Connecting the Old with the New: Developing a Podcast Usability Heuristic from the Canons of Rhetoric

Laurissa J. Wolfram
Georgia State University

Follow this and additional works at: http://scholarworks.gsu.edu/english_theses

Recommended Citation
http://scholarworks.gsu.edu/english_theses/109

This Thesis is brought to you for free and open access by the Department of English at ScholarWorks @ Georgia State University. It has been accepted for inclusion in English Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.
Though a relatively new form of communication technology, the podcast serves as a remediated form of the classical orator—merging the classical practices of oration with current methods of production and delivery. This study draws connections from the historical five canons of rhetoric and current usability studies to build a heuristic for developing and evaluating usable podcast design.
CONNECTING THE OLD WITH THE NEW:
DEVELOPING A PODCAST USABILITY HEURISTIC FROM
THE CANONS OF RHETORIC

by

LAURISSA J. WOLFRAM

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Arts
in the College of Arts and Sciences
Georgia State University
2011
CONNECTING THE OLD WITH THE NEW:
DEVELOPING A PODCAST USABILITY HEURISTIC FROM
THE CANONS OF RHETORIC

by

LAURISSA J. WOLFRAM

Committee Chair: George Pullman

Committee: Mary Hocks
Michael Harker
Jennifer Bowie

Electronic Version Approved:

Office of Graduate Studies
College of Arts and Sciences
Georgia State University
May 2011
ACKNOWLEDGEMENTS

To my committee, thank you for all your support, insight, and encouragement… and especially for your patience and understanding. I have gained so much from this experience, and none of it would have been possible without your input. Dr. Pullman, the enthusiasm and interest you’ve shown in my research and the guidance and feedback you so readily provided have been invaluable. I cannot say thank you enough. To all the friends who listened, read, critiqued, and consoled, I appreciate your reassurance and constant support. To the hours between 4 a.m. and noon, we have gotten to know one another rather well over the past few months; thank you for the quiet, inspiring calm.

To my parents, thank you for always gently pushing me to fly, never letting me convince myself I could possibly be content doing anything else. You both have been an unfailing source of counsel, love, and prayers. I can’t imagine two more patient, caring, or genuine people. Thank you for always being willing to listen to my crazy ideas and “ah-ha!” moments. . . especially when they were about things that didn’t make sense to anyone else but me. And while this may sound cliché to some, I must sincerely give thanks to my Creator, whose peace, wisdom, and strength I turned to time and again throughout the frustrations of this project.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS iv

INTRODUCTION 1

CHAPTER

1. THE PODCAST: A TECHNOLOGY AND A DISCOURSE 3
   The Podcast as a Technology 3
   The Podcast as a Discourse 8

2. PODCAST USABILITY 22
   Online Aural Communication 22
   Heuristic Evaluation 25
   The Canons of Rhetoric: The Original Heuristic for Effective Communication 28

3. THE PODCAST AND THE RHETORICAL CANONS 33
   Arrangement 33
   Style 37
   Memory 41
   Delivery 43

4. PODCAST USABILITY HEURISTIC 49

CONCLUSION 57

REFERENCES 59
INTRODUCTION

Within the past decade, the podcast, a syndicated form of online media distribution, has become more than just a cutting edge piece of entertainment technology. It serves as a mode of communication, a political forum, an information database, an instruction manual, a classroom, and a training seminar—as well as an entertaining pastime. Since 2004, podcast creators, or “podcasters,” have been recording and editing podcasts from garages, bedrooms, classrooms, lecture halls, offices, and recording studios—all with a similar purpose of producing messages that must be heard. The podcast is both inexpensive and relatively easy to produce because of the minimal equipment needed—a computer, a microphone, an inexpensive editing software application, and an internet connection—which makes it an appealing way to broadcast a message to a potential audience of millions. Podcasters do not face the restrictions of other media forms—they do not obtain special licenses to produce and publish their shows, nor are they governed by the Federal Communications Commission, which restricts radio, television, wire, satellite, and cable. This ease of production and lack of regulation means podcasters virtually have no required standards to follow when creating their shows, resulting in some very poorly designed, produced, and edited podcasts.

Up until now, numerous books, websites, articles—and even podcasts—have been devoted to the technical nature of podcast creation, instructing potential podcasters on how to record, edit, upload, and market their material, but there is little published on what features actually make a podcast “good” and usable for audiences. Bad design features and flaws—such as uneven sound levels, unclear or misleading introductions, and poorly identified episodes—not only subvert the podcaster’s very purpose of being heard but also impact the user as they become annoyed, lose interest, and stop listening. The area of podcast usability research has much room
for expansion—moving *beyond* the technical steps of how to record, edit, upload, and market a podcast to how podcasters can do those things *well*, with effective and usable design. This project explores the current state of the podcast and its historical roots in rhetoric and oratory to develop a usability heuristic for podcast design.
THE PODCAST: A TECHNOLOGY AND A DISCOURSE

The Podcast as a Technology

In the first few years of the new millennium, a handful of bloggers began posting audio and video files to their personal blogs, but blog followers had to go directly to the blog in order to view or listen (Walch and Lafferty 8). In 2004, programmer David Winer had an idea to make these “audioblogs” more accessible to followers by adapting Really Simple Syndication (RSS) feeds to deliver audio and visual content users. This RSS feed technology, which Winer had been instrumental in designing, allows for online information syndication, automatically distributing and delivering updates of online content to feed subscribers—much like how magazines or newspapers are delivered automatically to their subscribers whenever new issues are published. Up to this point, the technology had only been applied to text-based online content, like blogs or news media sites, and Winer’s update to the RSS feed code extended this convenience to online audio and video (Chen). While the idea of accessing and downloading online audio files is not new, the podcast puts a innovative spin on downloadable media by using RSS feeds, and this mode of delivery is the major point of distinction between a podcast and any other downloadable file on the internet. Rather than requiring the user to actively seek out updated audiofiles, the “pull” technology\(^1\) of RSS feeds automatically sends the podcast episodes to the user’s media aggregator,\(^2\) or “podcatcher” (e.g. iTunes). Also like subscriptions to magazines or newspapers, podcasts are delivered to feed subscribers serially, in multiple episodic

---

1 Pull technology implies that the user initiates the interaction, or “subscription,” and from that point, the server automatically sends updated information to the user.

2 Aggregators are software applications that “collect” updated information feeds for their subscribers. They can be compared to as email inboxes that only collected content updates from feeds users have already subscribed to. In the context of podcasting, these podcast aggregators are also known as “podcatchers.”
issues; in other words, in the strictest sense of its definition, the podcast cannot be made up of one single audio file.

Although David Winer released what is now recognized as the first podcast, Daily Coffee Notes, MTV personality Adam Curry is credited for “driving the digital-consumption model into the mainstream” through his popular podcasting show, Daily Source Code (Chen). Curry took Winer’s RSS technology one step further by writing a software program called iPoder, which “[automated] the process of checking news feeds, downloading audio files and synchronizing them to an MP3 player.” In a 2005 interview, Curry described the iPoder program as something that “combines the hyperactive talkiness of blogs and the hipness of iPods into something utterly new: the podcast. iPoder uses the blog syndication tool RSS to automatically download homebrew radio shows, podcasts, directly into a portable MP3 player”; within a year, the iPoder software was downloaded over 500,000 times (Newitz). Also in 2005, the word “podcast” jumped from a mere 30 hits on Google’s search engine to over 10 million, and by December 2005, New Oxford American Dictionary announced “podcast” as the word of the year (Walch and Lafferty 9).

As one would expect with any new form of technology, there are quite a few misunderstandings associated with podcasts, and before I continue, I would like to resolve some of these. The term “podcast” itself becomes problematic because it may be used to refer to individual podcast episode, or it may be used to describe an entire podcast “show.” The Podcasting Bible defines podcasts as:

a series of audio (or video) programs delivered through a static URL containing an RSS feed that automatically updates a list of programs on the listener’s computer so that people may download new programs using a desktop
application. Programs can be delivered to the listener automatically or when they choose to download them. (qtd. in Chen)

Many people also incorrectly associate the “podcast” with something originally created and marketed by Apple. Though Apple did not have an active role in podcasting design technology or the podcast as a genre, Curry coded his iPodder software to transfer files automatically to his MP3 player of choice, the iPod; however, his software was not intended exclusively for iPods (Searls). The clear branding association between Apple’s MP3 player, the iPod, undoubtedly served to drive the popularity of podcasting into the mainstream. In perhaps an attempt to disassociate the podcast from the thought of strictly being playable by iPod MP3 players, the term “podcast” was later “backronymed” as “Personal On-Demand Narrowcasting” (Morris and Terra 13). Apple actually jumped on the podcasting bandwagon a year later in 2005 including and supporting podcast search and download in the release of iTunes v4.9, which significantly simplified and streamlined the subscription, download, storage, and playing process, opening the door even further to potential listeners. Although iTunes has risen as the leading “podcatcher,” Yahoo! and Odeo are alternative aggregator applications (Walch and Lafferty). There are also podcast directories other than iTunes where users can search for shows: Podcast411.com and Podcast Alley, for instance, are particularly popular among more “indie” podcasters. Likewise, even though iPods dominate the market of portable media players, podcasts can be downloaded and listened to or viewed on any portable media device—or on any computer with a media player.

Portable MP3 players, such as the iPod or the Zune contribute to the audience appeal of the podcast format, which centers on its ability to break down the barriers of both time and space, known as time- and location-shifting (Bowie 3). After users download audio podcasts,
they can listen to the episodes anywhere and at any time—driving down the road, running on a treadmill, walking to lunch, or taking a bath—and they are not held dependant upon broadcast signals, reception, or internet connectivity. Unlike a radio show or public lecture, for example, where the listener must be present at a scheduled time, podcast episodes can be saved and listened to whenever the listener chooses and as many times as he or she likes. In fact, a 2010 study conducted by Edison Research discovered that this characteristic of asynchronous “time-shifting” is the primary reason podcasts are so popular with consumers. Podcasts also give their audiences control over navigation, allowing listeners to scan forward and backward or pause episodes—none of which are options in traditional oratory or in other electronic aural technologies. The time- and space-shift characteristics and the increased user control can, at times, give the podcast an advantage over more traditional modes of communication, such as reading, because the user can still access the information while engaging in other activities.

