A New Digital "Oral Tradition": Learning Appalachian Old-time Music via YouTube and Skype

Rachel M. Ward, Carman Neustaedter
School of Interactive Arts + Technology
Simon Fraser University
102-13450 102nd Avenue, Surrey, BC,
rachel_ward, carman@sfu.ca

ABSTRACT
"Old-time" or "mountain music" refers to the first music of the Americas. The songs themselves convey a rich cultural history that span hundreds of years, continents and regions. Where this music was once relegated to isolated communities in Appalachia, it is now globally available via virtual outlets such as YouTube. As a genre, old-time has specific expectations and ascriptions regarding "correct" or "traditional" playing. Through interviews with young (aged 25-35) old-time musicians, this research explores the ways in which "tradition" — in terms of stylistic expectations and cultural information — is now being transmitted via virtual platforms. The results demonstrate that, while YouTube and Skype increase access to this genre of music, it has the unforeseen deleterious effect of promoting the "homogenization" of styles and sounds. From a theoretical standpoint, this research argues that YouTube and Skype are a new form of the "oral tradition," albeit in digital format. As a result, this study calls in into question societal conceptions of "tradition" and the ways in which notions of the "traditional" are changing as a result of sharing and transmitting cultural information in the virtual age.

Author Keywords
Appalachia, Old-time, Music, YouTube, Skype, Online Communities, Tradition, Education

ACM Classification Keywords
J5 [Arts and Humanities]: *Music*; K3.1 [Computers and Education]: Computer Uses in Education — *Collaborative Learning*.

INTRODUCTION
In 2011, when I relocated to Australia for graduate school, my youngest brother, Max, joined me. One month before leaving, he took up the old-time Appalachian fiddle. Upon arriving in Australia, he quickly found himself in a situation where he was not only separated from friends and family, but also from his band members and any musicians who had familiarity with Appalachian music. Much of his free time was spent watching YouTube videos made by old-time musicians, including elderly instrumentalists who were filmed by their prodigies in West Virginia, mainstream folk bands, as well as musicians who donated their time and expertise by creating "DIY" instructional videos.

Stumbling upon a series of instructional videos, he was introduced to a young Los Angeles-based musician who played and taught the old-time fiddle. Max began weekly Skype lessons with the instructor. I often observed their lessons in which they both were situated in front of their laptops with violins in hand. In many ways, it looked like a regular music lesson, albeit with thousands of miles of physical separation.

Appalachian music has a rich and varied history. Song structures and lyrics can be traced back to the Elizabethan Age, some researchers even arguing that the melodic structure is an "indication of archaism" [2]. The music developed regionally distinct styles within England, Scotland, Ireland and France, with the "fiddle" as the central instrument. The Ulster uprising of the Scots in Northern Ireland led to the exodus and settlement in North America, bringing with them their unique Scots-Irish style of fiddle music [2]. Once in America, this music blended with other musical styles, including African and Native American influence and instruments [24]. The prototype of the banjo was originally developed in Western Africa and introduced via slave ships to the Southern United States [7,21]. Once the banjo moved northward, what is now known as "old-time" music "materialized from a mélange of English, Scots, Irish and African musics in the 17th and 18th centuries to become the first distinctly American music formed out of the musics of immigrant cultures" [24].

For the context of this study, it is important to note that this music was once situated in isolated mountain communities and learned through the oral tradition only "in geographical proximity to family or community members" [24]. Because of the isolation of many mountain communities, regional variations and playing styles developed. This changed with the Civil War when, for the first time, young men from the isolated communities met and congregated on centralized battle grounds. Here, they learned other regional songs and

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.
CHI 2016, TBD
Copyright 2016 ACM xxx-x-xxxx-xxxx-x/xx/xx...$10.00.

playing styles and composed the "civil war tunes" that are still played today.

The lyrics themselves are rich with cultural meaning, and tell stories that span hundreds of years and continents [28]. For instance, by the time British folklorist Cecil Sharp first arrived and recorded these songs in 1917, many of the lyrics were still traceable to the Elizabethan folk songs. The songs themselves are gender specific and often represent specific roles and descriptions of life within homestead communities [2]. In other words, each song has a unique history in terms of origin, meaning, access (for instance, as based on gender), regional variations and modifications over the ages.

As many of the musicians address in their interviews, this music is highly auditory in nature and is "passed on" from one person to another through aural learning ("by ear") [11,16]. Along with the music itself, nonverbal expectations regarding playing style were taught and learned as an oral tradition. Where some interpretation is appreciated, there is a fine line between appropriate and inappropriate modifications. This "rhythmic space" is one that must be navigated with careful consideration to the group:

> […] *it requires a collective culture, in which each player must find in the rhythm a place to contribute a particular pulse, in which all are responsible for keeping the rhythm absolutely solid and clear, and in which this clarity in turn permits those subtle individual changes and improvisations through which the rhythm is constantly changing, yet constantly the same — creating a space in which musicians, dancers, and listeners are all enclosed, a circle in time, rather than a line moving through time from here to there* [11].

This study builds on the historical context of this music as an oral tradition to explore how cultural information and stylistic expectations are being conveyed through virtual old-time music education — specifically, through Skype music lessons and YouTube videos. It focuses not only on the ways in which new media is utilized in musical learning and collaboration, but will address the cultural implications of learning and sharing traditional old-time music, as a genre that often promotes expectations and "self-regulation," in the desire to avoid modification to songs, tuning, instruments and lyrics in order to play "pure" or "traditional" old-time music.

