"Our fiddles sound big. That's the way I think it should be": Cape Breton Fiddling and Amplification Practices

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Abstract: This article is a case study of amplification in Cape Breton fiddling, exploring its relationship to material culture, globalization, and aesthetics of place. Amplified performances create a high-volume, live aesthetic closely associated with local dance halls that differs significantly from acoustic performances. While the technology used in amplifying Cape Breton fiddles is standardized, it is subject to debate among musicians. These critiques pertain to discussions of technology that are part of longstanding discourses of modernism and romanticism. As such, this technoscape shapes the sound of Cape Breton as a place, through the consumption, negotiation, and production of global flows.

Résumé : Cet article est une étude de cas de l'amplification du son du violon au Cap-Breton, qui explore la relation de cette pratique à la culture matérielle, la mondialisation et l'esthétique du lieu. Les interprétations amplifiées créent un fort volume dans les spectacles « live » dont l'esthétique est étroitement associée aux salles de danse locales et qui different fortement des interprétations acoustiques. Bien que la technique utilisée pour l'amplification des violons du Cap-Breton soit standardisée, elle fait l'objet de débats parmi les musiciens. Ces critiques relèvent des discussions au sujet de la technologie qui font partie des discours de longue date sur le modernisme et le romantisme. En tant que tel, ce « paysage technique » façonne le son de Cap-Breton en tant que lieu, par l'intermédiaire de la consommation, de la négociation et de la production de courants mondiaux.

As an active member of the Cape Breton traditional music scene for over a decade, I have frequently encountered how amplification affects traditional musicians. Whereas some violinists outside Cape Breton may choose varying methods of amplification, or even avoid it altogether, the amplification practices of Cape Breton fiddlers are quite standardized, having been shaped by function and local aesthetics. As such, Cape Breton fiddlers relate to violin timbre and audio technology in a distinct way, differently from other traditions.¹The significance of audio technology in Cape Breton fiddling is noted by scholars such as Glenn Graham (2006:72) and Burt Feintuch, who writes, "Nearly all the fiddlers who play in public use L. R. Baggs² transducers to amplify their instruments, and nearly all the pianists use electric keyboards" (2004:93-94). However, this is a topic that has not been deeply examined by scholars, and has largely remained a cursory observation. In an effort to address the topic, this article will serve as a case study of the role of audio amplification in the Cape Breton fiddling tradition. I will focus on the violin pickups produced by L. R. Baggs in particular, which have become the norm for professional performances, and are also common in vernacular settings, such as house parties.

This article is also part of a larger study for my doctoral research, which discusses Cape Breton traditional musicians as professionals and tradition bearers, exploring how they negotiate their identities in the colliding worlds of vernacular and professional music making. The majority of my informants are professional musicians who make their livings from music, and are among the most active musicians in the region. They voiced strong opinions about amplification and timbre, invoking discourses of romanticism and modernism, along with those of tradition and sense of place. In this way, this tradition of amplification has become an expected, valued, and sought-after local aesthetic. These uses of audio technology demonstrate how mass-produced, material products can be appropriated and imbued with highly localized meaning.

Discourses on Audio Technology and Music

Audio technology has been a source of contention since the emergence of the gramophone, which is, in many people's minds, the beginning of audio technology itself. Very quickly, recording technology brought about new ideas concerning audio fidelity and authenticity, issues that had not been relevant prior to sound reproduction (Benjamin 1968; Schafer 1977; Feld 1994; Auslander 2008 [1999]). By considering audio reproductions as being situated within a complex network of social processes, Jonathan Sterne addresses changing attitudes toward audio technology, revealing aesthetics of audio fidelity and listening practices as cultural constructs (2003). In fact, he demonstrates that notions of audio fidelity are so changeable that, "after 1878, every age has its own perfect fidelity" (222).

