This paper synthesizes speculation in the professional literature about the future impact of multimedia. Many experts believe that multimedia will soon become the major focus of entertainment dollars and time because its versatility gives it the potential to be a very powerful way to communicate ideas and search for information. In its current state multimedia's quality cannot always measure up to individual media at their best, but it does allow information to be experienced with the senses and emotions as well as the intellect. Multimedia is causing a revolution in instructional methods by making learning interactive and self-paced. The video game and entertainment industry is being changed by multimedia, too, albeit more slowly. Film history stretches back for a century, but only recently have there appeared a variety of ways to access films: in the cinema, on videotapes, on premium cable, or on broadcast television. Even though the financial market for multimedia seems poised to explode, this paper suggests that computer multimedia may not emerge as another significant choice in visual entertainment because the computer screen is not large enough to captivate large groups or offer social events in the same way that television and movie screens do. (Contains 12 references.) (BEW)
Multimedia Production: A Critical Evaluation

by Ronald E. Sutton

In the 1967 feature film, The Graduate, the lead character Benjamin (Dustin Hoffman), is approached by a "polyester friend" of his uptight, middle class parents. The man asks if Benjamin, a recent graduate of Harvard, wants to know what the hot--- the really hot--- product area is in the business world. Benjamin nods assent, but displays no real interest. The man is not to be dissuaded. He leans in close to Benjamin and whispers in a conspiratorial manner, "PLASTICS."

I feel somewhat the same way. My students often indicate, one way or the other, that they want to know what their focus should be in today's world of changing technologies. I often find myself, much like the polyester gentleman, saying to them, "MULTIMEDIA."

This paper is a critical look at this fast-breaking, fascinating, much hyped field of multi-media. The question it asks is whether MULTIMEDIA will really be the major focus of our entertainment dollars and time in the future.

The Question of Definition

In an excellent paper, James Lockard anticipates the impact that multimedia will have in the 90's. Citing Butler (1990), and Hawn (1990), he calls multimedia "one of the hottest concepts in the computer world," suggesting it is about to overwhelm this market in "warp drive" fashion. For him "multimedia is a versatile means of communication that combines previously separate media into a single, unified computer-based entity.....computer-controlled production environments that enable creative integration and manipulation of video, audio, text, and graphic elements" (Lockard, p. 217).

In "Multimedia: Promise, Reality and Future" Mike Moore,
Robert J. Myers and John K. Burton. (1994) point out the paucity of useful research on multimedia use in education. They also stress the concept of "computer driven interactivity" (p. 51). The media to be combined here include motion imagery, voices plus data, text, graphics and still images, but clearly the focus is on the intersection of video and the computer.

Ora Silverstein (1994), in her common sense article "Multimedia and Hypermedia: An Invitation for Discussion" includes "visual text, voice, picture-drawing, animation, and video" (p. 128) and wants us to focus on computer-multimedia as not only "another technology" but one that is going to play an important role in the 21st century along with all the other "multimedia" we are surrounded by in today's world (p. 129).

Erik Holsinger claims in his 1994 study How Multimedia Works that "Multimedia has the potential to be one of the most powerful forms of communicating ideas, searching for information, and experiencing new concepts of any communications media ever developed" (p. 3). This is simply because multimedia incorporates every type of media ever developed.

He then describes how the multimedia experience combines all the best elements of the media we have used and developed over the years, graphic arts, books, magazines, film, animation, radio, television. He feels that's "where the real potential lies; a truly outstanding multimedia title could potentially provide an even better experience than any of the other media could individually." (p. 3) That's its potential, but not its present capability. As a matter of fact all aspects of multimedia are now inferior to the individual media at their best.

Nonetheless, Business Week guru Robert L. Lindstrom (1995) states "With the arrival of digital multimedia, the personal computer has crossed the threshold from the world of the static to the realm of the dynamic, where information is experienced with the senses and emotions as well as the intellect." (p. 1). Lindstrom stresses that the commonality in multimedia, other than the fact of being just another of the ways to communicate, is that all media incorporated into it is translated into digital Os and 1s, the bits and bytes of computers. Text, graphics, audio and video are all integrated and adapted in digital form (p. 2).

Educational Revolution

There is little question that the multimedia technology has caused and is causing a revolution in education and instruction. The getting and giving of information of all kinds is being transformed both by the way the media can be
integrated into one operating system as well as the interactive aspects of that system. This gives the learner or seeker considerably more control over the flow of information and instruction than he/she had previously.

This is a tidal wave of change. It will continue, hopefully with an adequate definition of what it is, and appropriate research to test its effectiveness in our school, home, office and university workplaces. For the seeking out of information, for individualized instruction of the "How to load a camera" type, for packaged instruction over long distances, for multi-path learning experiences, for quick reference and data storage and retrieval, and even for the amusement that comes from playing games on a computer, both the mundane (Crystal Quest) and sublime (Myst), multimedia is the way of the future.

Dr. Jack Jorgens, author of the text, *Shakespeare on Film* (1977), and my colleague at American University, has developed a multimedia-oriented course on his book's theme. It was done in hypercard and makes a significant sampling of Shakespearean films on laser disk available for investigation, comparison and contrast for students. It's a dynamite program and an exciting learning experience for anyone willing to engage with it in the Media Services section of American University Library.

**Entertainment Evolution**

But the collision Holsinger describes is "the collision of the communication, entertainment and computer industries" (my emphasis) (p. 2). And entertainment is the one area which will grow in an evolutionary rather than revolutionary manner. This is predicated the firm but arguable premise that entertainment is seen economically and culturally in the United States as a social activity and not a solitary pursuit such as stamp or coin collecting.

