

**Open Captioning vs. Rear Window
Captioning:
Researching Accessible Technology for Deaf
and Hard of Hearing Individuals**

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I. Introduction

Movies are one of the most primary sources of multimedia communication. The many genres of movies dictate what messages are being conveyed. Documentaries seek to educate people about specific issues such as wildlife, foreign countries, or illness, among others. Theater movies seek to entertain people, with a large number of them attempting to impart messages to the audience. For example, the movie “Radio” was adapted from the true story of a mentally retarded man in South Carolina who was “adopted” by a high school football coach and made a part of the high school football team. The movie was very inspiring and hopefully persuaded people to be more open-minded towards people with mental disabilities.

Movies are a great way for technical communicators and people working in media-rich fields to communicate to audiences. People choose to view movies for educational or entertainment purposes, or even both, so movies are an excellent way for communicators to reach target groups.

This method of communicating to audiences has expanded to include accommodations so that deaf and hard of hearing audiences can be reached as well.

II. Background Information

“Show me the money!”

“Hasta la vista, baby.”

“Go ahead, make my day.”

These movie quotes from *Jerry Maguire*, *The Terminator*, and *Dirty Harry* have become such well-known catchphrases that are such a large part of everyday life in America that it’s hard to imagine conversations, speeches, articles, and other communication mediums taking place without ever mentioning movies or quotes. For decades after movies with verbal dialogues ended the silent movie era, millions of deaf and hard of hearing Americans could not enjoy movies due to their inability to understand the movie dialogue, and thus missed out on many cultural phenomena that began with a single line uttered in a famous movie.

With the passage of the Americans with Disabilities Act (“ADA”) of 1990, came the development of methods to make theater movies accessible to people with hearing disabilities. Two main methods of movie theater captioning were developed: Open Captioning (“OC”) and Rear Window Captioning (“RWC”). Thanks to these methods, some if not all of the estimated 30 million Americans with some degree of hearing loss can now enjoy movies in theaters.

This is a subject that professional multimedia designers, writers, and technical communicators should be aware of, especially since such a large part of the United States population have hearing disabilities. They must take that fact into consideration while developing materials, in order to make videos, DVDs, and other multimedia formats accessible to people with disabilities, especially deaf and hard of hearing individuals.

III. Methods of Movie Theater Captioning

There are two general categories of captioning systems that can be used for captioning movies in the theater: Open Captioning (“OC”) and Rear Window Captioning (“RWC”). The main difference between each method is that OC is always in view, cannot be turned off, and the entire audience can see it regardless of whether they wanted to or not, while RWC is viewable only by the user.

a. Open Captioning (“OC”)

Open captions always are in view and cannot be turned off, whereas closed captions can be turned on and off by the user.

Originally, OC was the only method available to the deaf and hard of hearing audience. At the time of the ADA’s passage, Congress strongly encouraged movie theaters to provide OC movies. When the ADA became law, the only technology that was available at the time for captioning theater movies, was open captioning (“OC”).

The below screenshot is an example of what open captions on a theater movie screen would typically look like. (WebAIM)



b. Rear Window Captioning (“RWC”)

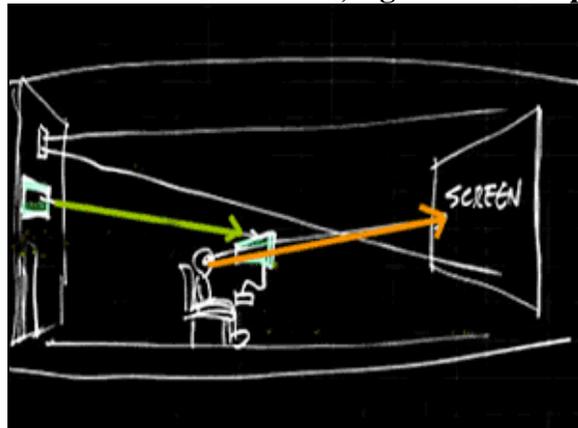
With the Rear Window Captioning (“RWC”) system, only the deaf patrons can view the captions while the rest of the theater audience cannot.