Sound reproduction is a social process that is also intrinsically linked to

physical objects. Folklorist and material culture scholar Simon Bronner offers the idea that "people use objects as symbols. Each person recognizes objects as metaphors for human experience and value" (1985:23). As such, the physical objects associated with amplification can take on symbolic meaning, as in the case of the electric guitar, which is associated with rock 'n' roll, framing the instrument as loud, rebellious, and subversive. This symbolic meaning was evident by the reaction and debate evoked when Bob Dylan "went electric" at the Newport Folk Festival in 1965 (Waksman 1999:1). The controversy in the United States surrounding Dylan's shift from acoustic to electric guitar was paralleled by similar processes happening in England, which "developed partly as a counteraction to the restrictive 'authenticity' of the folk club culture" (Sweers 2005:11). The linking of authenticity with acoustic instrumentation is discussed at length by Peter Narváez, which he refers to as the "myth of acousticity." He writes,

This myth pits the supposedly superior, authentic, "natural" sound of the traditional wooden guitar, as perceived by sensory media (ears and eyes), against the inferior amplified sounds of guitars employing electronic magnetic pickups, sound processors, and amplifiers.... In addition, however, the myth of acousticity, which was embraced during the folk boom, attaches ideological signifieds to the acoustic guitar, making it a democratic vehicle vis-à-vis the sonic authoritarianism of electric instruments. (2012:200)

While the electrification of instruments is commonplace today, these discourses surrounding the difference between acoustic and electronic sounds remain, particularly in relation to "traditional" music.

The "myth of acousticity" helps to explain how amplification has come to be naturalized in certain ways. Just as electric instruments have been positioned as inauthentic or untraditional, microphones and pickups have become widely accepted and are at times an invisible part of a performance. Acousticity and amplification are often conflated; a purely acoustic performance would involve only acoustic instruments without any microphones or speakers, though in popular discourses, an acoustic performance means the use of acoustic instruments equipped with pickups and amplified through a PA system. Boden Sandstrom observes,

Most of the music we hear has been electronically altered, perhaps several times. In fact, the recent trend for major popular musical groups in the United States to perform "unplugged" – with lesser but varying degrees of electronic amplification – is an attempt to get back to the basics. It indicates the pervasiveness of electronic alteration, enhancement, or amplification of sound. (2000:289)

Various components of amplification, like microphones, PA systems, and pickups may be viewed (somewhat misleadingly) as transparent in certain situations, as they can become an expected and naturalized part of live performance.

This process of technological naturalization is, in fact, a way in which groups adopt and make sense of technological advancements. Hermann Bausinger asserts that even something as simple as the creation of fire was once considered "technology," though today it is something that has become naturalized (1990:18). In this way, what we do and do not consider "technology" is entirely relative. If we are to take Bausinger's argument a step further, the discourses of what is or is not construed as "technology" sheds light on how a group defines its traditions; the more naturalized an aspect of technology becomes is an indication of how accepted that technology is.

Amplification and Cape Breton Fiddling

Settled by the Mi'kmaq, French, English, Irish, and a sizable group of Highland Clearances-era Scottish immigrants, northeastern Nova Scotia's Cape Breton Island is home to a rich fiddling tradition (McKinnon 1989; Doherty 1996; MacInnes 1997; Feintuch 2004; Ivakhiv 2005; Graham 2006). Although Cape Breton fiddling has its roots in Scottish and Irish traditional music, today it has its own identity separate from its European counterparts. In the 1990s, it, and "Celtic" music as a whole, received substantial attention within the international music industry (Taylor 1997). Today, Cape Breton fiddling continues to be an important part of the Nova Scotia music scene. The tradition's prominence makes it a key aspect of tourism marketing, and is often seen as a symbol of the regional identity (Lavengood 2008). In its current form, Cape Breton fiddling is primarily a duo performance tradition centred on a fiddler and piano accompanist; the tradition has a history of public dances and concerts, and its commercial recordings date back to the 1930s.

Over the past two decades in Cape Breton, violin amplification has created a sound that, while most common at dances, is pervasive in virtually all live performance contexts due to a combination of convenience and aesthetics. This amplified sound is high-volume, bassy, full-bodied, and highly compressed. Authoritative and "electric" sounding, though at times lacking clarity, this amplified violin sound differs significantly from the sound of microphone amplification, which provides a more detailed, "natural," and somewhat "thinner" timbre. The amplified sound created by violin pickups has become iconic of the dance tradition and the fiddling tradition as a whole in Cape Breton.