**Podcast Creation**

The start-up costs of podcasting are relatively inexpensive, and it is possible to create a podcast show with the standard recording equipment that is standard for most new computers. This is an appealing option for individual hobbyists, non-profit administrators, or teachers, who do not have a budget for more expensive equipment and must keep production costs low. After the first few shows, if the podcasters decides to continue podcasting, they can purchase additional equipment, such as more professional mics, mic stands, pop filters, mixers, advanced

---

3 In a 2009 study conducted by Edison Research, podcast consumers rated the importance of being able to listen to/view podcasts *whenever* they wanted as a 9.3 out of 10; the importance of being able to listen to/view podcasts *wherever* they wanted scored an 8.6 out of 10. (Webster, slide 14). Ironically, the same study determined that although people highly valued the time- and space-shifting convenience of podcasting, most actually preferred listening to podcasts directly on their computer through iTunes or another media player. Their 2009 study concluded that 68% preferred to listen to podcasts from their computers, while only 32% of participants chose to listen from a portable device (Webster, slide 23).
editing software, and other accessories. Sound quality certainly can become an issue when using built-in computer microphones and minimal equipment, compromising the podcast’s level of professionalism, but this small start-up fee is an attractive quality for podcasters who are hesitant to invest a large sum of money before making a firm decision that podcasting is right for their communication needs—and something can committing to long-term. Although the cost of podcast production and creation can quickly add up, Rob Walch and Mur Lafferty, authors of *Tricks of the Podcast Masters* offer that without considering the necessary computer for editing and uploading, a two-person recording set-up, using basic equipment (USB mics and free downloadable software), would only be about $25, and a semi-pro set up (including a high quality mixer, pop filters, mic stands, and XLR cables) would average between $780 and $990 (269-271).

Beyond the hardware involved in creating a podcast, the production and publication processes requires few additional costs. The software needs, for example, are fairly minimal and some programs can be downloaded for free, such as Audacity and Levelator. Audacity is a software program for recording, mixing, editing, and compressing audio, and Levelator adjusts sound levels post-production (so podcasters can avoid the creating podcasts with radically shifting ranges of volume loudness and softness). After the podcast episode has been recorded, editing, compressed, and saved in the proper format, the podcaster must publish it online, so listeners can access it. The simplest way to do this is through a blogging platform, such as WordPress, which streamlines the publication and distribution process, taking some of the technical burden off of the podcaster.

Once the podcaster uploads and publishes her episode file, she must list her podcast on a podcast directory, which compiles podcasts within a database through which potential listeners
can search and browse. As previously mentioned, although iTunes is one of the more popular podcast directories, there are other places online where podcasts can list their shows, such as Podcast Alley and Podcast411. These podcast directories allow listeners to search for specific podcasts by name, category (cooking, gaming, fitness, politics, health, etc…), and download popularity. Once a listener finds a show he is interested in and chooses to subscribe, the RSS feed sends the podcast to him each time a new episode is published.

The Podcast as a Discourse

For hearing capable individuals, sound is a natural and accustomed quality of life, surrounding them daily in practically every type of situation or interaction—whether they are conscious of it or not. Even if someone were to remove him or herself from contact with all people and technology, it would be difficult to completely escape the reach of sound. Sound is an important and powerful means of communication; it can evoke emotion, influence mood, set a desired tone, and convey a number of different messages—verbal and non-verbal. The human voice in particular is extremely powerful and influential, able to “cut through all the meaningless, random white noise of life and penetrate the consciousness of [the] targeted audience” (Bader). The sense of exigency and authority the human voice holds can make it a more powerful choice of persuasion over written communication, has prompted a new appreciation for oral delivery in the contemporary fields of rhetoric and communication. Bernard Hibbitts, former Dean of Communications and Information Technology at University of Pittsburgh School of Law, observes:

The history of Western culture over the past 125 years suggests that the recent turn toward the aural is largely a product of new aural technologies. In essence,
cultural aurality has tended to become more pronounced as aural technologies have multiplied and spread. At every stage in this process, the existence of these technologies has radically extended the power and range of aurally communicated information. As technologically transmitted and amplified sound has become able to assume more of the cultural burden, culture itself has turned towards sound for information. (3.12)

The podcast reflects this cultural shift toward the aural delivery of information, creating a new type of discourse community. But whereas the term “discourse community,” in a more traditional sense, describes a “local and temporary constraining system, defined by a body of texts (or more generally, practices) that are unified by a common focus” (Porter 9), the podcasting community as a whole finds its common ground not so much through a common message, but through a common technological medium that is able to express a variety of messages. In other words, the podcast discourse community, as a whole, is held together by a shared focus on the delivery of information, rather than the information that is being delivered. This binding quality of information delivery that connects the podcast community hinges on the podcaster’s ability to reach larger audiences more easily and effectively through a recorded—yet still very personal—audible voice.

Audio recorded for playback and review is nothing new; for some time, recording devices have been used to capture lectures, speeches, interviews, sermons, and personal notes, but up to this point, their distribution potential was limited. Television and radio, of course, have been reaching a wide audience for a long time, but an individual has never had the opportunity and potential for his or her audible voice to be heard on such a broad scale. For early podcasters, in particular, the podcast combined the personal nature of the blog, the immediacy of subscription
feeds, and the portability of downloadable Mp3 files with the episodic nature of the radio broadcasting to form this recreated—as described by Adam Curry—type of “homebrew radio show” that could reach a virtually unlimited audience (qtd. in Newitz). In the book *Writing Space*, David Jay Bolter aptly describes this reinvention and recreation as something that has taken place historically as advances are made in technologies—particularly in communication and writing:

> Whenever a dominant technology is challenged, there may be a major refashioning of the culture’s [communication] space. The three dominant technologies since ancient times, the papyrus roll, the codex, and the printed book, each participated in the fashioning of a rather different writing space. When the codex replaced the roll, it refashioned the writing space from the still relatively oral space of ancient culture to the progressively more visual and less oral space of medieval writing. When the printed book supplanted and marginalized the codex, the writing space took on qualities of linearity, replicability, and fixity that we have associated with the printed book. Electronic and digital technology are helping to refashion the writing space again. In the late age of print, this refashioning is not complete, and we are now experiencing the tensions and inconsistencies that come from attempts either to reconcile the two spaces of print and digital technology or definitively to replace the one with the other. (22)

Bolter terms this act of shifting, reusing, and replacing as “remediation,” which “[reorganizes] the characteristics of writing in the older medium and [reforms] its cultural space” (Bolter 37). Much has been (and is still being) written about communicative technology and how it is shaping
and changing the ways people receive and process information—and since its inception in the early 2000s, podcasting has situated itself as a part of this reshaping tool. In accordance to Bolter’s definition of remediation, podcasting serves as the remediated public forum where modern day rhetors present their arguments in a way that may be more appropriate and effective than written or printed text.

Bolter’s “remediation,” the fashioning and shifting of technologies to produce something new and more effective, is similar to the ancient rhetorical canon of Invention, which Aristotle defined as “an ability, in each [particular] case, to see the available means of persuasion” (37). Invention is not necessarily creating some entirely “new” form of technology; instead, it is better described as a way we can gather pieces and parts from existing technologies and reformulate them to better serve our purposes. This idea is explained well by Sir Francis Bacon in *Advancement of Learning*:

> The invention of speech or argument is not properly an invention: for to invent is to discover that we know not, and not to recover or resummon that which we already know; and the use of this invention is not other but out of the knowledge where of our mind is already possessed, to draw forth or call before us that which may be pertinent to the purpose which we take into our consideration. (134)

The act of podcasting itself does not create new information; it provides another avenue for speakers to share and broadcast their information, making their messages more accessible and readily available to a wider audience.

The question, then, that must be asked is, “At what point and in which situations does creating a podcast become ‘the best available means of persuasion?’” To answer this very broad question, a potential podcaster must considering her answers to the following:
- **Is the topic interesting?**

  There are many different podcast topics published regularly, ranging from the obscure (*Ray Brown’s Talkin’ Birds*) to those that maintain an almost cult-like following (*Muggle Cast: The Harry Potter Podcast*). One advantage of the podcast is its ability to reach audiences across the world that enjoy similar interests. The podcaster must remember, however, to present his content in a way that is both interesting and engaging—despite how bizarre or even mundane it may initially seem. The *Grammar Girl* and *Astronomy Cast* podcasts are perfect examples of this: Who would have ever guessed that podcasts on grammar and astronomy could ever become so popular and widely followed by general audiences?

- **Does the topic appeal to the audience?**

  Not all podcasts are designed to be entertaining. Education and business blogs, for example, typically aim to inform, rather than entertain. Arguably, a podcast designed to house a company’s standard operating procedures or reproduce a required lecture on economics and game theory may not typically be considered “interesting,” but the information should at least be something that is needed or necessary enough to motivate users to listen.

- **Can the topic be adequately delivered in audio format?**

  The podcaster should carefully consider whether he or she can adequately present the message through audio alone. Some topics may require images or visual demonstrations for clarity, such as fitness training techniques, cooking procedures, or mathematical equations. If this is the case, the podcaster should consider a communication form other than an audio podcast. For example, a cooking podcast
would not be as effective if its audience is unable to actually see the podcaster’s actions; an in-person demonstration, step-by-step pictures, or a video podcast would be better suited.

Podcast listeners have stated that the most appealing features of the podcast are its mobility and portability, and the podcaster must keep in mind that her audience may be doing other activities while listening, such as cleaning, running, driving, or working (Webster, “The Podcast Consumer 2009”). Because of this, the podcaster must present the information in a way that is clear and easy to understand, as users will likely have other things competing for their attentions. Subjects that are easily explained are more effectively presented as a podcast than dense, complicated material, which require more focused attention from the listener. In-depth discussions of complex information—modern and contemporary theory, for example—may be better received and more easily comprehended as a written text, rather than a podcast.