This argument is based on a general view of the historical development of the media and its audience(s). From ancient times to the present, people have gathered together in groups large and small to watch performers in live situations. "Theater" describes this phenomenon, if by this broad and inclusive term, we mean everything from Medea to Ringling Brothers to *Waiting for Gordot*, to *Phantom of the Opera* and all the spectacles and ritual performances in between.

**From Theater to Film!!**

Just one hundred years ago we began to make a transition from this sort of audience involvement in theater to that of film. We still gathered together in the relative darkness, but the performance now
was frozen, canned, trapped on celluloid. We could clap or scream or laugh or cry --- and movies made us do all that---but it had absolutely no effect on the performers. They had done "their thing" many days, or weeks, or months or even years, ago and it was now immutably fixed first at 16, then later, 24 frames per second.

It really didn't even trouble us that the pictures weren't really capturing motion. This simple fact repeatedly astounds rather worldly students in university classes on visual literacy classes. Movies are a series of still photographs flashed on a screen before us and separated by snippets of darkness so that our brain is fooled into seeing motion where there is no motion.

From their invention in 1895 to the present day we enjoy the social experience of seeing a movie with our family, friends and loved ones. Sometimes whole communities gather to experience the power of this audiovisual medium when it focuses on their history or story in some special way (Schindler's List for example). At their peak, in the earlier decades of the 20th century, many people, including this author, went to the local movie theater(s) as many as three times a week.

**From Film to TV!!!**

Then about fifty years ago we began another transition in our media entertainment. The shift to television was even more wrenching than the theater to film shift. We saw these moving images and sound in our homes for the most part, not specially built community buildings. We could look at them alone and many did and still do that; however, if taken to an extreme our society considers it anti-social behavior and dubs such persons with the unflattering label of "couch potatoes."

But in a more positive light we enjoy all manner of information and entertainment through the television medium. Two great media peaks loam large as major watersheds as we look back over the history of the media: one is the time before Gutenberg and the time after Gutenberg; another is the time without television and the time with it. These periods are increasingly referred to as the Age of the Word and the Age of the Image & Sound.

Television and its first cousin video (as in video recorder and video tapes) is enjoyed in many forms. Small and large groups gather to see athletic contests, couples enjoy movies in the privacy of their own living room, families view repeatedly their own copies of favored films, such as The Lion King. Television and video make up the largest element of our entertainment dollar and time commitment. In my own home the entertainment decisions are these regarding a new movie that hits
Would we see it:
A. in the theater.
B. on a tape from Blockbusters
C. on premium cable
D. on broadcast television

From TV/Video to Multimedia

Blue sky prophets talk about extravagant markets and profits to be made in multimedia. One 1990 study cited in Lockard (1991) projected "the market for multimedia worldwide to grow from $6.4 billion...to $24.1 billion in 1994, with over half of the latter in the U.S. market" (p. 218).

Another source indicates that Government analysts estimate the use of multi-media to grow from $900 in 1992 to $2.4 billion in 1995 (Couch et al p. 290).

A LINK study in 1992 predicted that multimedia revenues from business, consumer, and education will grow from $777 million in 1991 to $13 billion by 1996 (Couch et al p. 290).

A final study by Market Intelligence indicates "that the worldwide multimedia marketplace is on the brink of a seven-year explosion and is expected to peak at $424 billion in 1996" (Kupsh, p. 40).

These are attractive figures in the business world. It's little wonder that this new media technology is receiving a full court press in hype and exaggeration. Holsinger sarcastically cites "'multimedia analysts' who announce gloriously outrageous market figures every week, in which it is certain that by the year 2000 the multimedia market will be a $650 billion industry (give or take $650 billion)" (p. 2). Reliable and credible data that really indicates the size and potential of this multimedia market is elusive to non-existent!

The Screen Dilemma

Will computers develop into large display wall screens in our homes? If so, the entertainment shift may indeed occur more rapidly than suspected or predicted, moving easily from television to multimedia with its interactive addition.

High Definition Television (HDT) could help the revolution along at this point, but presently appears stalled in competing systems and formats throughout the world.

If the basic viewing platform for multimedia remains a standard computer screen, essentially designed for individual use, then there is serious doubt it will emerge as the entertainment avalanche of the future. Myst, as fascinating a journey as it is, remains an individual journey, or at most a trip
for two. On present screens then, multimedia entertainment is virtually impossible to conduct as a social event given its interactive nature.

CONCLUSION: IT'LL NEVER FLY, ORVILLE!!!

We need to determine, and the marketplace is doing this to some extent, what we want multimedia to do for us? Inform us, educate us, train us, play games with us, entertain us as solitary individuals...all these are possibilities, that even now move unevenly toward actuality.

But will multimedia entertain and move us as theater, film and television have in their respective Ages over the centuries. I don't think so. Serious questions can be raised about multimedia being the entertainment wave of the future. Do we really see the masses spending enormous quantities of money that would dwarf the video game industry of 3+ billion dollars (Holsinger, p. 2). Many doubt that astronomical numbers of people will spend countless, solitary hours in front of the interactive multimedia screen.

I personally doubt it will fly or float or compute! There is the possibility that I will be proven wrong. History doth occasionally make dim critics of us all. Until then, these are my questions and critical evaluation of multimedia.

REFERENCES


