
- extremely in support of the death penalty
- generally in support of the death penalty
- generally against the death penalty
- extremely against the death penalty

What you see on your screen is a generalized website that corresponds to your political position on the death penalty. Each website should be thought of in terms of your political position on the death penalty. For example, if you stated that you are in support of the death penalty in the previous question, then the sites you are about to see are for a non-profit organization in support of the death penalty. Conversely, if you stated that you are against the death penalty in the previous question, then the sites you are about to see are for a non-profit organization in opposition to the death penalty.

You will see different death penalty websites (each corresponding to your political position on the death penalty) treated in different visual styles. You will be asked specific questions for each website.

SECTION 1-10: DEATH PENALTY [REPEAT QUESTIONS FOR EACH PAIR OF WEBSITES]
Which website do you 'like' the most?
- The one on the left
- The one on the right

If you felt strongly about this issue, how credible would you view this organization, based on this website alone (the one that you 'like')?
- would view this organization as extremely credible
- would view this organization as somewhat credible
- am unsure
- would view this organization as somewhat not credible
- would view this organization as extremely not credible

If you did not feel strongly about this issue, but supported its cause, how credible would you view this organization, based on this website alone (the one that you 'like')?
- would view this organization as extremely credible
- would view this organization as somewhat credible
- am unsure
- would view this organization as somewhat not credible
- would view this organization as extremely not credible

If you already had positive information about this organization, and were inclined to join, would this website (the one that you 'like') change your view:
- positively...much more inclined to join after viewing
- positively...more inclined to join after viewing
- no change in opinion
- negatively...less inclined to join after viewing
- negatively...much less inclined to join after viewing
If you already had negative information about this organization, and were not inclined to join, would this website (the one that you 'like') change your view:
- positively...much more inclined to join after viewing
- positively...more inclined to join after viewing
- no change in opinion
- negatively...less inclined to join after viewing
- negatively...much less inclined to join after viewing
SECTION 11: DEATH PENALTY
Which website do you 'like' the most overall? (pick ONE from all eight seen on the screen):
  top left
  top mid-left
  top mid-right
  top right
  middle left
  middle mid-left
  middle mid-right
  middle right
If you felt strongly about this issue, how credible would you view this organization, based on this website alone (the one that you 'like')?
  would view this organization as extremely credible
  would view this organization as somewhat credible
  am unsure
  would view this organization as somewhat not credible
  would view this organization as extremely not credible
If you did not feel strongly about this issue, but supported its cause, how credible would you view this organization, based on this website alone (the one that you 'like')?
  would view this organization as extremely credible
  would view this organization as somewhat credible
  am unsure
  would view this organization as somewhat not credible
  would view this organization as extremely not credible
If you already had positive information about this organization, and were inclined to join, would this website (the one that you 'like') change your view:
  positively...much more inclined to join after viewing
  positively...more inclined to join after viewing
  no change in opinion
  negatively...less inclined to join after viewing
  negatively...much less inclined to join after viewing
If you already had negative information about this organization, and were not inclined to join, would this website (the one that you 'like') change your view:
  positively...much more inclined to join after viewing
  positively...more inclined to join after viewing
  no change in opinion
  negatively...less inclined to join after viewing
  negatively...much less inclined to join after viewing
Appendix II

Abortion Websites
Death Penalty Websites
Visual components of source credibility for non-profit organizations on the World Wide Web

References


Visual components of source credibility for non-profit organizations on the World Wide Web


Visual components of source credibility for non-profit organizations on the World Wide Web


Evaluating Animated Infographics
A Step towards Multimedia Research
An Experimental Approach

Klaus Forster
Sabine Stiemerling
Thomas Knieper
Institute of Communication Studies
at the University of Munich

Contact:
Klaus Forster
Institute of Communication Studies at the University of Munich
Oettingenstr. 67
D-80538 Munich, Germany
Voice: +49 89 2180 - 9419
Fax: +49 89 2180 - 9504
Email: forster@ifkw.uni-muenchen.de

Paper Presented to the Visual Communication Division
at the AEJMC Annual Convention, Aug. 7 - 10, 2002 in Miami Beach, FL
Abstract

Visualization and animation can be seen as two main characteristics of multimedia applications. In our study we compared animated infographics with their still versions and textual representations of the same information. According to our results it is not always appropriate to visualize and animate certain topics but in most of the cases visualization can enhance information transfer. The results are indicating that animations should be preferably used in complex fields of knowledge.
Evaluating Animated Infographics
A Step towards Multimedia Research
An Experimental Approach

Introduction

For the most news media it is still of increasing importance to visualize information. In the United States the launch of USA Today in 1982 and the development of computer-based information technology sped up the already existing trend to use informational graphics in addition to - or instead of - textual representations (Lester 2000, p. 150). According to the definition of Lester "[i]nformational graphics (or infographics) are primarily visual displays with accompanying labels and text that help explain an illustrations meaning. In one sense they are extensions of still photographs published in newspapers with captions or cutlines that give explanatory text, but they go further in providing information" (Lester 2000, p. 150). Infographics can have certain advantages compared to other forms of representation. A visualization of statistical data may draw attention to charts that might otherwise be ignored. Informational Graphics can easily introduce a specific topic and are more appropriate to explain certain complex facts (Knieper 1995, pp. 303-304). Of course infographics are used not only in the press but also in the electronic media. Especially in the Internet's World Wide Web (WWW) we can observe the tendency to use visuals to substitute or at least to complement written information. The reason for this may be found in the difficulties to make the user stay on a boring or incomprehensible web-site while a more interesting offer is always just a mouse-click away (Meier 1998, pp. 29-30).