This phenomenon was initially brought to my attention on a documentary film project [27], when one 25-year-old old-time musician explained that it is very important not to alter the songs in any way because of their historical importance and out of respect for tradition [27]. But is this notion ubiquitous across age groups, context and real-virtual spaces? In these regards, this study focuses on the question: How do old-time virtual music communities represent, transmit, restrict and discuss, potentially, "remix" [17] perceptions about "tradition" and what is "traditional"? This research diverges from previous studies about online old-time communities by focusing on **cultural transmission** rather than the techniques and practice of online music education. In these regards, importance was placed on exploring the ways in which those who have "traditional knowledge" (TK) of old-time music are sharing and collaborating via new media (YouTube and Skype) methods and perpetuating certain playing styles, expectations and perceptions in the creation of a *new (digital) oral tradition*. To understand how tradition is now being "passed on" virtually, I interviewed old-time musicians and instructors from across North America (North Carolina, New Orleans, Houston, Pittsburgh and Vancouver) who learn and teach music through YouTube and Skype.

RELATED WORK

This project builds on existing methodologies used in the examination of learning and collaboration in online music communities, based on the following four (4) research categories:

"DIY" YouTube Musicians

YouTube is a visible and practical virtual hub for musicians worldwide. There has been a wide range of studies about musicians on YouTube, from the development of an "acoustic analyzer" that searches out talented musicians [18], to the evaluative category of YouTube as "DIY Entrepreneurship" for musicians [1]. Other research puts forth an exploration of the ways in which YouTube has provided new ways to "create and share music" [6] as a form of a "participatory culture" [5].

In the realm of HCI research, YouTube has been studied through the conceptual lens of the "amateur," as an under-explored topic in the discipline [12]. This case study is presented in a manner similar to this one [see Study Methodology, below], in that qualitative, semi-structured interviews were conducted with musicians (in this case, none were professional) to explore the ways that they are using online services in their practice. They found that musicians are "contributing to a thriving DIY music scene" and that "online distribution and promotion is transforming the […] world of the amateur musician" [12].

YouTube for Music Education

Similar to other frameworks that developed a tool for meta-analysis of YouTube content [18], this concept has also been applied to videos that were globally tagged with the keyword "music education" [29]. On a micro-level, qualitative research has been conducted to present case studies about the ways in which YouTube is being used in music learning [19,20]. For instance, the use of YouTube music videos in the classroom, in addition to sheet music, may allow for more meaningful, applied and cross-cultural engagement with music as a form of "participatory learning" [19].

In terms of learning traditional and folk music on YouTube, one music education study analyzed instructional videos according to length, instructor demographics, content and teaching methods. Since their focus was on video content, their results primarily indicated that the videos were beginner-level and that instructors tended to be white, middle-aged males [15]. As I will discuss in more detail below, some studies [23,24,25] consider the ways in which YouTube is being used in conjunction with formal online "communities of practice (CoP)" [23], such as "Banjo Hangout," for collaborative online learning.

Skype for Music Learning

The use of Skype in education has been in a variety of classroom contexts, from theater and interactive performances [10], to that of musical education [9,14]. These are presented as case studies, usually between one teacher and one student, to explore the "possibilities of long-distance learning opportunities" [14]. For instance, one researcher [9] presents a case study of a college trumpet professor on the East Coast and an eighth-grade band student in the Midwest. The author concludes that the limitations of Skype instruction outweighs the benefits of face-to-face lessons and, when possible, should be used as a supplement rather than the sole means for music instruction [9]. In a similar study at the collegiate level, it was found that Skype instruction presented similar challenges associated with "technology-mediated issues" and "feelings of disconnectedness," but that lessons in many ways evoked a similar feeling and style as real, face-to-face lessons [14].

Online "Traditional" Music Communities

Online communities offer a platform for people with shared interests to network from remote places. It is especially useful to individuals who are interested in types of regional music that may be unavailable to them locally.

One such virtual community, the Online Academy of Irish Music, provides a platform for users to learn traditional music and dance through professional video tutorials. One study has shown the ways in which these (pre-recorded) videos attempt to replicate face-to-face music lessons by exclamations of "good job!" and "try that one more time" phrases after demonstrations [13]. Of interest is the fact that colloquial phrases, such as "passing it on," are used in reference to the sharing of virtual media [13].

Another site, Banjo Hangout, has been explored extensively [24,25] as a virtual gathering place for Old-time and Bluegrass communities. In these "cyberethnographic" field studies, the ways in which users are discussing, learning and teaching banjo music. Through interviews with a wide variety of musicians, the author explores the ways that technology (embedded blogs, hyperlinks, and YouTube videos) contributes to the learning experience in this online community. She concludes that "through hyperlinks and posts, community members co-produce and create meaning and identity through practice in community" [24]. In a later study, she focuses on remote learning and interviews musicians from global geographic locations [25]. For instance, one musician explains, "being able to learn through the Internet is essential as Bluegrass and Old Time in South Africa is non-existent. [It is] impossible to find a teacher. The Internet is the only teacher I have" [25]. Another extends this concept by saying, "there are very few banjo players where I live [north of The Netherlands], so it's great to be part of an online community that shares your passion and exchanges knowledge" [25].

Online music communities may also serve as repositories for cultural knowledge, although this concept is underexplored in the literature. Some research has looked at the ways in which an Appalachian music community, "Sugar in The Gourd," has facilitated the preservation of cultural traditions [3,23]. From a standpoint that is relevant to this study, it was found that "Sugar in the Gourd" users had significant cultural knowledge of this music from theoretical, historical and performance perspectives [23]. This research is now being extended to look at the ways in which "traditions and perceptions of authenticity" and "issues of gatekeeping" are being demonstrated within these online cultural communities [8].

In a similar manner, this study will explore the ways in which new media is facilitating the transmission of traditional knowledge (TK), cultural exchange or "remixing" [17], and the reinterpretation of tradition as a result of digital exchange. Diverging from previous studies, I am particularly interested in focusing on the ways in which younger musicians (age 25-35) from North America are utilizing new media (YouTube and Skype) to learn old-time traditional Appalachian music. This study will be interpreted from a perspective of culture and tradition, rather than that of music education.