Although the amplification that I am discussing includes other components such as preamps, amplifiers, and speakers, for the purposes of this article, I will focus on the pickup in particular, and by extension, the preamps that normally accompany them. So, while my informants and I discuss this in terms of pickups, the sound is really the combination of the two. Although used for some rudimentary equalization, preamps are used primarily as a signal boost, making which specific brand, model, or even technique is associated with it less important than the fact that it is simply there, being used by the fiddler. Amplifiers and speakers also affect the sound of a violin, but are also widely used in many other circumstances. The sound systems used by Cape Breton fiddlers, be they owned privately or by music venues, are not unlike those found in performance venues across North America. The distinctiveness of tone created by a fiddler's pickup or microphone is easily heard regardless of the sound system he or she uses, making the sound system less significant in shaping violin timbre than the pickup itself.

Amplification varies from one musical tradition to another, yet these differing conventions often rely on the same technology that is disseminated and used on a global level. Technology is "indigenized" (Appadurai 1996:32) as musicians consume and appropriate globalized material culture, assigning deep local significance to it. This process is perhaps most accurately described as "glocalization," a term used by Roland Robertson to provide a nuanced description of contemporary globalization (1995). Instead of polarized notions of the global and local, Robertson construes globality and locality as overlapping categories in which homogenization and heterogenization occur simultaneously. In a glocal world, sense of place still remains significant. As Yi-fu Tuan writes, "place can acquire deep meaning for the adult through the steady accretion of sentiment over the years" (2001 [1977]:33). This local significance, however, is culturally constructed, causing the meaning and use of audio technology to differ substantially according to context.

In short, it is necessary to consume audio technology in order to produce music, which is then in turn consumed; the components of the production of music may be the same in different contexts, but the product and meaning therein may be drastically different. In this way, technology is entrenched in performance issues, as well as social and consumptive practices. This is consistent with Paul Théberge's discussion of how the lines between production and consumption are blurred in the contemporary music industry (1997). Bluegrass offers an excellent example of an amplification tradition that relies on standard equipment – microphones and a PA system – in a genre-specific way. Until the late 1960s, it was standard practice for the entire band to stand around one centrally placed, omnidirectional microphone. In a fluid act of musicianship and audio engineering, each musician controlled his or her level in the mix by his or her proximity to the mic. While this practice fell out of favour for several decades, the centre mic has once again become commonplace. However, in contrast to its original use, today the centre mic is often used in conjunction with other microphones (Finch 2011:200).

In Cape Breton, amplification practices are considerably different. Historically, dances were played with Highland bagpipes, an extremely loud instrument. As fiddles became a more popular choice, often several fiddlers played in order to be heard over the dancers. Prior to amplification, it was commonplace to retune the violin to increase the volume. This practice is said to be the basis for what is known as "High Bass" tuning, for which the violin's lower strings (G and D) are both tuned up a whole step to give the overall tuning of AEAE (lowest to highest). The idea behind this is that it allows fiddlers to easily play a melody in octaves, particularly if the tune was a pipe tune, and therefore limited in range to a major ninth. Today, High Bass tuning is generally only employed for a self-consciously "traditional" performance.

Amplification became important to fiddlers playing publicly as early as the 1940s, and fiddling great Buddy MacMaster identifies fellow fiddler Winston Fitzgerald as one of the first traditional musicians to have a sound system in Cape Breton (MacInnes 2007:83-84). These early sound systems have remained a part of the tradition's cultural memory and anecdotes of MacMaster's own old "horn" loud speaker are common today. Over the years, sound systems became progressively more common, and, by the 1990s, owning one was a necessity for fiddlers who were performing publicly on a regular basis. Cape Breton fiddler and academic Glenn Graham comments,

Back in the day – it's not like I'm really old or anything – but you had to figure out by asking around and by listening to people what's a good sound system to buy, and then you had to, through trial and error, figure out how to use it. A sound system was expensive. But if you were going to be playing regularly back in the '90s, you had to have your own sound system, or you'd have to be borrowing it from someone, or the people that hired you would have to look around to find a sound system for you, so it was more difficult. So maybe you were more apt to get more gigs because you had your own system, and if you were, well, decent enough to play. (Interview, 24 June 2011)

Today, music venues for traditional musicians in Cape Breton are often equipped with house systems.