Because the WWW has opened new ways to present information with its hyperlinks and its interactivity, it will also facilitate new modes of expression and new reading habits which could even lead to a replacement of written text in favor of a combination of graphical images, photography, audio, video and animation which is usually labeled as 'multimedia' (Meier 1998, p. 24). The WWW can be assessed as a highly visual medium which seems extremely suitable to transmit multimedia applications even though - due to limited bandwidth - main fields of application for multimedia are still training software or electronic encyclopedias distributed on CD-ROM (Hansen 1996, pp. 560 and 562). But the present developments in high-speed technologies will most likely support an increasing utilization of multimedia applications on the Web. Therefore one resulting question may be whether visuals with multimedia elements are in general more suitable to convey information compared to still infographic images or plain text, especially because of the cost of programming professional multimedia applications. The study at hand seeks to give some answers. After a brief overview on relevant literature an experimental design is presented to examine three different modes of presentation (plain text, still infographics and animated infographics).
1. Visual Communication

The assumption that the chance to communicate successfully increases if we already know at least something about the object of communication may be seen as a general principle in human communication. If there is no direct reference to this object of communication the next best thing is a visual representation of it. Visual depictions are seen as superior to the spoken or written word in creating such a reference (Pettersson 1989, pp. 5-6). Nevertheless, one should be careful in selecting the appropriate visual representation: Not all visuals support learning and understanding. Too many realistic details in an image may be accountable for difficulties in identifying the relevant information of the picture and too few details may result in an inappropriate representation (Pettersson 1989, pp. 7-8). Pettersson advocates a kind of 'middle course': "A moderate amount of carefully selected realism gives the best learning. Thus, a series of slides could be a better choice than a film in a specific situation" (Pettersson 1989, p. 9).

A multitude of visual representations can be distinguished, but one basic differentiation is made between pictures and symbols. Symbols are signs which are clearly defined in their meaning and represent aspects of reality. Pictures also represent reality but can be open to different interpretations through different people at different times. There are realistic, suggestive and schematic pictures. Among the latter are infographics e.g. quantitative charts or maps (Pettersson 1989, pp.142-143), which are the starting point of this study. Infographics are combinations of text and graphics and contain information which is difficult to be represented through text or images only. They can visualize complex subject matters, statistical data or spatial descriptions. Artistic or primarily decorative images are no infographics (Knieper 1995, p. 3).

There are different conceptions about the effects of graphical representations compared to the effects of texts. But they all have in common that images produce more attention, are easier remembered, trigger more associations in the mind, and are regarded as more appealing (Brosius 1995, p. 122). Text-picture-combinations can facilitate retention if the picture refers to the text by helping the recipient to build a mental model (Weidenmann 1997, p. 71).

2. Infographics and Multimedia Communication

Knowledge may be obtained in various ways. One way is certainly mass communication including its media. Given the limited time we are able to spend with consuming mass media content, some thought has to be given on ways to facilitate best the retention of the highly volatile (or transient) information which is transmitted over the channels of mass communication. One channel of increasing significance is undoubtedly computer mediated communication which is the subject of this study.

If infographics are shown on the computer screen it seems reasonable to ask how to optimize such computer mediated information. Just to put a conventional graphic on
screen may be as inappropriate as converting text to html-files without considering design principles for hypertext. The technique which promises to make use of the full range of possibilities computers hold for their users is widely known as multimedia. Although no generally accepted definition of multimedia yet exists, the usually employed terms used to clarify the concept have some common ground (Hansen 1997, p. 228; Werner/Becker 1997, p. 88; Fentrop 1998, p. 326; Meier 1998, p. 315). As a working definition we defined multimedia with reference to Weidenmann (1997, p. 66, see also Reinmann-Rothmeier/Mandl 1997, p. 10) as integrated computer-based presentation of different media (text, graphics), where at least one medium is time-dependent (animation, audio).

It is quite obvious that multimedia and computer mediated information should be of great interest for the communication studies. But research started in the field of learning theory already in the 1960s (Vassileva 1997, p. 108). These early attempts to develop 'Computer Assisted Instruction' programs were based on behaviorism and conceived from a teacher's perspective (Weidenmann/Paechter 1997, p. 125). With the decline of behaviorism the perspective changed from the teacher to an active learner, clearly pointing to today's multimedia learning applications (Klimsa 1997, p. 16).

Multimedia learning has certain advantages but also possible pitfalls. Animations for example can impair the learning process if the learners reduce their mental efforts. But it is also possible that multimedia elements support the building of mental models (Mandl/Reinmann-Rothmeier 1997, pp. 10-11. and p. 17; Klimsa 1997, p. 12) and therefore facilitate learning. Hence multimedia has to combine its advantages, especially to raise attention and to promote a more reflective cognition. "Multimedia for education must minimize the fluff and get the users working - working hard, not because they have to but because they want to" (Norman 1993, p. 41).

3. Research Question and Hypotheses

The general research question is:

Are visuals with multimedia elements more suitable to convey information compared to still infographics and plain text?

To answer the research question three hypotheses were developed. We distinguish between (1) the conveyed and recalled knowledge, (2) the subjective assessment of the different presentation modes and (3) the intensity with which the subjects deal with the presented material:

H1: Animated presentations will produce more memorized knowledge than still infographics and texts (retention rate).

H2: Animated presentations will be better rated than still infographics and texts (subjective assessment).