- **Is the topic sustainable?**

  Regardless of the need or interest surrounding a podcast, its topic must be sustainable. Creating a podcast is not like publishing an article in a journal, sending out an email, or uploading an audio file onto a website. By definition, podcasts are not one-time occurrences; they are meant to be produced regularly or in a series. This does not necessarily mean, however, that the podcast must continue on forever. Some podcasts, like how-to manuals or office procedures have definite ends—they contain a set amount of information that must be conveyed and then are complete. However, rather than producing one, three-hour podcast, the information can be broken into
multiple fifteen or twenty minute episodes. If the information presented in a podcast cannot go beyond a single episode, another communication medium may be more appropriate.

- **And lastly, is the podcast creator committed?**

  This harks back to the question of whether or not the subject matter is sustainable. Although podcasts are simple to produce and do not require expensive equipment, a quality podcast show takes time to create. The podcaster must realize that in order to build a consistent and loyal listening base, he must commit to not only producing quality podcasts but also maintaining some sort of schedule for delivery.

Only after a podcaster answers questions of purpose, content, and commitment can he or she go about planning and drafting the show. From this point on, the podcast discourse community formed from the common bond of content delivery becomes divided into specific communities characterized by content topic.

**Podcast Categories**

In the beginning, podcasts originated much in the same fashion as blogs, with independent authors producing material from their homes. Apple’s release of iTunes 4.9v in 2005—and the convenience it provided to the podcast subscription and storage process—threw the predominantly indie-driven community off balance, as businesses and organizations began to realize the marketing opportunities of podcasting (Walch and Lafferty). Podcasts may have first started as independently produced programs, recorded and published by everyday, ordinary people, but the growing popularity and marketing opportunities caught the attention of both
businesses and educational institutions, and the podcast quickly found itself entering into the professional arena, which broadened the scope of its categories and genres significantly.

Podcast genres are almost as varied and unique as the podcasters themselves, and several researchers have made attempts to create broad categories that adequately classify and include all genres. Prachi Parashar Panday in “Simplifying Podcasting,” defines podcast types as either public (those intended for anyone to hear), personal (those with a narrow audience, such as exclusively friends, family, or colleagues), or professional (specific to educational or corporate organizations) (253). While Max C. Anderson, in the article “The Medium is the Messenger: Using Podcasting to Deliver Consumer Health Information,” breaks the podcast into categories of entertainment, academic, and professional (119). Walch and Lafferty’s list, provides the most specific listing of podcast genres, which climbs to no less than eighteen different types, including genres unique as “Godcasts”⁴, the Interview Cast⁵, and News, and Sci-Fi, and Sports. Walch and Lafferty admit, though, that “most podcasts don’t fit into any pigeonhole,” and often, podcasts can easily appear in multiple podcast directory subcategories. (44). In an attempt to organize the genres of podcasting into something general and manageable, yet complete, I separate podcast types into to four large categories: Culture and Entertainment, Educational Institutions, Corporate and Business, and Repurposed.

Culture and Entertainment

Many podcasts within the Culture and Entertainment genre are created and produced by individuals, rather than businesses or organizations. Although several independent podcasts (such as the Grammar Girl podcast by Mignon Fogarty) grew into businesses that yield

---

⁴“Godcasts,” as they have been labeled, are podcasts with spiritual or religious topics. These podcasts, according to Walch and Lafferty are “fourth most popular behind audioblogs, music, and technology” (60).

⁵As its name implies, the Interview Casts is a podcast centered on interviews and discussion.
significant profits, this is rare, and a large number of podcasters just consider podcasting a hobby. Like many blogs, Culture and Entertainment podcasts can be very personal, with the podcaster sharing details about his or her life throughout the episodes—very much like the original “audioblogs” of the early 2000s. Culture and Entertainment podcasts typically focus on one predominant topic that appeals to a specific group of listeners, encompassing a wide range of interests and pursuits, such as:

- health and fitness (*Beyond Diet Podcast*),
- social etiquette (*Modern Manners Guy*),
- travel (*Rick Steve’s Notable Travelers*),
- political commentary (*The Philip DeFranco Show*),
- Science and Medicine (*60-Second Mind*),
- sex tips (*Savage Love*), and
- public speaking (*Splendid Speaking*).

*Educational Institutions*

As early as 2004, educational institutions realized the potential of MP3 players as learning tools. Duke University led the way with its iPod First Year Experience when in August of 2004 it distributed iPods and Belkin Voice Recorders to 1,600 incoming freshman; in the spring of 2005, instructors began experimenting with podcasting as a way to disseminate lectures, study materials, speeches, notes, and other digital content (Belanger). In May of 2007, iTunes U(niversity) made its debut on iTunes, offering content from universities, including MIT, Duke, Stanford, and Georgia State. Through iTunes U, instructors can upload recorded course lectures, supplementary materials, or notes formatted as PDFs. Universities have also taken
advantage of this technology to foster a sense of connectivity with current or prospective students by providing important news information, updates, announcements, and campus tours (Apple). The popularity of the podcasts published on iTunes U—which universities can publish privately within the institution or publicly to outside audiences—has continued to grow, as displayed by Georgia State University’s popular *Jazz Insights* podcast, which was featured on Apple’s homepage and has received over 4 million downloads since 2009 (Vernick).

The pedagogical value of podcasts is obvious—particularly in regards to aural learners and students with visual learning differences, such as dyslexia. As noted by Prachi Parashar Panday in the article “Simplifying Podcasting,” “Audio has a few characteristics that text lacks. Audio can have a significant impact on the understanding of information. Often, we understand better in a face-to-face lecture than when we read the same content on our own” (252). Instructor-produced podcasts, which can be in the form of directly recorded lectures or supplemental study materials, give students the opportunity to review important material that may have been difficult to fully grasp during class—and students can do this at their own convenience, while commuting to and from campus, doing laundry, or sitting in the dining hall (Harris and Park, Lazzari, and Tynan and Colbran). This portability and reviewability is especially useful to non-native speakers, who can pause and listen to material multiple times to grasp the full meaning (Abdous). Panday also connects the audio nature of podcasting to conceptual learning, which appeals to students with different learning styles: “a podcast (a collection of real, raw, and spontaneous ideas) captures the attention of the listener and can sustain this attention to transfer the concepts into long term memory” (253). Podcasts present an opportunity for aural learners in particular to access information in a way that is easier for them to process and store.
Further, instructors are incorporating student-produced podcasts into their course assignments, providing students with a different approach to learning and working with communication and information delivery. Audio recording assignments, such as these, move beyond the idea of traditional print-based writing practice, which “actively engages [students] in synthesizing course content and exposes them to a new mode of composing but also provides a critical opportunity for them to reflect upon the needs and expectations of their audience and how to reach that audience via the rhetorical elements specific to the medium” (Dangler n.p.). When teaching composition, writing instructors seek to help students become aware of their rhetorical writing situations by asking them to keep audience, context, presentation, formatting, and style in mind during the planning, drafting and producing processes. By taking this unique approach to composition through podcasting, students must think critically about the how to identify the relationships between this medium of information presentation, their intended audience, and the contextual situation—a exercise which can be transferred to traditional writing practices. For example, Jennifer Bowie at Georgia State University stated while incorporating student-produced podcasts into both her undergraduate and graduate level courses that podcasts “help students rethink the “old” writing concepts [rhetoric and composition instructors] have been teaching, such as the five canons and audience, tone, purpose, and context, in new ways and consider how students may bring the lessons they learned from podcasting back to their print text writing” (2).

By augmenting writing assignments with the production of podcasts, instructors encourage students to reflect more critically on communication style, structure, organization, flow, word-choice, jargon, and diction. Through the necessary processes of drafting, editing, and listening to their own work spoken aloud, students have more opportunities to engage with their
compositions and understand how their rhetorical choices impact the ultimate sound and “feel” of their messages.

*Corporate/Business/Non-Profits*

Some of the same instructional merits that first attracted education institutions also caught the attention of the corporate world. Used as both internal and external forms of communication, companies produce podcasts intended for both employees and customers. For many companies, keeping employees informed of current policies, trends, and procedures is expensive, and when an organization has a large employee base, it becomes almost impossible to schedule meetings that everyone can simultaneously attend. By presenting important information in small, manageable chunks that everyone can freely access, podcasts deliver both a convenient and cost-effective form of information delivery for both company employers and employees (Nguyen and Giordano, Kaplan-Leiserson, and Islam). Once individuals or organizations invest in the initial costs for production equipment, podcasts are also relatively easy to create, requiring limited technical know-how to record, edit, and upload the audio, which “[is] a critical factor in enabling subject matter experts and even average sales employees to generate content” (Nguyen and Giordno).

The podcast presents a simple and affordable way to break down content into small, manageable chunks that the user can carry away from an internet connection and listen to from any place and at any time. With podcasts, business personnel can access materials that would otherwise require them to spend extra time in the office or would prevent them from doing work that produces deliverables. Companies can take what may have initially required a training session or conference call lasting several hours and turn it into a multi-episode podcast they can
make available to employees, “[enabling] more productive load-balancing during the workday and the ability to listen on the go while driving to client meetings or work, walking the dog, or running on the treadmill, [which] transforms downtime into constructive time (Gronstedt 21).

The automation and subscription characteristics of RSS technology enables employees to subscribe only to the information that applies or is interesting to them, allowing them to skip what they do not need, while still staying current on important content.

Companies are also aware of the benefits podcasts can have on their customer base. Not only does the podcast present a simple solution for troubleshooting and product training, but it also promotes consumer confidence and provides a strong basis for brand reinforcement (Panday). General Motors, for example, produces a podcast to support its Fast Lane blog, where customers can “come to read the latest, greatest musings of GM leaders on topics relevant to the company, the industry and the global economy, and—most of all—to our customers and other car enthusiasts” (iTunes, GM). Purina’s “Petcast,” on the other hand, features veterinarians who offer advice and answer questions from pet owners on issues as varied as food allergies, licking habits, and separation anxiety (Purina). While the Purina podcast does not focus on Purina products a the sole purpose of the show, the discourse community it builds through this “service” for its customers helps develop a sense of customer trust and loyalty.