Fiddler and piano player Kimberley Fraser shares this opinion about the importance of socially spread, word-of-mouth knowledge in acquiring a sound system and comments on the popularity of the L. R. Baggs system: "I think part of it too is one person gets it and everybody else follows suit. ... When I was a kid, I didn't know any different. I was eleven when I got mine, or twelve. Everybody did that, so that's the system that I got" (interview, 28 July 2011). Of course, the influence of prominent tradition bearers cannot be underestimated in this context. This discussion of word-of-mouth knowledge and advice is significant in that it acknowledges that amplification practices are not entirely based on aesthetics. They are, rather, partially due to the fact that these conventions are socially sanctioned. Choices of audio technology, therefore, have to do with local, communal knowledge, further connecting these decisions to community and place.

Cape Breton fiddler and multi-instrumentalist J. P. Cormier notes that the introduction of amplification has had a concrete influence on the Cape Breton fiddle style:

That pickup changed our touch. I think it made us have a lighter touch. [...] That immensely affected the whole style, *I* think. I don't know if other players realize that or think that way, but I know I played differently when I didn't have to kill myself to be heard. And it was like, "Oh ... *now*. Watch." You get a lot more subtleties. (Interview, 8 June 2012)

In an oddly similar, yet contrasting, manner, Newfoundland fiddler, Emile Benoit, stressed that during his formative years as a musician, he had no access to amplification, which resulted in him becoming a very loud player, something that shaped his style for the rest of his life (Quigley 1995:168). Glenn Graham offers,

I think [amplification] is crucial because of the type of music and the social context that it's being played in. We're not sitting in either a small room or a small theatre, although this happens there too with these types of amplification that we're talking about, but the audience isn't sitting down in absolute silence, listening to you play a three part series and then they clap at the end of it and that's it and that's all they're hearing. You're surrounded by people eating, people drinking, etcetera. And it's loud. You're in loud rooms and people want to hear you, so it has to be overcome. You just compensate, and just like we're compensating with technology now, they compensated by adding another fiddler to add the amplification back before they had this. So, in a way, we're just continuing what they did, where you're finding solutions to the social context that you find yourself in. (Interview, 24 June 2011)

In Cape Breton, fiddlers now rely on a standardized method of amplification, which, despite being a well-established convention, is still subject to critique and debate. Perhaps the most significant aspect of these amplification practices is that microphones are rarely used at a Cape Breton fiddling performance to amplify anything other than an upright piano or musicians speaking to the audience. Pickups are the conventional choice for violin amplification, but there has been a progression of preferred violin pickups over the years. Glenn Graham explains:

A thing that was common in Cape Breton for a while, I guess probably in the '70s and '80s were these DeArmond pickups. They stuck on the fiddle, and then you put an elastic band over it. It kind of gave the fiddle a harsher type of sound. So, because of that, people said, "Hmmmm.... How are we going to get the fiddle to sound better?" So ... equalizers. So they get these little boxes and they put that with it.... And people started using a Fishman pickup. And then a Barcus Berry. And then the L. R. Baggs pickup showed up.... But now the majority of fiddlers are using these things called L. R. Baggs pickups. (Interview, 24 June 2011)

Graham details the progression of a contemporary fiddle sound that is constantly "improving." While this is valid description in one sense, this modernist explanation of audio technology is precisely what Sterne critiques (2003). Sterne contends that changes in audio technology cannot be viewed objectively in terms of incremental progress, but are bound by the social processes of which they are a part. For instance, audio technology is not merely a mediator that reproduces a copy of the original sound, but is central to a musical performance itself. He writes, "Without the technology of reproduction, the copies do not exist, but, then, neither would the originals.... The possibility of reproduction precedes the fact" (219).

J. P. Cormier explained that prior to his "obsession" with Cape Breton fiddling, as a bluegrass player, he played into microphones exclusively, either on stage or in the studio. Since his transition to Cape Breton traditional music, he has changed his amplification methods, almost counter-intuitively:

I play a beautiful, \$10,000 Roth [violin] ... with a Baggs on it. And we all know that the Baggs bridges are shite. They're terrible bridges. If I put a *real* violin bridge on that thing, and put it in the right place, and took that giant Carpenter Jack³ off of there, the violin would be three times louder. You could play it through an SM57 or an SM58.⁴ Either one. And it would blow the walls out of the place. But there's just something ... I got to be able to plug in ... I got to be able to plug in. Plug me in, plug me in! (Interview, 8 June 2012)

Cormier raises a point that is sometimes made by non-Cape Breton musicians. Violin pickups are often undesirable to fiddlers outside of the Cape Breton fiddling tradition, who are not only unwilling to alter their violin's tonal characteristics by installing a permanent pickup, but prefer the sound of a microphone. On the other hand, Cormier is not unique: a number of Cape Breton fiddlers play highly valuable instruments, yet amplify them in a way that diminishes the nuances in their sound. It seems that, somewhat paradoxically, the sound and function of the L. R. Baggs pickups takes precedence over the sound of the violin itself.