H3: The subjects will deal more intensely with animated presentations than with still infographics and texts (intensity of labor).
4. Methodology

To test the hypotheses and to answer the research question we employed an experimental design to check the differences between the three treatment conditions (animation, fixed infographic, text) on the computer screen. According to the hypotheses there should be a connection between the independent variable 'mode of presentation' and the dependent variables 'retention rate', 'subjective assessment', and 'intensity of labor'. We decided to use a design with repeated measures, meaning that every subject was measured on every treatment condition (within subjects design). One advantage of this design is a higher sensitivity so that the existing treatment effects can be detected more easily (Czienskowski 1996, p. 75). To avoid carry-over effects the subjects were allocated at random to a variety of treatment sequences. We therefore worked with a 'counterbalanced design' or 'rotation experiment' (Campbell/Stanley 1966, pp. 50-51; Laatz 1993, p. 488). The treatment sequences varied according to two latin squares. With the subjects allocated to the treatments at random and more than one latin square in use (see Table 1), we can classify the employed design as 'true experimental' (Campbell/Stanley 1966, p. 51).

<table>
<thead>
<tr>
<th>Table 1: Treatment sequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modes of Presentation</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Topic 1</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>(1) Text</td>
</tr>
<tr>
<td>(2) Infographic</td>
</tr>
<tr>
<td>(3) Animation</td>
</tr>
</tbody>
</table>

The three different topics were chosen to avoid learning effects and to include different topic related graphic forms. For each item of a topic a plain text presentation, a still infographic, and an animated version of the infographic were tested. The animation is a step-by-step-presentation of the infographic, meaning that the graphic elements are introduced stepwise in a predetermined time. The viewing times of the animated presentations vary between 50 and 70 sec. Viewing times for the infographics were exactly the same because Weidenmann et al. (1998, p. 82) found out that subjects who were free to choose their viewing time tended to deal far less intensively with the presentations than subjects who were not. The fixed viewing times may have certain advantages from an experimental point of view but are likely to impair the external validity of the results which we have to keep in mind. The plain text versions contain the same information as the two visual presentations, the reading time was not restricted. Each of the following items is visualized through a specific type of an infographic, e.g. a quantitative chart.
Topic 1: Traveling (Quantitative Charts: Line, Bar, Pie)

- Item 1: Development of German vacations not spent at home per year since 1972. Line chart (time: 50 sec.) and plain text.

![Line chart showing development of German vacations not spent at home since 1972.](chart1.png)

*Urlaubsreisen der Deutschen pro Jahr*


- Item 2: German travelers' most popular destinations in 1999. Bar chart (time: 65 sec.) and plain text.

![Bar chart showing popular destinations in 1999.](chart2.png)

*Die beliebtesten Reiseziele der Deutschen 1999*

Das mit Abstand popularste Urlaubsziel der Deutschen ist das Inland mit einem Marktanteil von 29 Prozent. Bei den ausländischen Reisezielen hält Spanien mit 15 Prozent weiterhin die Spitzenposition. Auf Rang drei liegt Italien (10%), gefolgt von Österreich (7%), Griechenland (4%), Frankreich (4%) und der Türkei (3%). Anschließend folgen die außereuropäischen Ziele USA (3%) und Lateinamerika mit 2 Prozent.

- Item 3: German vacation plans for 2000. Pie chart (time: 55 sec.) and plain text.

![Pie chart showing vacation plans for 2000.](chart3.png)

*Reisepläne der Deutschen im Jahr 2000*

Für das Jahr 2000 planen 72 Prozent der Deutschen mindestens eine Urlaubsreise. Im Einzelnen:

- 17 % haben gebucht,
- 28 % wissen wohin, haben aber noch nicht gebucht
- 17 % verreisen sicher, wissen aber noch nicht wohin und
- 10 % verreisen wahrscheinlich.

Von den anderen verreisen 15 Prozent nicht und 13 Prozent wissen es noch nicht.
Evaluating Animated Infographics

Topic 2: European Monetary Union, EMU (Map, Time Line and Graphic Adaptation)

- Item 1: States of the European Union, EMU states and candidates for joining the EMU. Map (time: 70 sec.) and plain text.

- Item 2: Stepwise implementation of the EMU. Time line (time: 60 sec.) and plain text.

- Item 3: Banknotes and coins in the EMU. Graphic adaptation (time: 60 sec.) and plain text.
In the pretest we obtained (1) some general information on the participants in the study, (2) measured the interest they had in the tested topics and (3) controlled their knowledge of the topics previous to the treatment. Then the participants were asked to rate each of the three modes of presentation according to its aesthetic value, its structural quality and how intensely they dealt with the given information. In each case we used two bipolar adjective seven-place scales (as in a semantic differential, only with far less opposite pairs), such as clear-confusing. Finally the participants had to assign a school grade to each presentation.

After all presentations had been shown, the participants were tested for their acquired knowledge. They had to answer knowledge questions related to each of the three topics (7 questions for the topics "Traveling" and "European Monetary Union", 4 questions for "Cloning Dolly")\(^1\). The information which had to be recalled is explicitly contained in the information units, independently of the mode of presentation. In the questionnaire we employed some open ended knowledge questions to prevent guessing according to the response categories. The questions had been formulated very precisely so that a classification as "correct" or "false" was always possible.\(^2\) Questions with structured response possibilities had been formulated with equally plausible, but neither too easy nor too difficult answer categories to avoid ceiling or bottom effects\(^3\) (Brosius 1995, pp. 68-70). In two cases the subjects had to build rankings\(^4\).

The experiment was conducted in July 2000 with Munich students in a lab at the Institute of Communication Studies. Every participant was tested individually. Altogether 60 individuals (31 female, 29 male) were subjected to the experimental treatments.

---

\(^1\) We asked only 4 Questions on the cloning process because they are far more complex than the other questions.

\(^2\) Example: Which countries are aspiring to join the European Monetary Union?

\(^3\) Example: The extracted ovum was a) fertilized b) unfertilized.