STUDY METHODOLOGY

Qualitative, semi-structured interviews will be conducted with young (aged 25-35) "old-time" students, musicians and instructors to evaluate their use of new media for old-time music education. Questions focused on techniques for learning, as well as perceptions of "tradition" in the form of "correct" playing styles and the virtual transmission of cultural information (such as song history and Appalachian heritage).

Participants

Five musicians were recruited to participate in this study. Three consider themselves to be "old-time" musicians and two more closely aligned with the designation of "folk with old-time influence." Two of the participants are music instructors and one teaches lessons over Skype. The participants include:

Lyle, 27, New Orleans, LA: A professional, full-time old-time musician who plays the fiddle and banjo in two bands. He is originally from Chicago, moved to Indiana, traveled throughout the USA by hopping freight trains and now resides in New Orleans. His father is also a musician. Lyle

began playing the piano at home when he was eight years old. He transitioned through a variety of genres and performed in a punk band before learning the "clawhammer"-style banjo at nineteen from friend he was traveling with via freight train. He gives face-to-face lessons but has never taught over Skype.

Adam, age unspecified, North Carolina: As a well-known old-time musician who tours globally, Adam focuses on "interpreting southern fiddle repertoire for 'clawhammer' banjo." He is originally from St. Paul, Minnesota and his parents are both classical musicians. When he was four years old, he began piano lessons. He took up the mandolin and banjo around age ten and the fiddle when he was sixteen. He often performs and sells CD's on his personal website, although he earns the majority of his income by teaching banjo lessons over Skype.

Max, 26, Houston, TX: An animator by profession who performs with a mixed-genre, punk-inspired "old country" band. All of the members are originally from Pittsburgh but moved together to Houston for increased access to this style of music. Max plays the fiddle, banjo, guitar and Cajun accordion. He began playing fiddle around the age of twenty-two, when he completed "old-time" fiddle lessons over Skype.

Andrew, 28, Vancouver, BC: Andrew recently moved to Vancouver from Ontario where contemporary folk music is very popular. He is generally employed in the retail or service industries. He doesn't consider himself to be an "old-time" musician, but prefers to be categorized under the general umbrella of "folk." He began playing the banjo last year, after becoming proficient in the guitar and ukulele. He used beginner-level YouTube tutorials to learn banjo.

Isaac, 26, Pittsburgh, PA: Isaac grew up in a region that could be considered northern Appalachia. He describes his heritage as, "Scotch-Irish hillbilly from West Virginia and […] Swiss-German Mennonite from central Pennsylvania." He grew up in a musical household and began playing the guitar and writing songs when he was thirteen. He has since taken up other instruments, including the mandolin, banjo and bass. He performs in local bands and considers himself to be an "*old-time*-inspired folk musician."

These individuals were selected based on their experience level (most are intermediate-to-professional "old-time" musicians), teaching experience and visibility on social media and YouTube. Effort was made to recruit participants from different regions, ages and skill levels (ranging from 1-15+ years experience). None of the participants (aside from Isaac) grew up with old-time music and many discovered it after years of playing and performing in other genres.

Interview Method

Semi-structured interviews were organized using three methods: in-person, over Skype (see Figure 1) and via an emailed questionnaire. The same forty-four (44) questions were asked in all three formats. Two interviews were conducted via Skype, one in person, and two through email. The questions were divided into four (4) sections to gauge participant demographics, musical background, playing style, use of new media and learning/sharing "old-time" music education online. The final section covered their feelings toward transmitting and receiving cultural information and "tradition" virtually. Some example questions from each of the four categories include:

When did you first start playing old-time? Are you from a region where this music is popular? Have you ever taught another person through the internet? In your online community, do you ever discuss more than music— history, folk traditions, culture, regional issues? Do you think cultural information (history and traditions) and "old-time" music instruction go hand-in-hand? Do you have any concerns about the music not being taught or learned properly online? What type of importance do you place on not altering or changing "traditional" songs?

Figure 1. Screen-shot of a Skype interview with Lyle, an old-time musician living in New Orleans, LA

Interview participants were not paid and offered the option to remain anonymous. All participants opted to use their real names in publication.

Data Collection and Analysis

The Skype interviews had both audio and video recorded and the in-person interview had only audio recorded. The open-ended responses were qualitatively analyzed in order to determine the role that new media plays in the virtual transmission of cultural knowledge.

RESULTS

Use of YouTube

All the musicians interviewed used YouTube on a regular basis to search for new songs to learn, to discover obscure material and, occasionally, to post their own videos.

Learning Songs

In order to understand the role that YouTube plays in musicians' personal practice, I asked each participant to describe the steps they would take in order to learn a new song. All of the musicians who I interviewed described YouTube as a primary resource in finding music. Lyle, 27, explains his process:

> *Well, first I would check to see if I have it on my hard drive. I've been trying to amass a pretty big music collection for awhile… and so far I've kind of gotten to the point where I have more music than I could ever digest. So that's kind of my first go-to. But if there is something that I know isn't on my hard drive, the first thing I do is go to YouTube and look around for it. I have a preference for source recordings but I'll also listen to videos that people have made of themselves playing or videos from fiddlers' conventions, they're all good.*

Whereas Lyle uses YouTube to find obscure source recordings, Andrew, 28, uses YouTube specifically to watch beginner-level banjo tutorial videos. In a manner similar to the way that "traditional" music was historically taught and learned — "by ear" and observation (see "Introduction") — he was able to learn in a similar using YouTube videos. He discusses the visual features of tutorial videos:

> *It's usually just somebody sitting there [playing]. What they'll do though, a lot of the times, they'll have a little window with left hand, right hand, whatever you're working on at the time so you can see a lot closer. Instead of just like a big shot of them, they'll also put like a little bubble of like this hand is doing this, that hand is doing that.*

Andrew explains that this allows him to pause, rewind and replay certain parts of the song to practice independently before returning to the video (the implications of this are discussed in the subsequent "Advantages" and "Disadvantages" sections).