I have found, through personal observation, that this is frequently the case with violinists who perform in Classical settings in addition to folk music circles. Although convenient for a "traditional" performance, a permanent pickup would be inappropriate both sonically and visually in the context of an orchestral performance. With respect to other traditions, L. R. Baggs pickups and similar systems are standard in Prince Edward Island fiddling and in high-volume band settings with bass and drums. Violin pickups are sometimes used in Canadian old time fiddling scenes, but microphones generally seem to be more common.

Cape Breton traditional piano player Jason Roach articulated the role that technology has played in creating a sense of place:

You don't go into the Doryman⁵ and hear a miked fiddle. That

would be so wrong. And it's been that way for a very long time, that everybody's been using preamps and keyboards. I mean, it would be wrong to go in there and hear something that sounded like anything but [that]. It's become the Cape Breton sound, and I don't know why you would want to change that. (Interview, 18 October 2010)

Roach feels very strongly about this, and his opinions have been the source of disagreements when working with non-Cape Breton musicians. "I've gotten in heated discussions about that, over how fiddles should never be miked. It kills me! Our fiddles sound big. That's the way I think it should be," he explained (interview, 18 October 2010).

Louise Meintjes explores how seemingly simple aspects of audio engineering like choosing to record an instrument with a microphone instead of running the signal on a direct line can have significant connotations in representation and the way that sense of place is constructed musically. In Johannesburg, South Africa, audio recording engineers prefer to record electric bass through a direct input, but the musicians often insist that the bass amp should be recorded with a microphone (Meintjes 2005:36). These disagreements relate to differing aesthetics, where the musicians, typically from black, working-class backgrounds, understand their music through live performance, gravitating toward a loud wall of sound found in traditional local performance. The typically white, middle-class engineers, on the other hand, value clarity and the hyper-realistic aesthetic of the international professional music industry.

Jason Roach elaborated on the amplified sound, mentioning that electric keyboards were also important to this: "I'm not necessarily a piano player.... I play the RD 700⁶ with my own little tweaks. ... It has a lot to do with the tone of those keyboards. It's not a piano tone, you know? But that's exactly what I want to play" (interview, 18 October 2010). His reference to "tweaks" is an acknowledgement of how he equalizes his keyboard prior to sending his signal out to the PA, as well as his own unorthodox mechanical alterations and repairs. This can be compared to the way that audiophiles add their own tweaks to their stereo systems or how guitarists personalize their instruments as a means to create a sense of personal attachment to otherwise impersonal, mass-produced commodities (Everett 2003; Perlman 2004; Waksman 2004).

Some Cape Breton musicians prefer acoustic pianos, but as Roach explained, the sound of an electric keyboard is now recognized in and of itself, and valued accordingly. Feintuch feels that in the Cape Breton fiddling tradition, the electric piano "further adds to the distinctiveness of the sound, as the keyboard has both a crispness and a characteristic not-quite-a-piano quality. The keyboard and the fiddle transducers combine to produce a sound that is strong and assertive" (2004:76). Glenn Graham recalled that

there was an FP8⁷ piano type that was very popular among piano players in the '90s. Some of us, we're so used to hearing tapes with that sound on it, we're really happy to get to play with someone who's still using one of these FP8s because that's what you're so used to hearing. (Interview, 24 June 2011)

Acoustic and amplified aesthetics and timbres may be relatively standardized, but these conventions are not fixed. There is not absolute consensus regarding these aesthetic differences and when each is appropriate, making these ideas the topic of compromise, negotiation, and debate.