\(^4\) Example: Rank the following countries according to their popularity as a holiday destination. Assign the most popular country a "1", the second most popular country a "2", etc.
Evaluating Animated Infographics

4. Findings

4.1 Influence of the Mode of Presentation on the Retention Rate

Our first hypothesis deals with the amount of knowledge the subjects were able to recall after the treatments:

*Animated presentations will produce more memorized knowledge than still infographics and texts (retention rate).*

At first sight the amount of correct answers to all questions revealed a general advantage of the two visual modes of presentation (still infographic and animation). However, after a thorough analysis we had to concede that this advantage was mostly due to the good results obtained with the animated and the still explanatory chart of the cloning process. Furthermore a statistically significant difference in this topic was only found between text and animation though the infographic still produced more correct answers than the text.

A closer look at the different topics revealed that in the majority of cases the graphic modes are better suited to convey information than plain text. Quantitative charts are all slightly more suitable to gain knowledge than the text, regardless of being animated or not. But when the different forms of quantitative graphics are compared, we get a more complex picture. The line chart is only slightly better than the text mode but there is no difference between the unanimated infographic and the animation. The fixed bar chart produced lower retention rates than the text and the animation, while the difference here seemed to be marginal. Unanimated pie charts are clearly better than the text and even slightly better than the animation. (See Table 2).

| Table 2: Mean Scores\(^5\) and Percentage of Correct Answers in the Topic "Traveling"

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>N</th>
<th>Mean (Max.: 2)</th>
<th>Mean (Max.: 2)</th>
<th>Mean (Max.: 3)</th>
<th>Mean (Max.: 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Line Chart (Percentage)</td>
<td>Bar Chart (Percentage)</td>
<td>Pie Chart (Percentage)</td>
<td>Whole Topic (Percentage)</td>
</tr>
<tr>
<td>Text</td>
<td>20</td>
<td>1.05 (53%)</td>
<td>1.40 (70%)</td>
<td>0.55 (18%)</td>
<td>3.00 (43%)</td>
</tr>
<tr>
<td>Infographic</td>
<td>20</td>
<td>1.20 (60%)</td>
<td>1.35 (68%)</td>
<td>1.00 (33%)</td>
<td>3.55 (51%)</td>
</tr>
<tr>
<td>Animation</td>
<td>20</td>
<td>1.20 (60%)</td>
<td>1.40 (70%)</td>
<td>0.95 (32%)</td>
<td>3.55 (51%)</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>1.15 (58%)</td>
<td>1.38 (69%)</td>
<td>0.83 (28%)</td>
<td>3.37 (48%)</td>
</tr>
</tbody>
</table>

F=0.37; p=.695 \( F=0.07; p=.935 \) \( F=3.17; p=.050 \) \( F=1.74; p=.184 \)

Altogether retention rates are higher with either visual modes in comparison to the correct answers produced by plain text. Therefore graphical presentation of quantitative information justifies the effort of visualization. But to animate the quantitative charts produced no further positive effect. In this topic frequent internet users and newspaper readers scored better than other subjects but the general picture prevailed.

\(^5\) The higher the mean scores are the better is the retention rate.
When the different infographics used in the topic "European Monetary Union" were analyzed for their ability to convey information, we discovered at least the tendency that unanimated graphics might be better suited for knowledge transfer than the other two modes of presentation. However, a conclusive statement seems to be inappropriate and is not underpinned by our data because no statistically significant difference was measured. (See Table 3).

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>N</th>
<th>Mean (Max.: 2) (Percentage)</th>
<th>Mean (Max.: 2) (Percentage)</th>
<th>Mean (Max.: 3) (Percentage)</th>
<th>Mean (Max.: 7) (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>20</td>
<td>0.30 (15%)</td>
<td>0.60 (30%)</td>
<td>2.20 (73%)</td>
<td>3.10 (44%)</td>
</tr>
<tr>
<td>Infographic</td>
<td>20</td>
<td>0.55 (28%)</td>
<td>0.95 (48%)</td>
<td>2.40 (80%)</td>
<td>3.90 (56%)</td>
</tr>
<tr>
<td>Animation</td>
<td>20</td>
<td>0.35 (18%)</td>
<td>0.85 (43%)</td>
<td>2.30 (77%)</td>
<td>3.50 (50%)</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>0.40 (20%)</td>
<td>0.80 (40%)</td>
<td>2.30 (77%)</td>
<td>3.50 (50%)</td>
</tr>
</tbody>
</table>

The result that the text versions in all cases are less suitable to stimulate higher recall rates, and unanimated infographics are better than animations points to the previously mentioned direction. If only a successful knowledge transfer is considered the use of information units with multimedia elements might not be worth the time and the money which are required to develop such applications.

Taking a closer look at the information given on the cloning process, we get a very different picture. First of all the analysis of variance shows a highly significant difference between the plain text and the animation. But even if we have to concede that the differences between the other modes of presentation are not significant it is still obvious that the explanatory chart is considerably better in conveying information when it is animated then the other presentation modes. (See Table 4).

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>N</th>
<th>Mean (Max.: 4) (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>20</td>
<td>2.00 (50%)</td>
</tr>
<tr>
<td>Infographic</td>
<td>20</td>
<td>2.70 (68%)</td>
</tr>
<tr>
<td>Animation</td>
<td>20</td>
<td>3.40 (85%)</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>2.70 (68%)</td>
</tr>
</tbody>
</table>

In general we found that plain text presentation might not be the optimal mode for knowledge transfer via a computer screen. Visuals like infographics should be used when possible. However, it is also questionable whether multimedia modes of
presentation like animation can add any value if only knowledge gain is considered. One exception might be explanatory charts with information about more complex problems like the cloning process. But even there our data does not allow firm statistically backed conclusions (see Table 5).