All of the participants commented that YouTube is a valuable resource based on the quantity of free and accessible material. Lyle explains:

> *I mean it's amazing, like the shear breadth of what's available on YouTube to an old-time musician. I've watched it grow over the last 7 or 8 years where the only things you could find on YouTube were — most of them were popular tunes — and now the trajectory of the relationship between old-time music and YouTube is that more and more obscure material is available. You're also getting a more and more detailed picture of the evolution of old-time music.*

He goes on to say that YouTube has allowed more people access to old-time than ever before:

> *I think it has the potential to introduce a lot of people to old-time music that might not otherwise have access to it, and that's really cool. And that's not just for old-time music but for any form of music, really, especially the more under-represented ones*.

This access is reiterated by Adam who says, "it gets more people aware of and participating in old-time music than would have been aware of it without the internet's ability to spread awareness."

Posting Videos

All of the participants have posted videos on YouTube for various purposes. As a professional performer and banjo teacher, Adam has posted about twenty-five (25) videos, mainly of his live performances. He also has posted some "one-on-one" videos of him playing songs, often introducing the tune with the make and model of the banjo itself before beginning the tune.

Max, 26, explains that he posted videos on YouTube while living in Australia, but hasn't posted any videos recently now that he lives in the same city as his band. He explains that posting videos allowed him to feel closer to the "old-time" community when he was limited by geographical access:

> *[…] it's just to feel connected to people – to get some honest-to-goodness feedback too because you are not really near people who are playing that music often – so you put it up there and you get to compare yourself to other people playing and you hear back from people playing it.*

Through posting YouTube videos (see Figure 2), Max was able to communicate with a global community of other old-time musicians. Max explains that the majority of the comments are "encouraging" or from users who are working towards learning the same song. For instance, one video that Max posted [21] received about 2,000 views and the comments reflect encouragement, reflections, or desires to learn the songs themselves:

> *Sounds awesome man, I just started learning to play the fiddle and I had my 2nd lesson last Monday and that's the tune my teacher chose to make me work with, I really like it. Of course he adapted it to a really basic version for me to learn [16].*

Recently, Lyle has not had a very active YouTube presence. Although there are several videos that a third-party posted of him performing with his band, he explains, "I don't tend to post my own videos or ask many questions or anything like that. I'm a little strange about having an online persona, I guess." Although, recently, when his friend wanted to learn a new song, Lyle filmed himself playing the song using a digital camera and uploaded it to YouTube: "I did one version at normal pace and then I did another one and slowed it down to exaggerate the bowing a little bit." He

then posted this video on YouTube and shared the link with his friend.

Isaac, 26, uses YouTube in a similar manner and mentions a very important point: that YouTube allows one the ability to *see* the song being played (as opposed to an audio-only download from an archive). This provides a significant advantage to learning an instrument, particularly the fiddle in which bowing techniques are imperative to a correct or "traditional" sound [11]. In many ways, this mirrors face-to-face instruction more so than learning only from archival audio or tablature.

Lyle and Max both agreed that self-filming and uploading to YouTube is an excellent learning tool to evaluate and track progress. When they were learning to play the fiddle, they both frequently recorded and posted videos to see their playing, how they sounded and to track improvement:

> *[…] it's a really good learning tool to record yourself and listen back. And that really helped back then too. It is fascinating to hear yourself and from that to improve here and there and then you record the next time and hear the improvement. I should probably still do that. It's a good exercise and it does benefit you.*

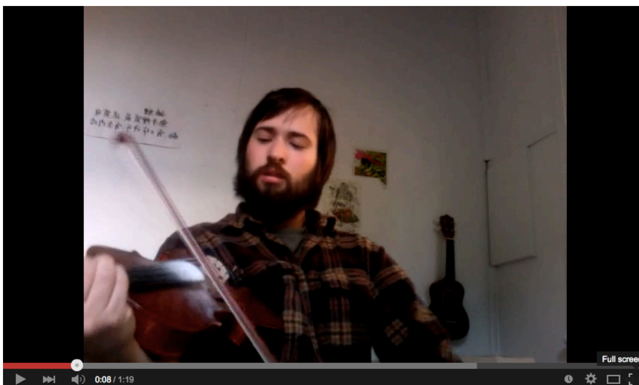

Figure 2. Self-recorded YouTube post of Max in Australia during the time he was learning the "old-time" fiddle through YouTube videos and Skype lessons [26]

Technical Advantages

All of the participants consider YouTube to be a vast resource for learning "old-time" music. Adam summarizes the advantages as: "quick gratification, a large and broad catalogue, and conveniently accessed by anyone with an internet connection." Andrew explains succinctly, "it's free and you can go at your own pace." Similarly, Lyle views YouTube as a vast resource in unfettered, democratic access to material:

> *So that's the nice thing about old-time music now with YouTube it's become more democratic in a way instead of like, you know, a few people who may have access to like a university archive or something like that or combining YouTube actually investing in the vinyls or CDs, you don't need any of that university access on YouTube. I think that's a really cool thing.*

All of the participants explained that the obvious benefits of YouTube are the pause and replay abilities (which represent certain concomitant "Disadvantages," below). Max explains the obvious abilities of "being able to sit in front of your computer and rewind, pinpoint, pause, the repetition." Although he clarifies that this learning style is "not traditional."