An explanation of how the RWC system works is provided by Motion Picture Access Group (“MoPix”), a nonprofit organization dedicated to promoting RWC in movie theaters:

“The patented Rear Window® Captioning System displays reversed captions on a light-emitting diode (LED) text display which is mounted in the rear of a theater. Deaf and hard-of-hearing patrons use transparent acrylic panels attached to their seats to reflect the captions so that they appear superimposed on the movie screen. The reflective panels are portable and adjustable, enabling the caption user to sit anywhere in the theater.”

To further assist with the explanation of how the RWC system operates, Motion Picture Accessibility Group (“MoPix”) has provided a series of illustrations, as shown below:

- 1) The RWC system user can sit almost anywhere in the audience. The RWC display is at the back of the movie theater, right below the projector window.**



- 2) The RWC system display screen is at the back of the movie theater. The screen shows the dialogue, but the letters and words are backwards.**

- Ball v. AMC Entertainment Corp., 246 F. Supp. 2d 17 (D.D.C. 2003) (opinion)
- Ball v. AMC Entertainment Corp., 315 F. Supp.2d 120 (D. D.C. 2004) (approving settlement)

Department of Justice v. Disney

- Walt Disney World Company Agreement re: the use of auxiliary aids at Disney theme parks (January 17, 1997)
- <http://www.usdoj.gov/crt/ada/disagree.htm>

Fiedler v. American Multi-Cinema, Inc.

- Fiedler v. American Multi-Cinema, Inc., 871 F.Supp 35 (D.D.C. 1994)

Toyota Motor Mfg. v. Williams

- Toyota Motor Mfg. v. Williams, 122 S. Ct. 681 (2002).

Bunjer v. Edwards

- Bunjer v. Edwards, 985 F. Supp. 165 (D.D.C. 1997).

Motion Picture Association of America, Inc. v. Federal Communications Commission

- Motion Picture Association of America, Inc., v. Federal Communications Commission, No. 01-1149, (D.C. Cir. Nov. 8, 2002).

V. Annotated Research Sources

Harvard Law Review

- Michael Stein. “District Court Approves Settlement Requiring Movie Theaters to Provide Closed Captioning for Deaf and Hard-of-Hearing People”. Harvard Law Review. 118 Harv. L. Rev. 1777 (2005)

Michael Stein discusses the landmark Ball v. AMC settlement as well as gives a history of movie captioning accommodations.

Temple University Law Review

- Sy DuBow. “The Television Decoder Circuitry Act – TV For All”. Temple University Law Review. TMPLR 609 (1991)

Sy DuBow wrote a law review article regarding the Television Decoder Circuitry Act and how it applied to captioning accommodations for deaf and hard of hearing individuals.

Access Board Bulletin Regarding Movie Captioning Systems

- U.S. Architectural and Transportation Compliance Board, Bulletin #8. “Theatrical Movie Captioning Systems”. (April, 2001)

The U.S. Architectural and Transportation Compliance Board published a Bulletin regarding movie captioning systems.

United States Congress Report Regarding Intent of Captioning under ADA

- S. Rep. No. 101-116 (101st Congress) at 64 (1989)

The United States Congress published a Report concerning the ADA's intentions for captioning accommodations.

United States Department of Justice website on the Americans With Disabilities Act of 1990 (ADA), accessed May 1, 2005.

- <http://www.usdoj.gov/crt/ada/adahom1.htm>

The U.S. Department of Justice maintains the official website of the Americans with Disabilities Act of 1990.

InSight Cinema website, accessed May 1, 2005.

- <http://www.insightcinema.org>

InSight Cinema is a nonprofit advocacy organization devoted to advancing the awareness and availability of OC. This website also provides information on theaters, dates, and times for OC movie showings.

ADA Portal website, accessed May 1, 2005.

- <http://www.adaportal.org/>
- http://www.adaportal.org/Other_Legislation/EBIT/Video%20and%20Multimedia%20Products/Open%20vs%20Closed%20Captioning.htm

The ADA Document Portal is a clearinghouse of all ADA documents, and enables the user to search for ADA-related documents.

Media Access Group (MoPix) website, accessed May 1, 2005.

- <http://ncam.wgbh.org/mopix/>

The Media Access Group, also a nonprofit advocacy organization, is dedicated to spreading the concept of RWC among movie studios and theaters. This website also provides information on theaters, dates, and times for RWC movie showings.