**Table 5: Mean Scores and Percentage of Correct Answers over all Topics and Modes of Presentation**

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>Traveling</th>
<th>EMU</th>
<th>Cloning Dolly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (Max.: 7) (Percentage)</td>
<td>Mean (Max.: 7) (Percentage)</td>
<td>Mean (Max.: 4) (Percentage)</td>
</tr>
<tr>
<td>Text</td>
<td>3.00 (43%)</td>
<td>3.10 (44%)</td>
<td>2.00 (50%)</td>
</tr>
<tr>
<td>Infographic</td>
<td>3.55 (51%)</td>
<td>3.90 (56%)</td>
<td>2.70 (68%)</td>
</tr>
<tr>
<td>Animation</td>
<td>3.55 (51%)</td>
<td>3.50 (50%)</td>
<td>3.40 (85%)</td>
</tr>
<tr>
<td>Total</td>
<td>3.37 (48%)</td>
<td>3.50 (50%)</td>
<td>2.70 (68%)</td>
</tr>
</tbody>
</table>

At least it seems clear that the use of texts in computer mediated learning environments should be considered carefully, especially since the layout employed in this study was quite generous, with large font sizes and only a small amount of information on each page, which is still rather unusual in the World Wide Web and most multimedia learning environments.

**4.2 Mode of Presentation and Subjective Assessment**

Because it is not only important how much information is effectively transmitted to the recipients, but most notably how the 'user' feels about the information offered, we formulated a second hypothesis to be tested in the following:

*Animated presentations will be better rated than still infographics and texts (subjective assessment).*

The general attitude towards the different modes of presentation is measured in assigned school grades, an aesthetic value index and a structural quality index.

**4.2.1 General Influence of the Mode of Presentation on the Subjective Evaluation, Measured in School Grades**

To assess the influence of the presentation mode on the subjects' perception, they were asked to rate the different information units according to German school grades ranging from 1 (best possible grade) to 6 (lowest possible grade)⁶. The comparison over all topics showed a distinct statistically significant difference between the text versions on the one hand and the two visual depictions on the other hand, whereas the difference between unanimated infographics and animations seemed rather insignificant. (See Table 6).

⁶ German school grades ranging from 1 to 6 are verbalized as: 1 to 1.5 = "very good", 1.51 to 2.5 = "good", 2.51 to 3.5 = "satisfying", 3.51 to 4.5 = "sufficient", 4.51 to 5.5 = "unsatisfactory" 5.5 to 6 = insufficient.
Table 6: Mean Scores of the School Grades for the Modes of Presentation over all Topics

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>60</td>
<td>3.13</td>
</tr>
<tr>
<td>Infographic</td>
<td>60</td>
<td>2.51</td>
</tr>
<tr>
<td>Animation</td>
<td>60</td>
<td>2.18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>180</td>
<td>2.61</td>
</tr>
</tbody>
</table>

\[ F = 21.26; p = .000 \]

**Scheffe-Test**

<table>
<thead>
<tr>
<th></th>
<th>Text vs. Infographic</th>
<th>Text vs. Animation</th>
<th>Infographic vs. Animation</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>.000</td>
<td>.000</td>
<td>.086</td>
</tr>
</tbody>
</table>

Again the age had a certain effect on the ratings: The older the subjects, the more they tended to give lower grades. This might be due to higher expectations regarding the quality of media presentations in general.

When the different topics are analyzed separately, the line chart in the topic "traveling" is assessed according to our hypothesis (text = "sufficient", infographic = "satisfying", animation = "good"), but only the text is rated statistically significantly lower than the unanimated infographic (Scheffe-Test probability = .001) and the animation (Scheffe-Test probability = .000) and therefore obtained the lowest grade of all modes of presentation in all topics. The difference between the two visual forms follows the tendency predicted in our hypothesis but is insignificant on the 5 % level (Scheffe-Test probability = .081). The unanimated bar chart and its animated version obtained slightly better grades than the text, but differences are again insignificant on the 5 % level, whereas the unanimated pie chart is rated significantly lower than text and animation (Scheffe-Test probability = .041). (See Table 7).

Table 7: Evaluation of the Modes of Presentation in the Topic "Traveling" in Mean School Grades

<table>
<thead>
<tr>
<th>Item Visualized as</th>
<th>Mode of Presentation</th>
<th>F-Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Chart (n=60)</td>
<td>Text</td>
<td>4.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infographic</td>
<td>3.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animation</td>
<td>2.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>F-Value</strong></td>
<td>19.78</td>
<td>.000</td>
</tr>
<tr>
<td>Bar Chart (n=60)</td>
<td>Text</td>
<td>2.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infographic</td>
<td>2.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animation</td>
<td>2.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>F-Value</strong></td>
<td>1.01</td>
<td>.371</td>
</tr>
<tr>
<td>Pie Chart (n=60)</td>
<td>Text</td>
<td>3.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infographic</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animation</td>
<td>3.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>F-Value</strong></td>
<td>4.51</td>
<td>.015</td>
</tr>
</tbody>
</table>

The school grades of the pie charts, animated or not, are obviously lower than those of the other quantitative charts. Here the text version obtained the same grade as the animation which is the lowest grade given to any animation in test. When we checked for control variables we found that the grades for the modes of presentation in the item visualized with a pie chart are related to the measured interest in traveling: the more the subjects were interested the better they assessed both animated and unanimated charts. Overall, in this item visualization does not add much if any value. However, the results should not be overestimated to the extent that pie charts are always inferior to other quantitative graphics. It is very likely that the results are mostly due to the specific subject dealt with in this topic. The impact of the interest in traveling on the given
school grades hints in this direction.