**Repurposed**

This category includes any podcast that takes audio content from media already produced for another medium of delivery. National Public Radio’s (NPR) podcast shows, for example, fall into this category, since they are simply reproductions of original radio show episodes, stripped of advertising and released as individual podcast episodes. Again, as already mentioned in
previous categories, the primary appeal for these repurposed podcasts is the option they give audiences to listen to episodes anywhere and at anytime—without the regular interruption of advertisements. For NPR, this innovation doubled their listening base just two weeks after it was first implemented in 2005 (CyberJournalist).

Clearly, the distinguishing lines that separate these classifications blur, at times, and a podcast may find itself falling into multiple categories. Podcasts that first began as personal hobbies have grown and developed into their own brand name, and there are a number of popular podcasts with an educational base that are not associated with any formal course or institution. Other podcasts offer discussions or commentary on (and thereby providing free advertisement to) television shows, movies, books, or music without direct endorsement from the production companies, publishers, artists, or authors.

The commonality all podcasts share, however, is the communicative purpose of conveying an idea to a listening audience and a responsibility to retain that audience. Despite any differences in content, motivation, genre, background, or audience size, a message can only serve its intended purpose if its audience can successfully receive and understand it; a podcast is only as good as its content and delivery will allow. In other words, if the purpose of a podcast is to communicate a certain message, its success or failure depends upon whether or not the podcast can be used effectively. In this case, the quality of being “usable” refers not only to how easily users can access the information but whether or not the user likes the podcast enough to continue listening.
PODCAST USABILITY

As the numbers of schools, businesses, entertainers, and independent hobbyists continue to turn to podcasts as a means of narrowcasting, the need is rapidly growing for rhetorical theory and usability studies to extend and expand into the area of podcast design. Numerous books, articles, and websites discuss the creation, application, and use for podcasts (Walch and Lafferty, Hay, Morris and Tera), but despite all these resources available for creating podcasts, a definitive means for evaluating usable podcast design has yet to be created. Although the purpose and use for the podcast may shift among its unique genres—changing the parameters of what make a podcast “usable” to respective audiences—a general list of usable design characteristics can still be created and applied. The field of usability studies identifies and discusses the characteristics of usable online interface design by analyzing design choices for layout, organization, and content formatting—all based on the audience’s visual perception—but the oral/aural nature of the podcasts opens new areas of exploration for web usability theory.

Online Aural Communication

In his master’s thesis, Georgia State University scholar Brian Snead made the argument that “audio is an effective but often overlooked component of World Wide Web delivery” (1). At the time, this might have been true; however, podcasts change that by allowing web-enabled communicators to use sound in constructive and appealing ways. Historically, sound has not always been used effectively or with discretion online and “rather than enhancing a user experience, audio can be a distraction and reduce [user] effectiveness” (Follett n.p.). Websites often subject users to the obtrusive interruptions of unexpected musical introductions as a page

---

6 Narrowcasting is used to describe a method of information transfer that reaches a select or “narrow” audience base, as opposed to broadcasting, which has a much wider audience.
loads or the jarring voices of a man or woman advertising auto insurance from a sidebar—
driving users to mute their speakers in protest. This has prompted many usability experts to
create strict guidelines for the appropriate implementation of sound in web pages, mandating that
web designers should at least give users the option to disable unwanted audio within the site
(Nielsen, Farkas and Farkas). In surveying countless texts on appropriate web design, one will
notice that the general rule of thumb to follow when incorporating sound into a web site is to use
it cautiously and with a clear purpose (Neilson; Neilson and Loranger; Farkas and Farkas). Most
online sound is used in support of a larger message and does not embody the message itself. In
other words, the message and meaning of the site or web application should be able to function
just as well without the audio element as it would with it, stripping audio of any true significance.

In the book, Prioritizing Web Usability, Jakob Nielsen and Hoa Loranger emphasize the
importance of a usable interface design to a website’s ultimate success or failure. Specifically,
they define usability as “how quickly people can learn to use something, how efficient they are
while using it, how memorable it is, how error-prone it is, and how much users like using it”
(xvi). Reviewing data from years of research, Nielsen and Loranger have condensed their
findings to a list of principles that optimize website usability based on legibility, navigability,
searchability, and appropriate design—all of which are factors determined by the user. When
designers consider the usability of theirs product, their focus must be centered on the user’s
needs, rather than the product itself: “A product’s usability is determined by the user’s
perception of the quality of the product, based on the user’s ease of use, ease of learning and
relearning, the product’s intuitiveness for the user, and the user’s appreciation of the usefulness
of a product” (Nieslen 6). Regardless of how innovative, cutting edge, or intuitive a designer
thinks his or her product is, if the user finds it difficult to access or complicated to use and
understand, he or she will not continue to use it, essentially making the product irrelevant and ultimately obsolete.

While usability experts emphasize the importance of evaluating and determining the level of usability for websites and other online applications, there is little published research on what specifically defines usable podcast design. However, several individual podcasters, such as the creators of Astronomy Cast, a weekly entertaining and educational podcast on astronomy, have conducted studies to evaluate the preferences, perceptions, and needs of their specific audiences. The information gathered from their initial survey indicates user preferences regarding show length, content, information formatting, and supplementary materials. Astronomy Cast concludes that for them, the optimal podcast show included the following characteristics:

- Show times under one hour in length
- Two hosts
- Interviews with real scientists short news updates, and information on any celestial events (these features would, of course, be specific to the Astronomy Cast’s specific content genre)
- Availability of shows in multiple formats for quality (high, low, and enhanced)
- Transcripts, links to supplementary materials (educational resources and original information sources), and relevant images and videos available for each show.

The Astronomy Cast producers note that another successful science podcast, Skepticality, mirrors many of these features; so while all may not apply to every podcasts, podcast creators can make some generalizations of user preferences—particularly in regards to length and show notes or transcripts.
Despite the limited scholarly research on what specifically makes a “usable” of podcasts, quite a few books, articles, websites, blog posts, and even podcasts focus on how to create a successful podcast that will attract and retain listeners. These texts do not explicitly state that by following their principles and guidelines podcasters are applying usability theory to their podcast designs, but that is essentially what they are doing by reflecting Neilson’s definition of usability, which focuses on creating a product that is memorable, likable, and accessible—characteristics that all focus on the user or listening audience. By doing so, these texts indirectly add to the field of usability studies, simply by instructing podcasters on how to make their podcast shows, scripts, formats, and accompanying websites more attractive and pleasing to users. What is missing from these texts, however, is a list of guiding principles—or heuristics—that reflect the usable design decisions behind these how-to guides.

**Heuristic Evaluation**

Originating from the Greek word for “discovering,” “heuristics” in rhetorical theory are, as defined by Thea Van Der Geest and Jan H. Spryidakis as:

> procedures or principles that help their users work systematically toward a discovery, a decision, or a solution. . . . [They] are typically used in situations where there is more than one good answer, more than one solution. They increase the chance that the solution chosen is the best possible solution among the many solutions possible. (301)

This definition, however, is not to be confused with the modern concept of heuristic evaluation, which is a lists of guiding principles—or a “check-list”—used for assessment and evaluation. This type of heuristic was initially developed as a collaborative effort by Jakob Nielson and Rolf
Molich in 1990 to evaluate the usability of web applications, and because of its simplistic nature, it is one of the most popular methods of usability testing (Kamper). Since the early nineties, Nielson has refined and reformulated the original list to reflect the trends he has noticed while conducting usability research of websites. By being aware of and following this list of ten principles, designers can work toward developing the optimal user interface design for their users. These ten heuristics—which range from issues of consistency, user control, and error prevention to efficiency of use and minimalist design—may not be necessarily applicable in every design situation, but they serve as guide during the interface development, creation, and modification processes.

Heuristic evaluation is often the first step designers taken when they try to determine the usability of a system, because its principles can be considered during the planning stages before the system is actually built (Sears 213). Not only is heuristic evaluation inexpensive, but anyone can perform it, and it is a relatively quick process that does not require a specific testing site and can be repeated throughout the design process (Nielsen, Kamper). Although a single evaluator can conduct heuristic evaluations, results are much more conclusive and accurate when the process is carried out by a group of people who have varying levels of expertise (Nielsen). There is much debate about the appropriate number of individuals needed to sufficiently conduct a heuristic evaluation, and while Nielson suggests using five evaluators, other researchers assert that the number should be as high as ten or twelve in order to attain accurate results (Hwang and Salvendy).

Some may speculate whether or not heuristic evaluation is the most appropriate and effective form of usability testing, and, as Andrew Sears explains in “Heuristic Walkthroughs: Finding Problems not Noise,” when conducting a heuristic evaluation of interface usability,
Evaluators are guided through the process by a list of heuristics, rather than a list of tasks to perform. Since this approach is not focused on user tasks, evaluators often miss a large number of problems with the interface design. Sears argues that although it is popular for its ease and cost effectiveness, heuristic evaluations do not offer enough structure for a thorough evaluation, and a better option is to perform an evaluation that combines both task-oriented, in addition to heuristic evaluations. While I acknowledge the soundness of Sears’s argument, I do not find it a necessary consideration in this particular study. Because podcasts typically function within a pre-established interface (either played directly from a website or in a media player) that the podcaster does not actively control, I am not exploring the usability of the interface. Rather, my focus remains on the usability of the podcasts themselves and how podcasters can design and format them appropriately for users.