Lyle incorporates a secondary technology in learning through YouTube; an application called the "Amazing Slow Downer":

> *I go for the source recordings, and what I'll usually do, I'll download them and I use a program called Amazing Slow Downer. And I'll just try to listen to it from a variety of perspectives. I'll listen to it a lot from its normal speed and just try to get a sense of the feel of the tune and then I'll try to pick out some of the intricacies by slowing it down maybe like 70 or 80% of the speed.*

In this way, Lyle explains it allows one to "gain a level of precision you might not otherwise get if you were to learn them from a friend.

Disadvantages

According to the musicians interviewed, the disadvantages of YouTube fall into the three categories: the (global) homogenization of sound, limited sociality (and the related inability to harmonize) and the proliferation of bad habits from lack of immediate correction. In this way, the disadvantages go hand-in-hand with the advantages — the ability to slow down and pause videos also led to specific unforeseen disadvantage — that is, the "stagnancy" or "homogeny" that results from an entire genre of musicians accessing the same videos to learn songs. Adam explains this using the terminology of "secondary and tertiary versions" — versions that are so "far from the source that much may have changed" that the "inappropriate settings of tunes can become very widespread." Lyle words this a different way:

> *You know, old-time music in the last 70 years hasn't been terribly popular style of music so anywhere you go if there's old-time musicians, there's generally not that many of them. So when you have something like YouTube linking everybody together, it's changing all of this musical data. If people are connected to each other, then people's styles are going to reflect reach other.*

He continues:

> *One thing I found about the problem with YouTube – and this also connected with old-time music in general, it's like as people get more connected with each other, maybe – well, maybe people's sounds are becoming a little bit more homogenized,*

> *perhaps. It's like modern old-time fiddle has a certain sound. Now it's more driving, it's more syncopated, it's a little bit pluckier. And it's almost – the type of virtuosity it's a little bit different than some of the older fiddle players who achieved a certain level of technical proficiency. I wonder if maybe YouTube is a driving force in the evolution of that sound.*

Max views pause and playback abilities as a very "non-traditional" way of learning old-time music. He views "traditional" fiddle as a type of give-and-take, a form of "on-the-fly" learning and modification:

> *People heard it – they had to catch it – and I think that's how things really got modified then. People didn't sit down and say, I'm going to show you this tune note for note. They just kind of had to pick it up; people had to hear the melody and pick it up. And that's how things kind of got changed and altered a bit. And I don't think that's how anyone does things anymore.*

Moreover, he is witness to a certain burgeoning preoccupation with playing things the "correct" or "traditional" way:

> *[…] some people take it too far. They want to play it exactly how the source recording was and they don't want to change it. They treat it like its sacrilege and that's static. Some people say that's how you keep the music living and some people say that's how you make it die. There's a balance between taking it and making it current […] but not corrupting it.*

He also explains that YouTube detracts from a very important aspect of learning old-time — that of *sociality*. As I will also touch on below as a similar disadvantage to Skype learning, YouTube negates an important reason people take up this genre — "a lot of people play it or like it because of the social aspect." This lack of sociality with YouTube is related to an issue that Max describes in regards to his experience of learning the old-time fiddle in Australia:

> *I would say that the best practice is solitary anyway — as far as becoming a really good and versatile with your instrument. But then you kind of get to the point where you feel like you're playing in vacuum. Sometimes you learn a tune isolated and you're playing it really good on your own. And then you have someone play guitar behind it and you're like, '[Ugh] I'm not playing this right.'*

The inability to harmonize is a significant disadvantage to learning through self-guided YouTube. Similarly, Andrew explains the biggest disadvantage to YouTube learning as the lack of "human instruction." As someone just taking up the banjo, he has found this inherently leads to the proliferation of incorrect playing habits:

> *A lot of times, it could be a little thing like the way you're holding your finger […] You form a lot of bad habits […] the human instruction would be able to pick up on that and tell you right away versus online.*

Everyone explained that YouTube provides a valuable tool in the preparation to play with others, rather than as a means to an end. Max explains that no matter the medium you employ to learn a song, the purpose is to become proficient independently before bringing that song to a group setting: "the whole point of them learning tunes is to play them with people and bring to the festival to play with people." Andrew summarizes YouTube by explaining

> *[…] it's not stopping people from playing with each other, it's not killing the campfire. It's helping people gaining a level of proficiency before they end up playing with others.*

Use of Skype

Of the four participants interviewed, only two had used Skype for online music lessons: one as an instructor (Adam) and one as a student (Max).

Process

As described in the introduction, when Max was living abroad he was separated from other old-time musicians. He had some proficiency in the banjo and had recently purchased a fiddle to take with him to learn while overseas. He was using YouTube to search beginner-fiddle tutorial videos and came across an instructor's "channel." Max found his videos to be very helpful and appreciated his playing style: "he was someone early on who I thought I might want to play like."

Max contacted the instructor through YouTube and discovered that he offered Skype fiddle lessons for an hourly fee. Max describes this process:

> *Some people pride themselves on learning along themselves. I certainly like to go meet people. I like to talk someone who does it well and see what I can learn from them. I like learning it from people who have mastered it. So when I first started learning [through YouTube], it was initially misguided, or unguided. And then you start talking to someone like him who really is calculated with what he does on the fiddle and with his music; to talk to someone who has really analyzed it and can really break it down for you what's going on. I like that side of it. I felt like I was getting a glimpse behind the mechanics of it all.*

Max decided to undertake Skype lessons, in addition the self-guided (YouTube) instruction. The date and time for the Skype lesson would be scheduled through email. The hour-long lessons would consist of training in one song:

> *He would have a song in mind to teach me. He'd show it to me over Skype bit by bit and then after the*

lesson he would record an audio file on the song that included the song played up to speed and then he'd play each part slowly, dissecting the bowing, fingering, etc. […] I would come back next week and show him my progress and we'd move onto the next song.

