Using Audacity, Questions to Ponder

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Why are we here?

Here are some questions to ponder during and after this workshop. Are you interested in audio recording? Are you interested in music recording? Or some of both? Casually or Professionally? How many of you have experience with the newsmedia? newspapers? radio? internet/social media? television? How often do you keep up on the news? What are your sources? How often do you make the news?

Before Nan takes over with the main audacity workshop, I would like to offer an interesting overview of where our (U.S.) basic everyday news comes from today ...

Newspapers

The modern newspaper is a European invention. The oldest direct ancestors of the modern newspaper were the handwritten news sheets that circulated widely in Venice as early as 1566. These weekly news sheets were filled with information on wars and politics in Italy and Europe. The first printed newspapers were published weekly in Germany from 1609. Typically they were heavily censored by the government and reported only foreign news, and current prices. After the English government relaxed censorship in 1695, newspapers flourished in London and a few other cities including Boston and Philadelphia. By the 1830s high speed presses could print thousands of papers cheaply, allowing for low daily costs.

Today 2018 in the U.S. there are at least 700 fewer newspapers and almost 900 fewer owners than in 2004. Circulation has dropped 25 percent. As newspapers and owners fell by the wayside — and circulation declined along with profits — consolidation in the industry increased. The largest chains grew even larger, as a new type of owner emerged. As economic conditions worsened after 2004, a steady stream of owners decided to sell or declare bankruptcy. More than a third of newspapers changed ownership. Many independent family- owned newspapers were sold to the large chains. As a result, as of 2014, the nation had 3,034 newspaper owners, down from 3,897 in 2004. As the number of owners decreased, consolidation — especially among the largest companies — accelerated. By 2014, the largest 25 companies owned 2,199 papers. The next largest 25 companies owned only 631 papers. The largest 25 companies in 2014 owned more than half of all dailies in the country — 721 out of 1,331 — and one-fifth of all nondailies — 1,478 out of 6,596. During the past decade, there has been extensive turnover among the largest owners. Several of the large chains in 2004 were acquired by other companies; others sold divisions or groups of newspapers.

Radio

Radio broadcasting began in the early 1920s, but it wasn't until the introduction of the transistor radio in 1954 that radio became available in mobile situations. Internet radio is in much the same place. Until the 21st century, the only way to obtain radio broadcasts over the Internet was through your PC. That will soon change, as wireless connectivity will feed Internet broadcasts to car radios, PDAs and cell phones. The next generation of wireless devices will greatly expand the reach and convenience of Internet radio.

Freedom of the Airwaves

AM broadcasting is a radio broadcasting technology, which employs amplitude modulation (AM) transmissions. It was the first method developed for making audio radio transmissions, and is still used worldwide, primarily for medium wave (also known as "AM band") transmissions, but also on the longwave and shortwave radio bands.

The earliest experimental AM transmissions were begun in the early 1900s. However, widespread AM broadcasting was not established until the 1920s, following the development of vacuum tube receivers and transmitters. AM radio remained the dominant method of broadcasting for the next 30 years, a period called the "Golden Age of Radio", until television broadcasting became widespread in the 1950s and received most of the programming previously carried by radio. Subsequently, AM radio's audiences have also greatly shrunk due to competition from FM (frequency modulation) radio, Digital Audio Broadcasting (DAB), satellite radio, HD (digital) radio and Internet streaming. AM transmissions are much more susceptible than FM or digital signals are to interference, and often have lower audio fidelity. Thus, AM broadcasters tend to specialise in spoken-word formats, such as talk radio, all news and sports, leaving the broadcasting of music mainly to FM and digital stations.

The Local Community Radio Act of 2010 (based upon the legislation originally introduced in 2005) was signed into law by President Barack Obama on January 4, 2011 as Pub.L. 111–371, after passage in the House on December 17, 2010, and the U.S. Senate on December 18, 2010. In a statement after the bill became law, Federal Communications Commission chairman Julius Genachowski said, "Low power FM stations are small, but they make a giant contribution to local community programming. This important law eliminates the unnecessary restrictions that kept these local stations off the air in cities and towns across the country." The Act states that the Federal Communications Commission (FCC), when licensing new FM translator stations, FM booster stations, and low-power FM stations, should ensure that licenses are available to FM translator stations, FM booster stations, and low-power FM stations; such decisions are made based on the needs of the local community; and FM translator stations, FM booster stations, and low-power FM stations remain equal in status and

secondary to existing and modified full-service FM stations.

Low Power FM (LPFM) is a non-commercial educational broadcast service. LPFM licenses may be issued to non-commercial educational entities, and public safety and transportation organizations. Individuals and holders of other types of broadcast licenses are not eligible to hold an LPFM license.