The greatest benefits of using a heuristic to evaluate the usability of podcasts are most certainly convenience, affordable cost, and flexibility. The broad range of podcast genres presents a challenge for any type of evaluative process because the characteristics of what makes a “good” or “usable” podcast may vary, based on genre, purpose, or audience perception. For instance, most podcast handbooks suggest limiting show length between fifteen and twenty minutes; however, several popular shows with large followings, such as Doug Loves Movies and The Nerdist, run up to an hour in length. Since the nature of a heuristic is to act as a set of guidelines for the developer, it appropriately applies to podcast creation and production by offering “rules of thumb,” rather than precise instructions.
The Canons of Rhetoric: The Original Heuristic for Effective Communication

In many areas—education, business, and entertainment—sound and oral delivery are the best available means of persuasion, and ironically, the technological advancement of audacity that is responsible for “[modern society’s] recent turn [back] toward the aural,” which I discussed previously in this study, has also returned communication to its classical rhetorical roots of spoken discourse. The podcast has become the electronic manifestation of the historic Greek orator; however unlike the classical orators of the past who were confined to a physical public forum, this voice is neither bound by time, space, nor location. Virtually anyone with access to a digital recording device, a computer, the internet, and reasonable technical know-how can express his or her opinions, thoughts, experiences, and ideas to a potential audience of millions. Modern communication and digital composition change how one can apply rhetorical principles to present-day discourse, yet the fundamental theories remain very much the same: communicators (or rhetors) must still determine the best means of transferring a certain message to their audiences by building their arguments upon the persuasive elements of logic, emotion, and authority—classically known as appeals to *logos*, *pathos*, and *ethos*. However, now instead of focusing solely on traditional speech or writing to convey a certain message, rhetor can choose from a wide range of multimodal forms, such as digital images, animation, videos, websites, and audio recordings. When discussing multimodal communication in *Multimodality: a Social Semiotic Approach to Contemporary Communication*, Gunther Kress asserts that:

The rhetor as maker of a message now makes an assessment of all aspects of the communication situation: of her or his interest; of the characteristics of the audience; the semiotic requirements of the issue at stake and the resources available for making
an apt representation; together with establishing the best means for its dissemination (Kress 26).

The podcast, with its spoken delivery, innovatively merges both the rhetorical tradition of the Greek orator with the modern conventions of new media communication. Though the podcast presents new technological challenges to the rhetor, it still retains a similar motivating purpose from classical oration: creating a strong, verbal, persuasive appeal that will attract and influence its intended audience.

Rhetoric has been defined as:

- an ability in each [particular] case, to see the available means of persuasion” (Aristotle, Kennedy translation 37)
- “Winning the soul by discourse” (Plato 44);
- “a form of defense and a means for effective engagement in public life (Kennedy xi); “a form of mental or emotional energy imparted to a communication to affect a situation in the interest of the speaker” (Kennedy 7);
- and “the strategies that people use in shaping discourse for particular purposes” (Lynn 14).

Though a brief and concise definition of “rhetoric” is somewhat elusive (indeed many have discussed and debated the topic of “rhetoric” for centuries), it essentially describes a communicator’s talent and ability to draw upon any and all methods and approaches at his or her disposal to adequately and successfully convey a particular message. Not confined to a single “best” approach, rhetoric involves concurrently drawing upon a multitude of techniques and approaches, which must all be adjusted depending on current audience or context.
To the ancient Greek rhetor, the canons of rhetoric—Invention, Arrangement, Style, Memory, and Delivery—served as the basic template for creating effective oral arguments. By calling speakers to consider things such as word choice, style, tone, organization, volume, and gestures, the canon positioned itself as a type of usability heuristic that offered guidelines for effective, persuasive speech. Ancient rhetors used the techniques, methods, and conventions of public speaking that the canons address to help them communicate their intended messages to audiences through carefully selected words, tone, imagery, and order. Speakers realized that the challenge of presenting an effective speech was creating it in a way that accurately transferred the speaker’s meaning to his audience—without misunderstandings and misconceptions. If a speaker’s delivery was not clear or if he used ambiguous word choices or incoherent subject order, he risked confusing or misleading his audience, thereby making his argument “unusable” for its intended purpose.

Just as the rhetor was acutely aware of his audience as he made choices about his message and delivery, good program developers and web application designers do the same as they make decisions about interface design, content, and formatting. By placing the user at the center of focus, developers can design and produce products that adequately meet their users’ needs. This concept, known as “user-centered design,” “grounds the process [of design] in information about the people who will use the product” (Usability Professional’s Association). One can directly connect the podcast back to classical Greek rhetoric, since the podcast’s primary form of delivery is the spoken voice of the podcaster—placing the podcast listener in the position of the audience. On the other hand, this voice is transmitted to the listeners through a web-based application—placing the listener in the position of the user. By connecting rhetorical theory and usability in this way, the “audience” becomes the “user,” and in the context of
podcast design, the two terms can work interchangeably. To the podcaster, audience-awareness not only ensures that the user will get what he or she needs (or expects), but it also secures the likelihood that the user will continue to listen to episodes. Clearly, the overall purpose of the audio podcast is to present some sort of message to an intended audience, but all too often, podcasters fail to consider how their message is actually being received by the audience. A podcast is only effective and successful if its format allows for a clear understanding and a favorable audience experience—in other words, if it is usable.

Since audio podcasts present such a clear intersection between the historic rhetor and current information technology, it is helpful to look at both rhetorical theory and usability studies when developing a system for evaluating and critiquing usable podcast design. Podcasters must keep in mind appropriate sound levels, clear recording quality, and distracting background noises. And as with all forms of written or verbal communication, organization, word choice, style, and tone are also key; but beyond that, the most popular and successful podcasts rely on supporting blogs and websites to provide the audience with written transcripts, show notes, and other related information from the show. The show’s audio, metadata, corresponding transcripts, websites, and links must all work together seamlessly to provide the optimal user experience that encourages user return. By creating a contemporary heuristic based upon the fundamentals of the five rhetorical canons, podcasting can be evaluated for its merits as a means of effective, user-centered communication.

Although all five canons have their place in podcast creation, the four that retain the strongest emphasis are Arrangement, Style, Memory, and Delivery. Invention, as mentioned previously is “an ability, in each [particular] case, to see the available means of persuasion” (Aristotle 37). It encompasses the rationalization on the part of the podcaster as to why a podcast
is the most effective form of communication in a given situation. I would assume that at the time someone begins investigating ways to make a usable podcast, he or she has already engaged in the process of Invention, and from this starting point, the other four canons fall into alignment as points to consider. In the following sections of this project, I will look at the canons of Arrangement, Style, Memory, and Delivery individually, making connections from classic rhetorical standards of speech to how they can be applied to podcast design, while drawing from current usability studies research as support. I will then compile and condense the resulting principles and present them as a list of usability heuristics, organized by canon.
PODCASTING AND THE RHETORICAL CANONS

The canons of Arrangement, Style, Memory, and Delivery are a part of the classical training that has been used to construct strong and effective communication since ancient Greece, and contemporary speakers and writers still hold to the canon’s principles when making decisions of word choice, format, design, and organization. This section breaks down each canon individually, explaining how it is applied in the context of podcast design. Though each canon has a distinct and unique purpose, none of the canons function effectively independent of the other four. In podcasts, just as with traditional speech, one must consider and incorporate principles from all the canons in order to produce a text—in this case, an audio text—that presents the author’s desired message while meeting the needs and expectations of his or her listeners and users.

Arrangement

The canon of Arrangement is concerned with the sequence and placement of elements in speech or writing. In classic oration, “Arrangement” followed a prescribed order:

1. Introduction
2. Statement of facts
3. Division
4. Proof
5. Refutation
6. Conclusion

In podcasts, the canon of Arrangement retains many of its original characteristics of organization, pertaining to the order a podcaster chooses to presents each episode. With podcast
scripts, podcasters must make decisions beyond the order of word, sentence, and sections, such as appropriate musical cues for openings/intros, intermissions, and outros (Walch and Laferty, Bowie, and Hay). Music plays an important role in podcasts, and podcasters make careful considerations about using musical elements to indicate clear cues for introductions, transitions for content, and signals for conclusions.

As stated by Steven Lynn in his explanation of Arrangement in *Rhetoric and Composition: An Introduction*, “When a text is perceived to have structural properties that identify it as a certain type, then it is said to belong to a certain genre—laboratory report, job application letter, detective fiction, legal brief, newspaper store, etc…” and—dare I add—the podcast (107). Just as with all other forms of communication and media, podcasts must follow a particular form of inherent order and design. Though there is room for variation, of course, most podcasts follow the same general arrangement:

1. Opening
2. Intro music
3. Main topic
4. Intermission/transitions
5. Closing
6. Outro music

The respective placement of each of these elements holds a specific identifying purpose for the podcast, especially the opening and closing. The opening of a podcast episode should always include the name of the podcast, the podcast episode number and title, and the episode topic. This not only identifies the podcast, but also allows the listener to immediately “gather her bearings”; a listener should not have to go through several minutes of content before realizing
she has already heard the episode. Jakob Neilson suggests the importance of clear identification in his heuristic for usable web design, which calls for a constant “visibility of system status” in web applications (Neilson). In other words, podcast users should always know “where” they are in sequence of an episode. This is particularly important for podcasters to remember, because a portion of their audience may be listening to a podcast on an Mp3 player and unable to look at the screen—perhaps while driving down the road or exercising (Walch and Lafferty 114).

Although podcasters must be mindful of arrangement within individual episodes, they must also consider arrangement on a broader scale—throughout the podcast as a whole. Some podcasters design their podcast shows to run in a non-linear sequence, which allows the listener to jump from episode to episode without following any pre-determined order. Of course, the users could gain a different experience by listening to the show from first episode to last, but it is not necessary for them to do so in order to enjoy the show. For example, *Diggnation* (a podcast based on the social news and bookmarking site, digg.com) fashions the content of its show in “layers.” New users can easily begin listening to current *Diggnation* episodes without needing to first familiarize themselves with previous episodes, but the show provides a richer experience through background knowledge for long-time listeners who have followed the podcast since it first began. *Diggnation* caters to both types of audiences by including the episode number to any past shows they may reference; long-time listeners will likely remember the reference, but by mentioning a specific episode number, podcasters enable newer listeners to search for the past show, if they wish. On the other hand, other podcasts—such as podcasted novels or some training modules—require their audiences to start from the very first show, listening to each episode sequentially. Regardless of the order a podcasters chooses for their shows format, it is important that they maintain a level of formatting consistency, which Neilson also asserts is an
important part of usable design. When podcasters do not organize or arrange episodes in a similar order each time they produce a show, they risk confusing or misleading their audience, which may drive users to give up listening out of frustration or annoyance.