United States Census Bureau website, accessed May 1, 2005.

- <http://www.census.gov/>

The U.S. Census Bureau maintains all kinds of statistics regarding Americans, including the number of deaf and hard of hearing Americans.

National Institute on Deafness and Other Communication Disorders website, accessed May 1, 2005.

- <http://www.nidcd.nih.gov>

The National Institute on Deafness and Other Communication Disorders provides information on deafness and its causes.

American Academy of Otolaryngology – Head and Neck Surgery website, accessed May 1, 2005.

- <http://www.entnet.org/healthinfo/ears/cochlear-implant.cfm>

This website provides information on the Cochlear Implant.

National Association of the Deaf website, accessed May 1, 2005.

- <http://www.nad.org>

The National Association of the Deaf (“NAD”) maintains a website in which they provide updates on lawsuits regarding OC and RWC in theaters.

Alexander Graham Bell Association for the Deaf and Hard of Hearing website, accessed May 1, 2005.

- <http://www.agbell.org>

The Alexander Graham Bell Association for the Deaf and Hard of Hearing (“AG Bell”) is an organization with the mission of promoting communication for people with hearing loss.

Coalition of Movie Captioning websites, accessed May 1, 2005.

- <http://www.hearinglossweb.com/res/cap/cmc.htm>
- <http://www.nad.org/site/pp.asp?c=foINKQMBF&b=100781>

The Coalition of Movie Captioning (“CMC”) is a coalition comprised of such organizations as NAD and AG Bell, with the purpose of promoting movie theater captioning across the US for deaf and hard of hearing moviegoers.

National Captioning Institute website, accessed May 1, 2005.

- <http://www.ncicap.org/>

The National Captioning Institute (“NCI”) is a nonprofit organization established for the purpose of ensuring that deaf and hard of hearing individuals have access to television through the use of captioning.

WGBH Boston’s website, accessed May 1, 2005.

- <http://www.wgbh.org/>

WGBH is Boston’s public broadcasting television station and has been responsible for the advent of the captioning revolution in television, and now movies.

Missouri Commission for the Deaf and Hard of Hearing website, ADA section, accessed May 1, 2005.

- <http://www.mcdhh.state.mo.us/ADA/TitleIII.htm>

This website points to the section of the ADA that includes provisions for the use of captioning system under the “auxiliary aid” provision of Title III.

Gary D. Robson. “Closed Captioning FAQ” website, accessed May 1, 2005.

- <http://www.robson.org/capfaq/>

This website is devoted exclusively, as well as extensively, to frequently asked questions (FAQs) regarding captioning systems.

Web Accessibility in Mind (WebAIM) website, accessed May 1, 2005.

- <http://www.webaim.org/techniques/captions/>

WebAIM (short for Web Accessibility in Mind), is an organization devoted to the internet’s possibilities for accommodating people with disabilities, but also has a section devoted to captioning.

Rufus Butler Seder. “Rear Window’ Captioning System”. Accessed May 1, 2005.

- http://www.designboom.com/portrait/rufus_rear.html

This website contains an article by Rufus Butler Seder of WGBH, who was one of the creators of the RWC system. The article explains the concept of the RWC captioning system and also provides explanation and visual aids of how the system works. I used the visual aids earlier in this paper in order to provide a visualization of how RWC operates.

New Jersey Attorney General website, Press Releases section, accessed May 1, 2005.

- http://www.state.nj.us/lps/dcr/happy_bday_lad.html

The New Jersey Attorney General’s office posted a press release talking about state anti-discriminatory laws as well as discussing a movie captioning case that is currently being litigated in state court.

Telecommunications for the Deaf, Inc. website, accessed May 1, 2005.

- <http://www.tdi-online.org/tdi/CaptioningHistory.asp>

The Telecommunications for the Deaf, Inc. (TDI) website provides a detailed history of the captioning revolution, such as the first captioned television shows, and beyond.

Joe Clark. “Axxlog”. Media Access Weblog website. Accessed May 1, 2005.

- <http://axxlog.wordpress.net/>

A captioning advocate maintains a blog in which he discusses movie theater captioning as well as litigation and settlements concerning the issue. I do not share some of his personal opinions, but it is interesting to read what he has to say regarding movie theater captioning, and he has also provided some helpful information on the blog.