Critiquing and Negotiating Current Conventions

While current amplification practices are fairly uniform, there is a wide range of opinions on such technology. As Leslie Gay writes, "The relations between technologies and their cultural use are complex and interrelated, with uses and meanings constructed and contested through the discourse of daily lives, through image schemata and metaphorical shifts" (1998:91). In the context of Cape Breton fiddling, some individuals may uphold these amplification practices due to social convention and convenience, but the existence of differing aesthetic values within the tradition must also be addressed. As scholars such as Marc Perlman (2004) and Sterne (2003:270-78) explain, competing aesthetics do not refer to objective judgements of quality, a point that is evident in the divide between analog and digital audio formats. Sterne argues,

Nobody disputes the clarity of digital reproduction, but, to many ears, the old vacuum-tube equipment sounds better, and the result has been an explosion in the vintage and used market. Similarly, audio recording engineers routinely select microphones with an incomplete or uneven frequency response in order to record a more appealing sound (2003:277).

In Cape Breton, two separate soundscapes emerge. The first, the "Baggs" sound that I have discussed, is attached to some of the most characteristically

"Cape Breton" performance contexts like dances, pubs, and even house parties. The second is what my informants refer to as a "natural" sound, associated with a purely acoustic performance, which is an aesthetic sometimes associated with concert halls or commercial recordings. These two different styles of amplification, then, directly correspond to the needs and values of performance styles in a given context. Although the sound of the L. R. Baggs violin pickup is certainly a dominant sound in many contexts, a more "natural" sound, be it created acoustically or amplified with a microphone, is also recognized and valued. Again, the "myth of acousticity" is relevant, as few musicians distinguish between the sound of a purely acoustic violin sound and one created by a microphone. As audio technology changes, however, this "natural," acoustic sound picked up by a microphone has slowly begun to gain more support, becoming more prominent in some performance contexts.

Paul MacDonald, a local guitarist, audio engineer, and self-professed audiophile, is an advocate for acoustic music and preserving a musician's natural, unprocessed tone. "L. R. Baggs pickups sound like that," he said, holding his nose between his thumb and forefinger. "It's like holding the violin's nose. It's a killer. I really hate it and I wish at least a few fiddlers would try something else. But people seem stuck on them" (interview, 6 July 2011). MacDonald feels that violin pickups have created a more homogenized violin tone, making musicians sound less unique. He continues,

It's not even 50 per cent of the violin's sound.... It's so compressed that to me it just doesn't really do any justice to the Cape Breton fiddle sound. It's become a crutch. I have these arguments with certain players about it where they say, "Oh, well, I like the security of it." And I say, "Well, what do you mean?" "Well, when I'm at a dance I like feeling secure that I'm going to be loud enough." And I say, "Well, you could learn to use a microphone too!" (Interview, 6 July 2011)

While his opinions are not held by all musicians in the area, there are a number of like-minded musicians who share his passion for preserving an acoustic violin tone. As such, he is a sought-after engineer for commercial recordings which he makes in an on-location, field-recording style. Being interested in acoustic sound, he is quick to stress more "traditional" ways in which the music would be heard. For instance, many Cape Breton homes in the late 19th and early 20th century would be furnished with tamarack or hardwood floors and walls of Douglas Fir or plaster, creating an excellent acoustic environment, something that was once highly valued. MacDonald explains,

Now, that tradition's gone too. Room acoustics aren't even important to people anymore. For Godsakes, in Inverness County, they plug in at house sessions now. I recorded house sessions where you couldn't hear yourself talk. What's that all about? That's how much things have changed. I couldn't believe that night. A PA system in a room no bigger than this. And you still couldn't hear yourself talk. (Interview, 6 July 2011)

His opinions demonstrate two important points. The first is that these amplification methods of pickups and electronic keyboards are indeed an unavoidable aspect of today's Cape Breton fiddling tradition. Secondly, it reminds us of individual agency. Although there are various standards that are widely accepted in amplification, there is still room for resistance against them. As with many aspects of culture, these conventions do not represent a perfect consensus, but are the result of the negotiation of various values, motivations and discourses. Amplification practices have changed substantially over the years, and are likely to continue to change; they have not come to pass accidentally, but through constant evaluation and deliberation by individuals.