In the topic "EMU" a distinct difference can be observed between the grades assigned to the text versions and either visual modes of presentations of the items dealt with in the map and the time line. For the item which was depicted as a map the grades followed the hypothesized direction, but differences are - as for the time line - only statistically significant between the textual representation and the visual forms. The grade of the animated map is the best grade assigned in all topics to all modes of presentation. The unanimated time line obtained an even better grade than the animation in this field but as mentioned earlier, this difference is insignificant. Results for the graphic adaptation are pointing in the counter direction of our hypothesis, but these differences are marginal and statistically not meaningful at all. (See Table 8).

| Table 8: Evaluation of the Modes of Presentation in the Topic "EMU" in Mean School Grades |
|----------------------------------|---------------------------------|-----------------|-----------------|---------------|-----------------|
| Item Visualized as               | Mode of Presentation            |                  |                  | F-Value       | p               |
|                                 | Text                            | Infographic     | Animation       |               |                 |
| Map (n=60)                       | 2.80                            | 1.90             | 1.80             | 6.15          | .004            |
| Time Line (n=60)                 | 3.10                            | 2.00             | 2.15             | 9.58          | .000            |
| Graph. Adaptation (n=60)         | 2.20                            | 2.25             | 2.30             | 0.07          | .933            |

A small but significant influence on the subjects' assessment of the time line had yet again the age: The older the subjects were, the lower the grades which they assigned. The slight differences in the assessment of the presentation modes in the item depicted as a graphic adaptation are possibly due to different degrees of interest in European politics: The higher the interest, the better are the assigned grades. Again we found only little evidence that the animation of infographics is appreciated by the subjects, so we can not conclude that a multimedia presentation is at least stimulating the recipient in a positive way and therefore can enhance knowledge transfer.

The rank of grades assigned to the different modes of presentation in the topic "cloning" is again clear and leaves not much doubt that - from a recipient oriented perspective - the visual presentation of complex matters is preferable to textual representation (see Table 9). But again there is only a statistically significant difference between the text and the two graphic forms and an insignificant but tendency-reflecting difference between the animation and the unanimated infographic (Scheffé-Test probability = .185).

| Table 9: Evaluation of the Modes of Presentation in the Topic "Cloning" in Mean School Grades |
|----------------------------------|---------------------------------|-----------------|---------------|-----------------|
| Item Visualized as               | Mode of Presentation            |                  | F-Value       | p               |
|                                 | Text                            | Infographic     | Animation     |                 |
| explanatory chart (n=60)         | 3.40                            | 2.45             | 1.90           | 13.25          | .000            |

In summary the hypothesis that animations are better rated than unanimated infographics and accordingly obtain better grades than textual representations can
neither be fully rejected nor is it clearly supported. Whereas for the line chart, the map and the explanatory chart at least a general visual superiority can be assumed, the results for the bar chart and the time line are only tending in this direction. Furthermore - for the time being - we have to reject the hypothesis of the visual superiority in the cases of the pie chart and the graphic adaptation.

4.2.2 Influence of the Mode of Presentation on the Perceived Aesthetic Value

The hypothesis, animations are superior to unanimated infographics and these are better than plain text, is backed by the results of the assessment of the aesthetic value the different presentation modes possessed according to the participants. Over all topics the animations are perceived to have significantly more aesthetic quality than the fixed infographics, whereas these are rated better than textual information. (See Table 10).

Table 10: Mean Scores\(^7\) of the Aesthetic Value Index for the Modes of Presentation over all Topics

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>60</td>
<td>3.41</td>
</tr>
<tr>
<td>Infographic</td>
<td>60</td>
<td>4.85</td>
</tr>
<tr>
<td>Animation</td>
<td>60</td>
<td>5.53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>180</td>
<td>4.60</td>
</tr>
</tbody>
</table>

\(F = 51.28; p = .000\)

Scheffé-Test

<table>
<thead>
<tr>
<th></th>
<th>Text vs. Infographic</th>
<th>Text vs. Animation</th>
<th>Infographic vs. Animation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(p)</td>
<td>.000</td>
<td>.000</td>
<td>.007</td>
</tr>
</tbody>
</table>

The analysis of the different topics shows that at least the tendency to perceive animations as more aesthetic than a) unanimated infographics and b) plain text is still observable. However, two exceptions can be found: The pie chart and the graphic adaptation. The unanimated pie chart is rated clearly lower than the text and the animation. Furthermore the distinct difference between all three modes of presentation is fading. As seen previously, the differences exist mainly between two modes at a time, but now there are not always the visual modes standing against the text as it is in the case of the line chart, where no statistical significant difference between the unanimated infographic and the animation was observed (Scheffé-Test probability = .183). For the bar chart we observed a significant difference only between the text and the animation. Differences between text and infographic (Scheffé-Test probability = .060) and infographic and animation (Scheffé-Test probability = .868) are not significant on a 5 % level. Even more interesting is again the pie chart, where text and animation are rated equally high. The difference there is between these two modes and the far lower rated unanimated chart. (See Table 11).

\(^7\) The higher the mean scores are the better is the rating of the aesthetic value.
Table 11: Mean Scores of the Aesthetic Value Index for the Modes of Presentation in the Topic "Traveling"

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>Item Visualized as</th>
<th>Text</th>
<th>Infographic</th>
<th>Animation</th>
<th>F-Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Chart (n=60)</td>
<td>2.93</td>
<td>4.13</td>
<td>4.78</td>
<td>14.59</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Bar Chart (n=60)</td>
<td>4.38</td>
<td>5.12</td>
<td>5.35</td>
<td>5.00</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td>Pie Chart (n=60)</td>
<td>4.38</td>
<td>3.25</td>
<td>4.38</td>
<td>5.03</td>
<td>.010</td>
<td></td>
</tr>
</tbody>
</table>

In the topic dealing with the European Monetary Union (EMU) the ratings of the aesthetic values tend to reflect our hypothesis with the graphic adaptation as an exception: Here the unanimated infographic is seen as slightly more aesthetic than the animation but the textual representation is still far lower rated. For the map and the time line only the differences between the two graphic representations on the one hand and the text on the other, are of statistical significance (Others Scheffe-Test probability = .25 and .998). In the item visualized as a graphic adaptation only the text and the unanimated infographic differ significantly in their mean scores of the aesthetic value index (Others Scheffé-Test probability = .07 and .90). (See Table 12).