Max describes this process as a "discussion" comprised of individual demonstrations, where student and instructor would "take turns," rather than as a collaborative learning exercise:

It's more like show me this and you can pick it apart. And then I have a recording of him. I learn it and then show it to him next week. It's working remotely.

The inability to play in unison is a significant difference between Skype and face-to-face lessons and is a result of technological constraints (lag time) of the application itself (see "Disadvantages," below).

Advantages

Adam is a full-time banjo performer and makes his living predominantly through Skype lessons. Both Max and Adam cited "geography" as the foremost advantage to Skype lessons. Max explains:

You can learn from who you want to learn from. You aren't limited to people in your area. Because depending where you are, there could be no nobody or people that are no good at all. Now you can pick and choose from some really great people.

Adam reiterates this statement by saying, "face-to-face lessons with poor instructors can be much worse than remote lessons with better instructors." As an instructor, this has been a great benefit to Adam:

A real benefit to remote lessons is that geography is a non-issue; if a prospective student has no clawhammer banjo teacher within driving distance, many suitable teachers can be procured online. Similarly, I would not be able to make a decent living exclusively as an old-time banjo and fiddle teacher if I were dependent upon ANY one local market (even, and perhaps especially, in the southeast, where the music is so easy to come by at festivals for little or no money charged). Now that my market is a global one (truly; I have five students in Australia alone, as well as students in Canada, the UK, and all across the USA), thanks to Skype, I am able to make my living doing what I love.

Disadvantages

As a student, Max orients the limitations of Skype around the (distorted) sound quality, inability to play in unison, lack of physical interaction (such as finger placement) and, like his critique of YouTube, the lack of sociality. Through Skype, Max describes the sound as "going through a channel and coming out as a processed sound. The instrument just sounds differently when you hear it coming straight through an instrument." In addition to improvement in sound quality, the reduction in lag time was one desired improvement with Skype. According to Adam, "the lag on Skype transmissions could be tightened to the point that true unison playing — and jamming — would be achievable."

Adam also mentions the inability to "physically monitor one's technique." This includes adjusting finger placement and posture — as something that is straightforward in face-to-face lessons but more difficult to convey over Skype. Adam explains:

Face-to-face lessons, with physical environment shared, are better for learners in that true unison playing can occur, as can physical instructor-facilitated adjustments to one's technique.

Lastly, as with the limitations of YouTube, Max describes the reduction in sociality as a main drawback to Skype lessons:

[…] when you are meeting with someone every week, or however frequently, that sort of becomes an event in your life. But now you're not leaving your house to have that same sort of discussion; again, it's that social aspect. When you're taking lessons there is a social aspect to it. And you kind of miss out on that with Skype lessons.

Virtually "Passing On" Tradition

After discussing the techniques for finding, learning and sharing songs, the interviews transitioned into a discussion of what type of cultural or "traditional" knowledge could be gained through learning songs online. The response fell into two fluid, definitional categories of *tradition*: "correct" or *traditional* playing styles versus *cultural tradition* (in the form of historical or regional information).

"Traditional" Playing Styles

All of the musicians interviewed placed varying degrees of importance in not altering the "traditional" nature of old-time songs. Adam, as a banjo performer and instructor, has made a name for himself by *reinterpreting* old-time songs, albeit in a highly proscribed and "acceptable" manner. Although, as described in the discussion of YouTube, above, some old-time musicians place incredible emphasis on not altering or modifying the "traditional" songs in any way. All of the musicians whom I interviewed said they were not preoccupied with "correctness," but in Lyle's words, certain "boundaries" are necessary:

Yeah, I have like some boundaries that I've set […] I just kind of do it by feel with every single song like I know what feels good to me and what feels like too far.

When Max was asked what significance he placed on not "altering or modifying traditional songs" he, similar to Lyle, explained there is a fine line and that modification is ultimately up to the "community":

> *It's kind of important to me. But I think the most important thing is to use the music: keep it rhythmic and make it a form of self-expression. You can't veer too much from it but you can make it you. It's up to the community I guess about how much to change it, but it's definitely about using the music as a form of self-expression. The most important part of keeping the tradition alive is keeping it current.*

Max explains that the "community" ultimately decides what is "traditional." He explains that the community can either "accept" or "reject" a version of song. The acceptance is more overt than the rejection though. Using the example of YouTube, he explains:

> *Actually every now and then you see comments like, 'that's good but it's not traditional' [...] it's more like what we don't hear is the feedback— the critical feedback. It's more people commenting on it or if the views go up— that's how you know it's good. The less you get it probably wasn't that good.*

In this way, the old-time community could be considered to have certain mechanisms of self-regulation, a topic I will explore in the "Discussion" section.

Andrew and Isaac are inspired by old-time music but align themselves more closely with the genre of "folk." Unlike the old-time musicians interviewed, they emphasize the *importance* of interpretation and modification. Isaac explains the level of significance he places on not modifying songs in the process of learning them:

> *Zero. "traditional" songs are not static things, lines, melodies, even whole stanzas move around. Before copywriting, songs were less a singular thing and more like currents in a river. They still are.*

Andrew similarly places great importance on *modifying* rather than *copying* traditional songs:

> *I think it's great to learn the traditional manner, but I wouldn't place too much importance on keeping it stagnant and not changing it. I think it's really important and really awesome that people cross genres and pick up new styles and adapt things. That's what I consider a large part of the tradition of music being passed down.*

This question of interpretation as an infringement of "tradition," as well as the self-regulation of the definition of "traditional" (such as via YouTube comments, or lack thereof) is one that will be discussed in detail in the "Discussion" section.

Cultural Knowledge

In addition to the "tradition" of playing songs in a certain style, "tradition" can be conveyed through song learning in the form of cultural knowledge. Andrew explains that in the beginning of banjo tutorial videos, the instructor will often provide some explanation of the songs origin and history. Isaac feels a more direct connection to history by physically playing the songs and experiences "a feeling for what the people who sang the songs in the past felt."