The multi-linear nature of the web puts an interesting spin on the traditional ideas of how writers should arrange their compositions, and this often presents creative challenges for developers, who are trying to organize and present information effectively for their users. In Writing Space, Bolter, notes:

Elements in the electronic writing space need not be simply chaotic; they may instead function in a perpetual state of reorganization, forming patterns that are in constant danger of breaking down and recombining. This tension may lead to a definition of effective writing that supplants or replaces our traditional notion of the unity of voice and of analytic argument (Bolter 12)

Essentially, content often dictates order in web environments—the developer, programmer, web designer, and certainly the podcaster must all consider how the arrangement of their content will affect their overall messages and how proper organization can best meet the needs of their respective audiences. Podcasts that function as training tools, for example, may serve a better purpose if users can listen to them out of order, which gives the user the option to decide which episode he or she most needs at a particular time. In contrast, educational podcasts presenting material that progressively increases in difficulty may require a more linear order to maintain clarity. And, of course, there are other podcasts that audiences can enjoy in both a linear and nonlinear order, leaving it up to the users to decide which order is most appealing.
Style

Style focuses on \textit{how} the message is communicated, the actual words and fashion of speech the author uses to express his or her message. The principles of good speech that applied in the ancient Greek forum can be transferred directly to the medium of podcasting. For instance, podcasters still must take into account grammar, accent, diction, word choice, voice inflections, and jargon when preparing and recording their podcast. When considering choices of style, podcasters must put their audiences at the center of their focus in order to make decisions about which styles of speech will be effective and appropriate for their intended listeners. Should the podcaster take on an informal tone that does not adhere to standard grammatical conventions and makes heavy use of slang? Will technical jargon be appropriated and necessary, or exclusionary and alienating? The most effective message is one that audience members can connect with, understand, and appreciate—which is brought about through the podcaster’s stylistic word choices and expressions.

Speaking allows for voice inflections, which play a large part in demonstrating style, and once communication moves from being spoken to written, it is often more difficult to pick up on stylistic choices. Sarcasm and the use of irony, for example, are stylistic choices that are not as easily conveyed through writing as they are through speaking. As writing began to supersede speech as the dominant means of formal communication, the element of style became somewhat of an abstract idea, difficult to adequately define and describe. Often equated with “voice,” style is made evident through a communicator’s precise decisions about wording, voice dynamics, and expression. This audible voice expresses the personality and identity of the communicator, and well-known authors can often be recognized by their distinct writing styles—from Emily Dickenson’s measured word choices and unconventional use of capitalization to Ernest
Hemmingway’s simple and understated descriptions. Frequent readers begin to know and recognize authors by the pronounced voices that speak through their writing styles, and there is an undeniable power to move and impact audiences when a communicator can wield the tool of voice aptly—whether spoken or written. The podcast returns to the oral history of communication by offering the audience an audible voice they can connect with and creating a more distinct sense of validity and realness in the message.

Composition studies directly attaches style or voice to the author’s personality and authenticity. In the article “Teaching Style: A Possible Anatomy,” Winston Weathers discusses his definition of style and how incorporating an author’s personality into a message creates not just a more attractive presentation but also a more effective meaning:

. . . style has something to do with better communication, adding as it does a certain technicolor to otherwise black-and-white language. But going beyond this "better communication" approach, we should also say that style is the proof of a human being's individuality that style is a writer's revelation of himself; that through style, attitudes and values are communicated; that indeed our manner is a part of our message. (144)

In this sense, style’s ability to embody an author’s personality actively reinforces his or her message’s credible appeal to ethos and emotional appeal to pathos. Through the podcaster’s spoken voice, style is brought about in a much more vivid and natural way than it is in writing: “The human voice in particular is extremely powerful and influential, able to cut through all meaningless, random white noise of life and penetrate the consciousness of [the] targeted audience” (Bader). This human voice delivers a feeling of immediacy and—quite literally—“speaks” to an audience through a personal connection.
Just as authors of traditional texts put a great deal of emphasis on appropriate style, podcasters must put equal emphasis on ensuring vocal tone and formality remain consistent with the podcast content and genre. Listeners expect a looser, more informal (and, at times, more off-color) script and speaking style from pop-culture, entertainment, or comedy podcasts than those with perhaps political, educational, religious, or business content. Regardless of the style and voice a podcaster chooses, a high level consistency is extremely important. Maintaining the same type of style listeners become accustomed to hearing episode after episode is important to audience retention, as it prevents listeners from becoming confused and disoriented. *Grammar Girl*, for instance, has a very distinct and unique style, that is characteristic of each of Mignon Fogerty’s episodes. Though the show is obviously read aloud from a script, Fogerty’s consistent balance between her quirky humor and a level of professionalism is engaging and suitable for her podcast’s topic of grammar.

Decisions of podcast style and voice rest heavily on the podcaster’s awareness of audience. Providing the “feel” an audience expects is often just as important for podcasters as delivering the listeners’ desired and expected content. Although the episode content may be the “meat” or substance of the message, one could compare style to the “garnish,” or the presentation that makes the message more appealing or attractive. Cicero broke down the audience appropriateness of style into three categories: plain, middle, and grand. Thus, the plain style is supposedly best for teaching; the middle style is best for delighting; and the grand style is best for moving” (Lynn 177-179). Podcasters’ deliberate use of vocabulary, jargon, and grammar all work together to create a stylistic environment and listening experience appropriate for the target of audience members a podcast intends to attract and retain. For example, a podcast that discusses medical health issues with a general audience would not use the same terms or
language if it were addressing medical professionals, rather it would incorporate a “plain,” simplistic style that the audience will easily understand. Similarly, a corporation’s “in-house” training podcast would likely have terms, acronyms, and other identifying terminology that are clear and relevant only to the individuals in that business.

Although elements of sound, such as an audible voice and musical sound effects, can infuse the podcaster’s message with a sense of immediacy and personal relationship, this “realistic” presence also has the potential to thwart or undermine the podcaster’s credibility. The spoken voice undoubtedly creates a connection with the audience, but by orally communicating a message, the podcaster opens him or herself to the possibility of a variety of verbal stumbles or slips of the tongue—things that can be avoided with text documents. Though people often overlook these vocal ticks and blunders in everyday conversation, recorded speech makes these mistakes seem more obvious and pronounced, as noted by Walch and Lafferty:

. . . if we have excessive noise, distractions, or vocal tics, our listeners will be so distracted by the annoying noise that they won’t hear anything about what our podcast is supposed to be about. . .The most important reason for your podcast to sound professional is for the audience not to hear audiobooks with coughing interrupting the climactic scene or DJs leaning away from the mic to yell at their dog to get his nose out of the cat box” (182).

Many podcasts choose to record over mistakes and edit out the compulsive “ums” and “ahs,” which gives the podcast a more professional and polished feel. Others podcasters, however, prefer to leave in these “mistakes,” with the rationale that cleaning up the audio too much may take away from the sense of “reality” the podcaster is trying to portray for his audience. Some situations excuse—or even warrant—minimal to no editing; hearing the podcaster cough, yell at
his dog, or tell his noisy child to “hush” in the middle of an episode can add to the personal nature and immediacy of the show—an attractive element for someone producing a lifestyle podcast or a podcast that is more relaxed and comic in nature.

**Memory**

Historically, the canon of Memory was extremely important to effective speaking, applying to how the orator recalled and remembered his speech, as well as how the audience was able to retain the speaker’s message (Silva Rhetoricae). Within contemporary rhetoric and composition, however, Memory has received the least amount of attention of all the five rhetorical canons. According to Edward Corbett in *Classical Rhetoric for the Modern Student*, “The reason for the neglect of this aspect of rhetoric is probably that not much can be said, in a theoretical way, about the process of [M]emory; and after rhetoric came to be concerned mainly with written discourse, there was no further need to deal with memorizing” (5). In regards to podcasting, Memory still applies to the speaker and the audience, but because of the technological medium, Memory affects them both in different ways. Unscripted podcasters take a more spontaneous approach to production and certainly must rely on their memories much like the traditional rhetor. Although there are many podcasters who do record using a script or detailed notes, they may draw from their memory during recording and choose to wander off script if something new or relevant occurs to them (Bowie 15).

Orators of the past had to ensure through figures of speech and enumeration that the audience would remember their message, but podcasting removes some of this burden—both from the speaker and the audience. The messaging medium acts as a virtual memory for the podcasting audience, storing the voice of the digital orator and his or her message in a format
that can be replayed and reviewed multiple times. Podcasters cannot disregard the audience’s memory completely, however; audiences still must be able to recall some of what they heard from episode to episode. To simplify this, podcasters should format, record, and appropriately title their episodes so the audience does not have to listen to several minutes of a show before realizing it is one they have already heard. Additionally, since podcasts are usually released in individual episodes over a period of time, it is useful for podcasters to give brief recaps or summaries of reoccurring topics from previous episodes in order to prompt listener memory.

Prachi Parashar Panday, an Instructional Designer, asserts that creating podcasts can be particularly useful in solidifying information students learn during class: “As a producer, in the podcast creation process, the learner creates a podcast (concrete experience); then reflects on the podcast created (reflective observations) – in terms of concepts learnt; then mulls over the options for improvement (abstract conceptualization); and then takes steps for improvements in learning (active experimentation)” (252). According to Panday, by taking this active role in podcast creation, students move through different points in learning process, engaging in deeper and further thought development as they continue through the process.