Table 12: Mean Scores of the Aesthetic Value Index for the Modes of Presentation in the Topic "EMU"

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>Item Visualized as</th>
<th>Text</th>
<th>Infographic</th>
<th>Animation</th>
<th>F-Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map (n=60)</td>
<td>3.43</td>
<td>5.58</td>
<td>6.23</td>
<td>29.32</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Time Line (n=60)</td>
<td>3.48</td>
<td>5.50</td>
<td>5.53</td>
<td>19.48</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Gr. Adaptation (n=60)</td>
<td>4.13</td>
<td>5.35</td>
<td>5.15</td>
<td>4.71</td>
<td>.013</td>
<td></td>
</tr>
</tbody>
</table>

The age of the subjects had an impact on the perceived aesthetic value in this topic: The items visualized infographically as a still map and a time line were rated lower if respondents were older.

The assessment of the aesthetic value of the different modes of presentation in the topic dealing with the cloning process followed clearly our hypothesis: The best result is realized by the animation, second-best is the unanimated infographic, and far behind is the textual representation. All mean score differences are statistical significant. (See Table 13).

Table 13: Mean Scores of the Aesthetic Value Index for the Modes of Presentation in the Topic "Cloning"

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>Item Visualized as</th>
<th>Text</th>
<th>Infographic</th>
<th>Animation</th>
<th>F-Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanatory Chart (n=60)</td>
<td>2.68</td>
<td>4.90</td>
<td>6.13</td>
<td>42.85</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Therefore the good results in all topics mentioned above are again mostly due to the very good assessment of the animated explanatory chart. Again this animated infographic seems to be the best.
4.2.3 Influence of the Mode of Presentation on the Perceived Structural Quality

In all topics, animations are perceived as better structured than unanimated infographics and textual representations, but there texts are even slightly better rated than fixed images, but this difference is statistically not significant. (See Table 14).

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>60</td>
<td>4.75</td>
</tr>
<tr>
<td>Infographic</td>
<td>60</td>
<td>4.69</td>
</tr>
<tr>
<td>Animation</td>
<td>60</td>
<td>5.52</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>4.99</td>
</tr>
</tbody>
</table>

F = 10.30; p = .000

If we distinguish again between the three topics we find first, that in traveling only the animated line chart is valued as significantly better structured than the text presentation which does not differ significantly from the still infographic (Scheffé-Test probability = .06) and that is not statistically different from the unanimated chart (Scheffé-Test probability = .16). For the bar chart at least a non significant tendency in the hypothesized direction is observable. Again for the pie chart the results contradict entirely our hypothesis. Here the structural quality of the text is seen as significantly better than that of the fixed chart and even tends to a slightly but not significant better perceived structural quality than the animation (Scheffé-Test probability = .71). (See Table 15).

<table>
<thead>
<tr>
<th>Item Visualized as</th>
<th>Mode of Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Chart (n=60)</td>
<td>Text</td>
</tr>
<tr>
<td></td>
<td>3.75</td>
</tr>
<tr>
<td>Bar Chart (n=60)</td>
<td>5.85</td>
</tr>
<tr>
<td>Pie Chart (n=60)</td>
<td>4.03</td>
</tr>
</tbody>
</table>

F-Value | p
---|---
9.46 | .000
1.29 | .283
6.28 | .003

Once more the interest in traveling biased the assessment in the cases of the line and the bar chart: The more the subjects are interested in this particular topic the better they rate the structural quality of all modes of presentation.

In the topic "EMU" no significant differences between the modes of presentation were observed in the items which had been visualized through the map and the graphic adaptation. Furthermore even the trends contradict our hypothesis. The two visual

---

8 The higher the mean scores are the better is the rating of the structural quality.
forms of the time line were rated significantly better than the textual representation but again there is no significant difference between the animated and the fixed chart (Scheffé-Test probability = .93). (See Table 16).

Table 16: Mean Scores of the Structural Quality Index for the Modes of Presentation in the Topic "EMU"

<table>
<thead>
<tr>
<th>Item Visualized as</th>
<th>Mode of Presentation</th>
<th>F-Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Text</td>
<td>Infographic</td>
<td>Animation</td>
</tr>
<tr>
<td>Map (n=60)</td>
<td>5.63</td>
<td>5.50</td>
<td>5.58</td>
</tr>
<tr>
<td>Time Line (n=60)</td>
<td>3.98</td>
<td>5.93</td>
<td>6.08</td>
</tr>
<tr>
<td>Graph. Adaptation (n=60)</td>
<td>5.80</td>
<td>5.35</td>
<td>5.45</td>
</tr>
</tbody>
</table>

The mode of the presentation for the cloning process had again a significant impact on the subjects assessment. The animation is rated as the most structured representation whereas the text and the still chart - with a marginal and not significant difference (Scheffé-Test probability = .45) - are falling both behind. (See Table 17).

Table 17: Mean Scores of the Structural Quality Index for the Modes of Presentation in the Topic "Cloning"

<table>
<thead>
<tr>
<th>Item Visualized as</th>
<th>Mode of Presentation</th>
<th>F-Wert</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Text</td>
<td>Infographic</td>
<td>Animation</td>
</tr>
<tr>
<td>Explanatory Chart (n=60)</td>
<td>4.55</td>
<td>4.08</td>
<td>5.60</td>
</tr>
</tbody>
</table>

The results point in the hypothesized direction, that animations are better in structuring information than the two other modes of presentation. However, one should not underestimate the structuring capability of textual representation. The text is at least slightly better rated in its structural quality than the still explanatory chart.