Max explains that learning old-time songs online has given him access to cultural information in an applied way:

> *Well, learning online and having access to different players in different [...] learning how each region developed its own sound is really interesting. I'd say I've learned about Appalachian culture in a more practical way.*

Lyle builds on this point:

> *I like learning about the lives of these musicians. I like learning about the history of the area and where their families came from and I like thinking about like the combination of forces that produce old-time music like the fact that it's – you know, it's music from the British Isles meeting music from West Africa, Germany, all on a different continent.*

Isaac describes one song, "Pretty Saro," that has particularly strong cultural connotations. The lyrics begin:

> *I came to this country in eighteen forty-nine*
> *I saw all their true loves but I did not see mine.*
> *I looked all around me and I was alone.*
> *Me a poor stranger and a long ways from home* [4].

The original song, "Pretty Saro" was a folk ballad from England in the 1700's. It was brought over to North America and the lyrics were modified to mirror its journey (as shown in stanzas, above) [22]. The lyrics were then changed again in 1970 when Bob Dylan recorded the song with Columbia records. In this way, "Pretty Saro" could serve a metaphor for the origins and evolution of old-time music in North America.

Isaac comments on the nature of "tradition" from a perspective of the historical trajectory of old-time music:

> *Since the academics like Childs first started collecting folk songs from the country and the first record execs started selling hillbilly music and blues, they had a certain idea about what was considered "authentic" — their perception created what we call "folk music" now. There is no pure past; everything is in flux. Sometimes when you sing a song that has been sung for many generations, you can hook up to a deeper feeling that ties you to the ancestors. You can't do it the same way though, you never can. The flux is what is so beautiful about playing music, taking what has been passed down*

and consciously reflecting it back into the world requires that the song is refracted through the contemporary musician's experiences and influences, and the context is always changing.

YouTube & Skype as "Oral Tradition"

Historically, old-time music has been passed down inter-generationally and "by ear," what is known as an "oral tradition" or "oral history." Max explains the importance of music in rural Appalachia, where people may not have kept written records: "a lot of people couldn't write their own name, so music is all they had to capture who they are."

Max goes on to explain that this music could represent their daily lives, or reflect a deeper global history (such as the song "Pretty Saro," described above):

> *[…] especially the ballad stuff […] inevitably it's part of their oral history […] But you know, the majority of songs are instrumental. Maybe they had lyrics to them at some point but they're gone now. But what do you say for instrumental songs? That's not really a part of oral history but it kind of is. It's not oral history but it's — it's a sound that passed down their identity*

Max goes on to explain that the oral tradition is one that is always changing — how it changed with the introduction of written language, with radio and now with digital media:

> *Let's say that the tech we have nowadays – even, like, capturing sound – never existed […] this music would be dead. Or, I think it would be dead. But now it's not. It's not just up to the people that live in those areas now — now everyone that is interested in it can keep it going.*

Relating this to the notion of "tradition" and how digital media can contribute to a new form of oral history, Max comments:

> *[…] the idea of tradition: there isn't one solid definition of it. People have lots of ideas about it, it's a fluid thing, and this [YouTube] is now part of it. And it happened naturally, people wanted to learn the music, and they couldn't otherwise, so this had to happen.*

Lyle views YouTube as a direct translation of an "oral tradition" because of the nature of learning music through this medium:

> *This is a form of oral tradition though it is quite different […] As far as tradition, I think at heart the communication of songs by their sound rather than by sheet music is something that's going to continue for a long time. I think especially with fiddle, it's being more commonly accepted that people learn exclusively by ear and not by sheet music. That's something that functions really well for old-time music because it's pretty much impossible to fairly represent old-time music through sheet music.*

DISCUSSION

According to the inherent nature of old-time music as one that is one of an "oral tradition" and "passed on" through watching and listening, YouTube and Skype may represent a logical transition to learning this genre of music in the digital era. As Lyle explains, the fact that YouTube inherently represents the old-time tradition of "learning by ear" rather than sheet music, may qualify it as a new medium in the (virtual) transmission of the "oral tradition."

This study demonstrates that the old-time tradition of learning is easily translated to virtual platforms and, arguably, could be considered a new form of (digital) oral tradition and oral history. Access to new digital archives is changing the way that musicians learn, while also increasing access to cultural knowledge and serving as a repository for heritage preservation. Although, it is possible that these advantages are counterbalanced by the parallel fears that these digital archives — while serving as a great form of preservation — could, ultimately, result in the "death" of the music.

Although none of the participants in this study placed great emphasis on avoiding modification, it seems their greatest fear is associated with the potential for future "stagnancy" and "homogeny" of the music as a result of YouTube. Since the old-time music community as a whole is accessing the same videos and same versions of songs, there is bound to be a reduction in variation and interpretation. As Lyle said, "when you have something like YouTube linking everybody together […] then people's styles are going to reflect reach other." He poses an interesting question for discussion:

> *[…] most of the people that started playing old-time music during the folk revival up through now are sort of faced with the question: Are we old-time musicians or are we people attempting to replicate a certain sound? And YouTube definitely factors into this because that's like the major platform for the communication of this music and the ideas that are ensconced within it.*

Some of the participants discussed "diehard" "traditionalists" who insist on sounding exactly (note-for-note) as the recordings do. There seems to be a rift in the old-time community about how far to take the concept of "traditional." Does this mean learning songs exactly as they sound in the old recordings — as Max surmised, "some people say that's how you keep the music living and some people say that's how you make it die."