A second way memory affects the podcast is through the various levels of appropriate content, which is determined largely by the members of the intended audience. Podcasts published for specific audiences may be able to rely on the memories and prior knowledge of their listeners without having to go into in-depth descriptions and explanations of technical content or terminology. For example, General Motor’s Fast Lane podcast is targeted at car enthusiasts and pointed explanations of terms and concepts would likely annoy and frustrate its advanced listeners. Astronomy Cast, however, has a large listening base outside of the discipline of astronomy that benefits from clear explanations not laden with scientific jargon.
Finally, audience memory is called upon in different ways depending on a show’s formatting and production style. Some podcasts, such as podcasted fiction, rely heavily on audience and their retention of information from previous episodes. These types of podcasts function by releasing new story chapters or sections as a series, and the audience must listen to each episodes in sequence to understand the plot. As mentioned previous, other podcasts, are much more non-linear in nature, and although information from older episodes is not necessary to enjoy more recent ones, audiences who have been following the podcast for a while will have the benefit of a richer understanding and listening experience. Rather than taking the time to review old information, which may annoy long-time listeners, many podcasters simply refer back to previous episode titles and numbers so more recent listeners can easily access the missing information.

**Delivery**

Delivery, the final canon, is related to the way someone communicates his or her message to an audience. In the past, this dealt with the form and presentation of the speaker and his or her voice, including volume, tone, gestures, and personal presentation. In his master’s thesis on the “Transmogrified Delivery on the Audio-Enabled Web,” Brian Snead aptly defines delivery as “the study and practice of whatever actual and meta content and persuasion any speaker generates through the use of his voice and the spectacle of his physicality” (38). Like Memory, Delivery is not something that directly applies to print-based text, and since it is so closely connected with the canons of Arrangement and Style, Delivery was “eventually disregarded through annexation” (Snead 38). Podcasts, however, rely heavily on a high quality of delivery—
both personally through the speaker’s voice and technically through the recorded audio and sound.

One of the most attractive features of the podcast is its flexible deliverability through time- and location-shifting, which allows information to be delivered at the listener’s convenience. This unique form of mobility gives listeners the opportunity to consume information in non-traditional spaces—MIT lectures can be listened to while sitting in the sauna, company policies and procedures can be reviewed during a daily commute, tips for marathon training and diet can be enjoyed on a 5-mile run, and class notes can be recounted at 3 a.m. in a college dorm room—all from a portable Mp3 player or computer. Furthermore, podcasts employ a type of delivery method known as “pull technology,” a “style of network communication where the initial request for data originates from the client, and then is responded to by the server” (Wikipedia). If a listener chooses to directly subscribe to the podcast’s RSS feed, each episode can be sent directly to his or her podcatcher software (such as iTunes) any time a new episode is released. Rather than the listener actively seeking new information, the new information finds the listener.

Although the technical delivery of podcasted information is different from classical oral communication, the traditional principles attached to the quality and projection of the podcaster’s voice remain the same. Aristotle put great emphasis on the quality of Delivery, stating:

It is a matter of how the voice should be used in expressing each emotion, sometimes loud and sometimes soft or intermediate, and how the pitch accents should be entoned, whether as acute, grave or circumflex, and what rhythms should be expressed in each case; for [those who study delivery] consider three things, and these are volume, change of pitch, and rhythm. (195)
Naturally, Delivery moves beyond just the nuances of voice, relying on hand gestures, facial expressions and other physical movements to reinforce meaning. Since physical movements are clearly not transferred through an audio podcast, the digital orator must rely even more heavily on the precise and deliberate use of vocal inflections to present her message and meaning. Not only must she pay attention to her enunciation, diction, and pronunciation, but also her talking speeds, which become an important factor for clarity and understanding:

A good rate of speed is about 90-120 minutes per word (average 100). This means for a 20-minute talk, about 2,000 words; for a 30-minute talk, about 2,800 words (providing for pauses, etc.); and for an hour’s talk, about 5,500 words. These rates are significantly slower than conversational speech, and they need to be. Measured speech allows the audience to keep up with you, and it gives you the appearance of control and fluidity. (Montgomery 171)

A delivery that comes across controlled and fluid, as Montgomery suggests, reinforces a feeling of authority and adds strength and credibility to the podcaster’s message.

Orators were able to control the delivery of their messages to the audience, directly influencing their audience’s experience through conscious hand gestures, facial expressions, and vocal amplification. The medium of podcasting, however, erases physical demonstrative movement. And although podcasters can control the volume and amplification of their voices during the recording process—“sometimes loud and sometimes soft or intermediate”—they cannot control the quality of their audience’s speakers or how loudly the audience sets their volume while listening. The podcaster does have some control, however, over how often the listener adjusts the volume throughout the episode. When podcasters mix multiple audio clips (i.e. their recorded scripts, music, sound effects, advertisements) that have been recorded at
different volume levels, the final product can sound “uneven.” As the audience listens to the show, they may find themselves constantly adjusting their volume settings to compensate for audio that is either too loud or too soft to listen to comfortably. This is not only irritating for listeners, but can cause them to lose confidence in the podcaster’s abilities, undermining the message: “Your podcast can have vital and wonderful information, gut-busting humor, and poignant messages, but if it is painful to your listeners when they hear it, they will unsubscribe” (Walch and Lafferty 182). By using their audio editing equipment to “compress” the sound file at the end of production, podcasters can ensure an even level of volume throughout the entire episode (197). On the other side of the spectrum, however, podcasters must be cautious of over compressing the audio, which results in a harshness of vocal tone that can override emotional emphasis, leaving the audio sounding flat, robotic, and impersonal, undermining the ethos of the author. Whereas the historic orator developed a sense of authority through the physical movements that suggested authority, the podcaster develops his or her credibility by producing a podcast with high sound quality.

Regardless of how good a show’s content is, audiences have an extremely difficult time overlooking poor audio quality—especially since audio is the primary form of delivery for most podcasts. However, aside from the obvious importance placed on the delivery of the audio message, there is a great deal of deliverable text involved with a successful production. Most podcasts include a transcript of the show or other related show notes on a companion website or blog, which gives “potential listeners the chance to quickly scan what is going to be on [the] show before they decide to download it” (Walch and Lafferty 208). Not only can audience members use shownotes to get an idea prior to listening of what the podcast will discuss, but many podcasters use shownotes to post links to resources mentioned in the episode or to provide
additional information not discussed in the show. Text is easy to visually scan or can be quickly
searched through by a web browser’s “find” feature—both of which are much faster options than
attempting to listen to several podcast episodes just to find a specific piece of information.
Shownotes also extend the level of podcast accessibility by delivering content to audience
members who may not otherwise be able to fully access the audio. *Astronomy Cast*, for
example, reported an unexpected finding from audience surveys that several of their audience
members did not listen to their episodes at all, but actively followed the podcast through reading
the published transcripts. One listener reported being hearing impaired, another explained that
he/she could not understand English very well, and several respondents were simply unable to
download large audio files (28).

Podcast shownotes and the websites on which they are published create a unique
reciprocal relationship of information delivery between the podcaster and his or her audience.
Shownotes published on blogging platforms provide audiences with a built-in comment feature,
where they can voice opinions, reactions, questions, complaints, and comments. This two-way
dialogue between the podcaster and her audience creates small communities within these
informal online settings, and it has become crucial to why podcasts are so popular: “A key
reason we have heard from listeners about why they enjoy podcasting so much is the interactive
nature of podcasting. Many podcasters go out of their way to communicate with their listeners, to
include the listeners in the show and to build a community around the show” (Walch and
Lafferty 199). Podcasters can use this continuing dialogue to generate show content and add
greater depth to future episodes. Podcasts like *Grammar Girl*, for instance, have call-in
voicemail numbers where listeners are encouraged to ask specific questions that podcaster
Mignon Fogarty answers in her episodes—often providing enough content or discussion for the
length of an entire episode. Similarly, the hosts of diet and fitness podcast *Two Fit Chicks* frequently read listener success stories posted on the podcast’s blog, inviting the audience to share in the role of the podcast author and making them actual producers of a portion of the show’s deliverable content.
PODCAST USABILITY HEURISTIC

The art of speaking has long been assessed and evaluated by using the Canons of Rhetoric, particularly Arrangement, Style, Memory, and Delivery. The heuristic below is organized in sections according to canon and lists general guidelines for podcasters to follow when designing user-centered podcasts. Because the scope of individual podcast genres is expansive, with unique purposes that range from educational, political, corporate, entertaining and personal, this heuristic seeks to provide basic standards. These principles, however, may not be relevant in every circumstance and for every type of podcast. Rather, this heuristic details a list of considerations podcasters can use when deciding how they can best meet the needs of their audience and users in most cases.

Arrangement

1. Release episodes serially

By definition, a podcast must be recurrently released in multiple episodes. In other words, a podcast cannot be a single audio file, delivered once. Although many podcasts are scheduled to be released indefinitely (or until the topic has been exhausted), others are produced with an expected end (e.g. training modules or podcasted novels). The key thing for podcasters to remember is that in order to fit under the definitive category of “podcast,” the content must have multiple episodes. If an organization, for example, only plans to release a single audio file for users to download, it would be more logical to publish the file on a website, rather than going to the trouble of creating as a podcast. Likewise, if a potential podcaster does not feel her enthusiasm for the topic (or for podcasting) is sustainable, she might consider other ways to communicate her message.
2. **Order podcast elements in identifying sections**

Podcasters should arrange podcast elements in the following order: opening, intro music, main content, intermission/transitions between topics, wrap-up/closing, and outro music.

3. **Use clear non-vocal introductory, transition, and cue elements**

Users should know “where” they are in the progression of the episode based on intro music, clear transitions, musical cues, and outro music.

4. **Determine appropriate global arrangement of podcast (linear v. nonlinear)**

Podcasters should arrange podcast episodes so that their order presents the subject matter logically to the user. Academic or training podcasts, for example, may be best formatted in a linear manner that requires users to start with the first podcast and work their way through each successive episode in sequence. Other podcasts with topics that are not necessarily dependant upon order, such as nutrition tips or video gaming tricks may be more appropriately formatted non-linearly, letting users pick and choose which episodes to play.