Fiddler Colin Grant argues that amplification is a necessary part of current performance contexts, and microphones are not always practical for fiddlers:

Knowing the potential for feedback onstage when using, say, an SM57 coupled with necessary monitors, it limits us to lower stage volume, which would inevitably make both the fiddler and accompanist play differently. I wonder if we've worked ourselves into a corner by adopting the Baggs pickup as standard. It would be difficult for me, at this point, to go back to a lower volume onstage in order to preserve the tone through a condenser mic. (Personal communication, 3 August 2011)

Grant added that he felt the L. R. Baggs system has become such an important part of live performances that other methods of amplification may not be welcomed in all situations:

I think that a fiddler using a high-tech mic [condenser microphone] would get a little bit of flack from the community of listeners and players for having a high-tech, fancy invention ... and then there'd be the problem of it just sounding too much like a CD,

and not having that sound that we have developed with L. R. Baggs. (Interview, 15 August 2010)

Nevertheless, in recent years an increasing number of fiddlers have begun experimenting with alternatives such as condenser microphones, though, at the moment, they remain a minority. To my knowledge, these individuals have not endured any significant criticism. Grant's anticipation of resistance speaks to the extent to which the L. R. Baggs pickup is an established convention within the tradition.

The exploration of alternative amplification methods is due at least in part to their interaction with musicians from other traditions from around the world. Kimberley Fraser explains that "Celtic Colours⁸ was a big eyeopener for that because you get all these musicians over from Europe that have these nice mic systems. And the difference in the sound, it's just amazing" (interview, 28 July 2011). It is noteworthy that Fraser (and a number of other informants) discuss learning about audio technology in the context of international music festivals, be it at home or abroad. The role that music festivals play in exposing musicians to various amplification practices further ties such knowledge and conventions to community, albeit an international one at times.

Despite the pervasive use of L. R. Baggs pickups and their amplified tone, fiddlers still value the natural, acoustic tone of their instrument. In fact, some fiddlers dislike the sound produced by a pickup but still use one, viewing a pickup as the most viable option for amplification. Chrissy Crowley notes the difference between an acoustic sound and that of an amplified one but acknowledges that practicality and audience expectations are an important part of the reason that music is amplified in this way. She offers, "I prefer the sound of an acoustic fiddle over any sound at all. But for the audience's sake, what they're used to and what they want is an L. R. Baggs pickup – an amplified sound" (interview, 16 October 2010). It is noteworthy that both Grant and Crowley mention the role that audience taste can play in determining amplification practices. While not being directly responsible for such decisions, the aesthetic preferences of the audience can be highly significant. Fiddlers rely heavily on the support of a local fan base in order to secure gigs.

However, both taste and function can change according to context. Kimberley Fraser explained to me that she had considered purchasing a new system for specific venues:

Now, for myself, being more aware, I'd actually like to get a mic

for playing something more like a theatre, rather than a Baggs, because it is very electric [sounding]. It's very hard to get away from that electric sound. So I'd like to get a mic. It would be nice to have both systems. To have a mic for one thing, then having a pickup.... Because you don't want a mic when you're playing for a dance, you want something where you can just plug in and go. And [you] don't have to worry about feedback or anything like that. (Interview, 28 July 2011)

Timbre is a significant consideration for violin amplification. The sound created with the L. R. Baggs pickup, as is evidence in these descriptions, is loud, bassy, and full, though it may at times lack clarity. J. P. Cormier explains that both versatility and timbre are important to how he amplifies his violin: "If I was going to just play concert halls.... Yeah, I'd use a DPA mic.⁹ No question. But I don't. I have to play the violin everywhere from beer halls to amphitheatres. It just doesn't work. The L. R. Baggs will work anywhere" (interview, 8 June 2012). These are opinions commonly voiced by local musicians – while some musicians may appreciate the clarity and detail of a microphone, they find them to be ineffective in a dance or pub setting where they must compete with considerable background noise. For some of these musicians, this disconnect is negotiated by the use of both a microphone and pickup simultaneously, to have both clarity and volume.