But does this, in effect, make these individuals a type of "living archive" rather than a practicing musician? Where this music once was based on aural, "on-the-fly" learning, it is now learned in front of computer screen with "pause" and

"playback" features. This technology seems to be changing the very nature of the sound. As Lyle explains:

> *[...] it is really interesting seeing the way that old-time music today has a certain sound. And I always do enjoy speculating the role that social media plays in the evolution of that sound.*

Translating this speculation to a future study, it will be of interest to explore this notion of "homogenization" through the analysis of YouTube videos for technique, style and sound.

CONCLUSION

YouTube and Skype represent an unprecedented form of learning "traditional" music — and, arguably, are a new form of digital "oral tradition." From a historical perspective, these forms of digital learning in many ways represent a logical transition from the aural and visual nature of old-time music education. While serving great benefit in terms of access and free education, certain features, namely "pause" and "playback" are resulting in unforeseen effects that are changing the sound of the genre as a whole. This, in combination with the limited number of song versions available on YouTube (as the primary resource for most old-time musicians), is resulting in the "homogenization" of styles and sounds. This phenomenon calls into question the very nature of "tradition" and what is "traditional" — as something that was once fluid and flexible in old-time's history — as a side-effect of new digital technologies. Where some argue that YouTube and Skype serve to "keep the old-time tradition alive," it is not without the resounding fear that it could ultimately be what makes the music "die."

REFERENCES

1. Abdulrahman, W.I. A Study of YouTube, DIY Musicians and Entrepreneurship. 2014.
2. Black, A.M. Old-Timey Fiddler. *Appalachian Journal 5*, 2 (1978), 256–267.
3. Brown, T. Sugar in the Gourd: Preserving Appalachian Traditions. *Music Educators Journal 70*, (1983), 52.
4. Browne, R.B. Happy Love Songs. In *The Alabama Folk Lyric: A Study in Origins and Media of Dissemination*. Popular Press, 1979, 59.
5. Burgess, J. and Green, J. *YouTube: online video and partipatory culture.* Polity Press, Malden, MA, 2009.
6. Cayari, C. The YouTube effect: How YouTube has provided new ways to consume, create, and share music. *International Journal of Education & the Arts*, (2011).
7. Coolen, M. Senegambian Archetypes for the American Folk Banjo. *Western Folklore 43*, 2 (1984), 117–132.
8. Dabback, W. and Waldron, J. Circles of learning: Appalachian mountain music and issues of tradition in the twenty-first century. *International Journal of Comunity Music 5*, 3 (2012), 252–263.
9. Dammers, R.J. Utilizing Internet-Based Videoconferencing for Instrumental Music Lessons. *Update: Applications of Research in Music Education 28*, 1 (2009), 17–24.
10. Dillon, S. and DeVito, D. Creating Interactive Performances Over The Internet. *Education Technology Solutions*, (2011).
11. Frisch, M. Notes on the Teaching and Learning of Old-Time Fiddle. *Ethnomusicology 31*, 1 (1987), 87–102.
12. Hoare, M., Benford, S., Jones, R., and Milic-Frayling, N. Coming in from the Margins: Amateur Musicians in the Online Age. *CHI*, (2014), 1295–1304.
13. Kenny, A. "The Next Level": Investigating teaching and learning within an Irish traditional music online community. *Research Studies in Music Education 35*, 2 (2013), 239–253.
14. Kruse, N., Harlos, S., Callahan, R., and Herring, M. Skype music lessons in the academy: Intersections of music education, applied music and technology. *Journal of Music, Technology & Education 6*, 1 (2013), 43–60.
15. Kruse, N.B. and Veblen, K.K. Music teaching and learning online: Considering YouTube instructional videos. *Journal of Music, Technology and Education 5*, 1 (2012), 77–87.
16. Leary, J.P. Old Time Music in Northern Wisconsin. *American Music 2*, 1 (1984), 71–87.
17. Navas, E. Regressive and Reflexive Mashups in Sampling Culture. In S. Sonvilla-Weiss, ed., *Mashup Cultures*. Springer-Verlag, 2010, 157–177.
18. Nichols, E., DuHadway, C., Aradhye, H., and Lyon, R.F. Automatically Discovering Talented Musicians with Acoustic Analysis of YouTube Videos. *2012 IEEE 12th International Conference on Data Mining*, (2012), 559–565.
19. Peluso, D.C.C. *Informal and Participatory Cultures in Music Education.* 2007.
20. Rudolph, T. and Frankel, J. *YouTube in music education.* Hal Leonard, Milwaukee, WI, 2009.
21. Satterwhite, E. "That's What They're All Singing About": Appalachian Heritage, Celtic Pride, and American Nationalism at the 2003 Smithsonian Folklife Festival. *Appalachian Journal 32*, 3 (2005), 302–338.

22. Sharp, C. *English folk songs from the Southern Appalachians.* Oxford University Press, 1952.

23. Waldron, J. Exploring a virtual music 'community of practice': Informal music learning on the Internet. *Journal of Music, Technology and Education 2*, 2009, 97–112.

24. Waldron, J. Locating Narratives in Postmodern Spaces: A Cyber Ethnographic Field Study of Informal Music Learning in Online Community. *Action, Criticism & Theory for Music Education 10*, 2 (2011), 32–60.

25. Waldron, J. YouTube, fanvids, forums, vlogs and blogs: Informal music learning in a convergent on- and offline music community. *International Journal of Music Education 31*, 1 (2012), 91–105.

26. Ward, M. *Old Time Fiddle Candy Girl.* 2011.

27. Ward, R. *"Appalachian Punks": A Resurgence of Tradition.* USA, 2014.

28. Whisnant, D.E. Thicker than Fiddlers in Hell: Issues and Resources in Appalachian Music. *Appalachian Journal 5*, 1 (1977), 103–115.

29. Whitaker, J. a., Orman, E.K., and Yarbrough, C. Characteristics of "Music Education" Videos Posted on YouTube. *Update: Applications of Research in Music Education 33*, 1 (2014), 49–56.