4.3 Influence of the Mode of Presentation on the Intensity of Labor

We supposed that animated infographics could foster the intensity with which one deals with the presented information. This is particularly important, if we want to assess the value of multimedia information conveyance for the users.

*The subjects will deal more intensely with animated presentations than with still infographics and texts (intensity of labor).*

Regarding the intensity of labor we observed a distinct difference between infographics and plain texts. Not fully consistent with our hypothesis the subjects dealt significantly more intensively with the unanimated infographics than with the texts, but there is no significant difference between the textual representations and the animations, or the still infographics and the animated charts. Still infographics fostered the labor intensity even somewhat more than the animated graphics (See Table 18).
Table 18: Mean Scores of the Intensity of Labor Index for the Modes of Presentation over all Topics

<table>
<thead>
<tr>
<th>Mode of Presentation</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>60</td>
<td>4.82</td>
</tr>
<tr>
<td>Infographic</td>
<td>60</td>
<td>5.49</td>
</tr>
<tr>
<td>Animation</td>
<td>60</td>
<td>5.28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>180</td>
<td>5.20</td>
</tr>
</tbody>
</table>

\[ F = 5.52; p = .005 \]

Scheffé-Test

<table>
<thead>
<tr>
<th></th>
<th>Text vs. Infographic</th>
<th>Text vs. Animation</th>
<th>Infographic vs. Animation</th>
</tr>
</thead>
<tbody>
<tr>
<td>( p )</td>
<td>.006</td>
<td>.086</td>
<td>.598</td>
</tr>
</tbody>
</table>

When the different topics are singled out, we get a similar picture as in the overall results, whereas the statistical significance is only given for the difference between the unanimated pie chart and the text (Other Scheffé-Test probabilities = .17 and .58). (See Table 19).

Table 19: Mean Scores of the Intensity of Labor Index for the Modes of Presentation in the Topic "Traveling"

<table>
<thead>
<tr>
<th>Item Visualized as</th>
<th>Mode of Presentation</th>
<th>F-Value</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Chart (n=60)</td>
<td>Text</td>
<td>3.83</td>
<td>4.55</td>
</tr>
<tr>
<td></td>
<td>Infographic</td>
<td>4.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animation</td>
<td>4.13</td>
<td></td>
</tr>
</tbody>
</table>

The same occurs in the topic which deals with the European Monetary Union (EMU) between the fixed map and the text (Other Scheffé-Test probabilities = .06 and .99) and the unanimated graphic adaptation and the animation (Other Scheffé-Test probabilities = .24 and .62). (See Table 20).

Table 20: Mean Scores of the Intensity of Labor Index for the Modes of Presentation in the Topic "EMU"

<table>
<thead>
<tr>
<th>Item Visualized as</th>
<th>Mode of Presentation</th>
<th>F-Value</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map (n=60)</td>
<td>Text</td>
<td>4.95</td>
<td>5.88</td>
</tr>
<tr>
<td></td>
<td>Infographic</td>
<td>5.88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animation</td>
<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

Only the results for the different presentation modes in the topic "cloning" tend to follow the hypothesized direction but the differences are statistically not significant. The explanatory chart is at least dealt with more intense than the two other presentation forms. (See Table 21).

Table 21: Mean Scores of the Intensity of Labor Index for the Modes of Presentation in the Topic "Cloning"

<table>
<thead>
<tr>
<th>Item Visualized as</th>
<th>Mode of Presentation</th>
<th>F-Value</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanatory Chart  (n=60)</td>
<td>Text</td>
<td>5.05</td>
<td>5.45</td>
</tr>
</tbody>
</table>
These results might be due to the predetermined times given to the participants to deal with the still charts as well as with the animations. Here we probably detected a very interesting measurement artefact caused by our experimental design. It could help to explain to some extent other surprisingly positive results the still charts achieved.

Whilst the subjects showed the same tendency to deal more intensely with the still images in the topics "Traveling" and "EMU", only the results of the cloning process tended in the direction of our hypothesis. We therefore also get some possible explanations why this complex item seems to be more appropriate for animation than others.

5. Discussion

Animation can be seen as one main characteristic of multimedia applications. In our study we compared animated infographics with their still versions and textual representations of analogous information. The findings are conclusive to a certain degree. According to our results it is not always appropriate to visualize and animate certain topics but in most cases visualization can enhance the information transfer. The results are further indicating that animations should preferably be used in complex fields of knowledge. In some other fields still infographics or even textual information might be equally suited to convey information.

However, our findings could have been affected to some extent by the employed experimental design with predetermined viewing times of animations and still infographics. Knowledge transfer via computer-screen in everyday situations might differ entirely from this experimental setting. Though an infographic may serve as an eye-catcher, directing attention to the information offered on the screen, it is far more important how long an informational graphic is dealt with. Is it long enough to convey the relevant information or is the user simply surfing away after a few glimpses? It seems logical to assume that an animated chart is being watched attentively while it is building up step by step, whereas the relevant information of a still infographic might be overlooked because the recipient is just glimpsing at the image.

Besides the successful conveyance of knowledge the subjective assessment of the different modes of presentations used in this study is a matter of particular interest. Our findings suggest that animated informational graphics can possess more aesthetic value and structural quality for the recipients. Yet this result does not automatically show up whenever a chart is transmuted to an animation. Therefore our findings also suggest further research. In the field of computer-mediated visual communication multimedia is not the universal answer to all communication problems. Just to do what is technically possible might not always be a wise decision. However, animated visual information can possess certain advantages over other presentation modes, but further research, including the audio mode of presentation, has to be conducted. This study has to be seen as one of the first steps into multimedia research.
References


NOTICE

Reproduction Basis

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").