The role that dance plays in the fiddling tradition should not be underestimated, and has been discussed by numerous musicians and scholars alike (Feintuch 2004; Doherty 2006:105-106; Graham 2006; Herdman 2010; Melin 2012). The prominence of dance in the fiddling tradition is evident in many of my informants' comments, as their discussions of amplification frequently also addressed dances, clearly positioning them as a significant, perhaps even definitive, aspect to the tradition. Chrissy Crowley comments, "if you don't have a really good sound guy, those [condenser microphones] sound so quiet that you don't get the feeling you would normally get, say, in a dance hall with the L. R. Baggs" (interview, 16 October 2010). She describes the sound of a fiddle in a dance hall as being iconic of the Cape Breton fiddle sound, and this iconic sound is produced in part with the L. R. Baggs pickup. For Crowley, the definitive Cape Breton fiddle sound (at least in a live setting) is one that inhabits the imagined space of Cape Breton dance halls, and is a sound that is loud and amplified. This point is echoed by a fellow fiddler, who explained that when he plays for tourists, he tries to play in a manner he considers traditional: "I play what I would play at a dance in West Mabou,¹⁰ because *that* is what Cape Breton is" (interview, 5 July 2011).

The use of these amplification practices creates an intertextual performance that references the dance hall of the collective Cape Breton imagination. Such a connection between music, space, and imagination is consistent with Peter Doyle's discussion of how sound can shape an imaginary space (2005). In this way, it is apparent that although amplification is no longer exclusively linked to dances, its use can be regarded as an implicit reference to them. Moreover, the aesthetics of amplification changed substantially over the years but have now become fairly stable. This sound connects performances to the imaginary space of the dance hall, which is, according to some dominant discourses, iconic of the tradition and region as a whole.

Conclusion

It is my intention that this case study may lay the groundwork for further study in this area, and is by no means definitive or exhaustive. The L. R. Baggs pickup, while the focus of this article, has served as an entry point to the topics of audio technology and timbre, chosen because of its widespread use, and relatively recent introduction into the Cape Breton music scene. The study of timbre and audio technology in Cape Breton fiddling can be developed as a whole, with the history of amplification in Cape Breton, discussion of nonamplified violin timbre, and piano amplification all being topics worthy of inquiry.

Technology is commonly understood as being antithetical to tradition. Although this is a gross oversimplification, it speaks to pervasive and enduring discourses that align technology with modernist ideologies of progress, and frame tradition as belonging to a static, romanticized past. Through an analysis of amplification in Cape Breton fiddling, we can see how technology has become an integral part of the tradition. In this way, seemingly insignificant, even ubiquitous, technological devices can become incredibly important within specific contexts. As products of glocalization, these global, mass-produced commodities are locally appropriated and used to reinforce sense of place and regional identity. Violin pickups have come to signify live performance and, more specifically, dances. L. R. Baggs pickups are visible additions to the instrument, which serve as a marker that identifies the fiddler as both a public performer and as a Cape Bretoner.

Notes

1. Although this study may also be relevant to fiddlers in Prince Edward Island who commonly use similar methods of amplification, the study of this specific relationship falls outside the scope of this article. Likewise, I am not able at this time to compare Cape Breton amplification methods and meanings to those of other traditional Canadian fiddle contexts, such as Newfoundland, Ottawa Valley, Québécois, or Métis.

2. L. R. Baggs is a small company based in California specializing in the amplification of acoustic instruments.

3. A Carpenter Jack is a quarter-inch output created by violinist Fred Carpenter that attaches to the body of the violin with a clamp similar to those used for chinrests.

4. The SM57 and SM58 are microphone models made by Shure. They are industry standards for amplifying instruments and vocals, respectively.

5. The Doryman Beverage Room is a traditional music venue in Cheticamp, Cape Breton. Over the last thirty years, its weekly matinees have showcased some of the most respected of the island's tradition bearers.

6. The RD keyboard series is manufactured by Roland and are an industry standard for professional electric stage pianos.

7. Roland's FP keyboard series is relatively similar to the RD series, but intended more as a home piano. Also a standard among professional musicians, FP keyboards are equipped with speakers and fewer electronic effects.

8. The Celtic Colours International Festival is an annual nine day event that takes place each October, beginning Thanksgiving weekend. The festival features concerts and community cultural events at over one hundred different venues across Cape Breton Island.

9. DPA Microphones makes a series of miniature omnidirectional condenser clip microphones for violins and other acoustic instruments.

10. West Mabou is home to the only weekly, year-round square dance in Cape Breton. Started by Margie and Jimmy MacInnis, these dances represent an effort to foster an interest in traditional music and dance, particularly among the younger generation of the community.

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