LPFM classes

Class L1 (LP100) is to 100 watts effective radiated power (ERP). (47 C.F.R. 73.811)

Class L2 (L10) is at least 1 and up to 10 watts ERP. (47 C.F.R. 73.811)

In addition, Class D educational licenses exist for stations of 10 watts transmitter power output (TPO) or less, regardless of ERP. These stations are all grandfathered operations, as no new licenses of this type have been issued since 1978, except in Alaska. They are not considered to be LPFM stations, although they operate noncommercially and have similar coverage areas to Class L2 stations.

Arguments for LPFM

Free Press, a non-partisan advocacy organization pushing for media reform, specifically in promoting "diversity and independent media ownership, strong public media, and universal access to communications," voiced its support of LPFM for a variety of reasons:

- It strengthens community identity.
- It creates an outlet for amateur musicians to get their music heard.
- It creates diversity on the air because women and racial minorities are represented.
- It creates an opportunity for young people, especially college students, who are interested in radio to learn about the business.
- It provides farmers with up to date agricultural information.
- Prometheus Radio Project, a non-profit organization that "builds, supports, and advocates for community radio stations which empower participatory community voices and movements for social change," also supported LPFM, citing these reasons:
- The media should not limit democratic participation but should provide a way for communities and movements to express themselves

- Public airwaves shouldn't be concentrated in private/corporate hands
- Low Power FM gives a voice to communities
- Low Power FM needs to be protected from big broadcasters

"Radio waves" transmit music, conversations, pictures and data invisibly through the air, often over millions of miles -- it happens every day in thousands of different ways! Even though radio waves are invisible and completely undetectable to humans, they have totally changed society. Whether we are talking about a cell phone, a baby monitor, a cordless phone or any one of the thousands of other wireless technologies, all of them use radio waves to communicate.

Here are just a few of the everyday technologies that depend on radio waves:

AM and FM radio broadcasts/Cordless phones/Garage door openers/Radio-controlled toys

Wireless networks/Television broadcasts/Cell phones/GPS receivers/Satellite communications/Ham radios/Police radios/Wireless clocks

The list goes on and on... Even things like radar and microwave ovens depend on radio waves. Things like communication and navigation satellites would be impossible without radio waves, as would modern aviation -- an airplane depends on a dozen different radio systems. The current trend toward wireless Internet access uses radio as well, and that means a lot more convenience in the future!

A college student in Wisconsin listens to a disc jockey in Jamaica play the latest rapso (calypso rap) music. A children’s advocacy group unites its geographically diverse members via private broadcast. A radio listener hears an ad for a computer printer and places an order immediately using the same medium on which he heard the ad. All of this is possible with Internet radio, the latest technological innovation in radio broadcasting since the business began in the early 1920s.

Internet radio has been around since the late 1990s. Traditional radio broadcasters have used the Internet to simulcast their programming. But, Internet radio is undergoing a revolution that will expand its reach from your desktop computer to access broadcasts anywhere, anytime, and expand its programming from traditional broadcasters to individuals, organizations and government.

Uses and Advantages

Traditional radio station broadcasts are limited by two factors:

1. the power of the station's transmitter (typically 100 miles)

2. the available broadcast spectrum (you might get a couple of dozen radio stations locally)

Internet radio has no geographic limitations, so a broadcaster in Kuala Lumpur can be heard in Kansas on the Internet. The potential for Internet radio is as vast as cyberspace itself (for example, Live365 offers more than 30,000 Internet radio broadcasts).

In comparison to traditional radio, Internet radio is not limited to audio. An Internet radio broadcast can be accompanied by photos or graphics, text and links, as well as interactivity, such as message boards and chat rooms. This advancement allows a listener to do more than listen. In the example at the beginning of this article, a listener who hears an ad for a computer printer ordered that printer through a link on the Internet radio broadcast Web site. The relationship between advertisers and consumers becomes more interactive and intimate on Internet radio broadcasts. This expanded media capability could also be used in other ways. For example, with Internet radio, you could conduct training or education and provide links to documents and payment options. You could also have interactivity with the trainer or educator and other information on the Internet radio broadcast site.

Internet radio programming offers a wide spectrum of broadcast genres, particularly in music. Broadcast radio is increasingly controlled by smaller numbers of media conglomerates (such as Cox, Jefferson-Pilot and Bonneville). In some ways, this has led to more mainstreaming of the programming on broadcast radio, as stations often try to reach the largest possible audience in order to charge the highest possible rates to advertisers. Internet radio, on the other hand, offers the opportunity to expand the types of available programming. The cost of getting "on the air" is less for an Internet broadcaster.

These are all ideas to help you get a better grounding for your audio work/play.

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