5. **Organize podcast content logically in each episode**

The podcaster should arrange the content and topics of discussion in way that makes sense and clearly expresses the message to the listening audience. For instance, some podcasts begin with a quick recap of the previous episode, present new information, discuss listener questions or comments, then conclude with a brief description of the next scheduled episode.

6. **Use a consistent show format**

Regardless of which sequence and order the podcaster chooses for his show, he should remain consistent within each episode. By varying the arrangement and shuffling the
order from one episode to the next, the podcaster risks confusing and disorienting (as well as annoying) his users.

7. Adhere to consistent release schedule

If a podcaster intends to release new episodes regularly, she should make and adhere to a set schedule so that regular listeners know when to expect the next episode. For example, if a podcaster has set a precedent for releasing a show every Tuesday evening, she should abide by that schedule every week so as not to confuse or frustrate listeners. Even if something comes up which prevents the podcaster from producing her regular show, it is better to release a very brief podcast, explaining the delay in content than release nothing at all.

Style

1. Match style appropriately with content

The podcaster must consider and select his speaking styles based on the context of his message and the genre in which it is published. In other words, business, professional, and educational podcasts inherently require a more formal delivery style, while entertainment and popular cultural podcasts allow for a lesser degree of formality. Formal language style is less personal, is characterized by objective statements rather than biased opinions, and is written in active rather than passive voice; it also avoid the use of slang and contractions. Informal style, on the other hand, is much more relaxed and conversational, allowing for colloquialisms and slang.
2. Make mindful choices of grammar, accent, and words

Podcasters should consider appropriate grammar, accent, and word choice for their podcast. When preparing to record, a podcaster must necessarily take into account the rhetorical impact these choices may have on her ethos, or credibility. If a podcaster such as Mignon Fogerty began using non-standard grammatical structures in her *Grammar Girl* podcast (which is designed to provide proper grammar instruction), it would cause her listening audience to question her authority on the topic. In some cases—when the nature of a podcast is more relaxed and informal—non-standard grammar, regional accents, dialects, and colloquial terms actually enhance and strengthen overall “feel” of the podcast and bring out the podcaster’s personality. For example, *Two Fit Chicks and a Microphone*, a healthy living podcast, features two hosts—one from Scotland and one from Texas. The podcast takes on a conversational tone and the distinct personalities of the two hosts come through clearly in their contrasting accents and figures of speech.

3. Choose vocabulary that is appropriate to audience levels of understanding

Podcasters should be mindful of what vocabulary is suitable for their audiences. Podcasters should avoid using jargon or technical terminology unless the audience already has an understanding of subject matter or the podcaster clearly introduces and explains the terms within the podcast. In other words, podcasters must keep assess and determine his audience’s level of proficiency as novice, intermediate, or expect and adjust his vocabulary accordingly.

4. Choose a style that fits the podcaster’s personality

A podcaster should choose a style that effectively displays his individual personality, which will reinforce validity of the message. Stever Robbins, who podcasts about
productivity on *Get it Done Guy*, takes a very casual approach to his podcasting style, interjecting quirky jokes about vampires throughout his episodes and posing odd scenarios to explain and clarify his ideas about “working less and doing more.” Although his laid-back style might not come across as strictly business or “professional,” his place as the number one business podcast in September of 2010, demonstrates a clear appeal to listeners.

5. **Select an appropriate recording setting**

The background noises of recording locations have a direct effect on the feel and style of the podcast, and podcasters must deliberately choose where their podcasts will be recorded. For podcasters who record at home, a closet is often the optimal recording environment, as the surrounding clothes absorb the sound; a large empty room, on the other hand, results in audio that sounds hollow and “canned.” Podcasters also must decide whether or not a completely quiet space is the most appropriate place to record; while background noises, such as children or pets, may be unwanted in a more professional podcast, these elements may add a sense of character and charm to a personal podcast.

6. **Edit speech and sound with a rhetorical purpose**

Editing out and recording over tics, poor word choices, and verbal stumbles will contribute to the professional feel of a podcast. However, leaving these “mistakes” can add a distinct sense of personality and immediacy, which may better serve the podcaster’s intentions.
7. **Maintain a consistent style throughout the podcast**

Although the appropriate podcasting style is left up to the discretion of the podcaster, it should remain consistent throughout each episode and the podcast as a whole. Some podcasters, such as Mignon Fogarty of *Grammar Girl*, read from a script; however, Fogarty’s reading style is relaxed and feels almost conversational.

**Memory**

1. **Select clear titles for each episode**

   Podcasters should clearly title each episode with the episode number and a title that indicates the main topic or purpose of the episode. Users should not have to listen to the episode in order to identify the subject matter.

2. **Present important/identifying information at the beginning of each episode**

   Each episode should include the episode number and title, along with a brief description of topic at the beginning of the audio. If a user begins listening a podcaster, she should be able to quickly determine whether or not she has already listened to the episode.

3. **Provide recaps of previous episodes**

   If an episode is a continuation of a previous show—or if it is dependant upon information from another episode—the podcaster should include a recap to prompt audience memory. This allows the user to make a decision about whether or not he or she needs to return to a previous episode for a more complete review.
4. **Ensure that content is appropriately matched with the audience’s current knowledge**

A podcaster should ensure that the level of podcast content is suited to the target audience’s memory and current knowledge base. If the intended audience is knowledgeable about a topic, in-depth explanations and descriptions are unnecessary (and annoying). If the podcast is introducing new information, however, more in-depth explanations may be needed.

5. **Give identifying information when referencing past episodes**

If the podcaster discusses a topic that requires foundational information he discussed in a previous episode, he needs to clearly state the number and title of the episode where the information can be found. This allows new users to quickly gather any necessary information and gives long-time users an opportunity to refresh their memories.

**Delivery**

1. **Make deliberate choices of vocal inflection**

   From a stylistic standpoint, podcasters should use appropriate vocal inflection and variations in sound projection to reinforce their message, particularly since audio podcasts cannot relay physical gestures or facial expressions, which play strong roles in the transfer of meaning and importance.

2. **Record at a speaking rate that is easy to understand**

   To preserve understanding and clarity, the podcaster’s speaking voice should be recorded at an average rate of 100 words per minute (Montgomery 171).
3. **Use appropriate audio compression**

   In order to maintain consistent volume levels throughout the episode, each audio file should be compressed post-production. But podcasters should be aware that *over-compressing* an audio file will create a robotic sound that can affect the emotional appeal.

4. **Include transcripts/show notes for each episode**

   All podcasts should have some sort of accompanying website or blog that publishes transcripts or show notes for each individual episode. This allows users to easily search episode content.

5. **Provide options for listener comments or feedback**

   Podcasters should provide options for listener comment or feedback, allowing users interact with the podcaster, as well as fellow audience members.
CONCLUSION

Undoubtedly, the area of podcasting is still open for exploration. Though the heuristic developed in this study provides a very general guide for usable podcast design, it cannot possibly take into account the distinct differences that are present in all podcast genres. These differences in design, dictated by purpose and user preference, have a direct effect on whether or not a podcast is considered usable in its particular situation. Users have different expectations and opinions for what makes a training or class podcast usable as opposed to a podcast on gaming techniques or celebrity gossip. Furthermore, educational podcasts, recorded directly from class lectures have different expectations and characteristics than an educational podcast that is scripted and recorded in a studio. These shifts in genre necessitate different considerations in the area of usable design and therefore require closer research and analysis. Future studies need to be conducted that look specifically at what usability criteria podcasters should apply to individual podcast genres to evaluate usability and how these characteristics appeal to the intended audience.

Additionally, the narrow scope of this study could not take video podcasts into consideration. Many of the same principles of usability that apply to audio podcasts can be transferred to video podcasts, or “vodcasts,” such as clearly stated episode titles and numbers at the beginning of the episode, consistency of show order and style, and appropriate transitions between show sections. However, the added visual element of the video podcast presents additional points of evaluation and critique. Hand gestures and facial expressions become an important feature of delivery; and choices about where recording should take place must take into consideration not only background noise but the visual appearance of the background.
setting, as well. These are all areas that current research in rhetoric and usability studies needs to include.

The growing number of listeners indicates that the podcast is not merely a passing fad, as individuals and organizations continue to notice the potential of the podcast both in industry and in academia. Podcasts appeal to people in different ways and in different situations—for education and training, product reinforcement, political platforms, and entertainment. Regardless of the voice behind the podcast, the intent that the podcast serves, or the audience it attempts to reach, each podcast acts as an information outlet, a digital orator with a message and purpose. Just as the canons of rhetoric served the historic Greek rhetors as guiding principles for effective speech, so the digital orator is guided by many of these same principles. A poorly fashioned and delivered speech is no more persuasive or effective than a poorly produced podcast. Although podcasters may have the potential to reach a virtually limitless audience, their message is only as good as the medium through which it is delivered. If the podcaster’s audience finds the podcast inaccessible or unusable—if they become confused by the podcast’s presentation and arrangement or annoyed by erratic sound levels and distracting background noise—they can simply choose not to listen, rendering the podcaster’s message ineffective and obsolete. By developing and publishing frameworks for evaluation and critique, such as the one I present in this study, the podcast will find its place as an effective and usable means of communication and composition.
REFERENCES


<http://www.informaworld.com/smpp/content~db=all~content=a911126733>.


Dangler, Doug, Ben McCorkle, and Time Barrow. "Expanding Composition with Podcasting."


Geoghegan, Michael W., and Dan Klass. *Podcast Solutions the Complete Guide to Audio and


Palser, Barb. "Hype or the Real Deal?" *The Online Frontier* (February/March 2006): 65. Print.


Tynan, Belinda, and Stephen Colbran. "Podcasting, Student Learning, and Expectations."


<http://www.edisonresearch.com/home/archives/2008/04/the_podcast_con_1.php>
