Music, Multimedia, and Spectacle:
The one-man band and audience relationships in the digital age

Introduction

The one-man band is a phenomenon that is at once familiar and unknown. French sociologist Jean-Marc Leveratto uses the term "*lieu commun de la culture*" to describe archetypes that have been created and popularized through a process of invention, evolution, and commodification. These archetypes, once standardized, take on an existence outside of and beyond their performances (Leveratto 2006). Since its emergence in the second half of the 18th century, the one-man band has become a shared frame of reference, and use of the term has passed into common parlance to refer to any one person doing many different things (December 2012), above and beyond its reference to the lone multi-instrumentalists seen in 19th century engravings, early 20th century vaudeville acts, and movies such as such as Walt Disney's *Mary Poppins* (1964) or the Pixar animated short *One Man Band* (2005).

Despite the familiarity of the one-man band (or perhaps because of it), a detailed definition of the phenomenon proves hard to find. The subject has for the most part managed to escape prolonged study by academia[1], though it has received some documentary treatment in films and other publications[2]. Most of the few existing works on one-man bands are by or for musicians in general and one-man bands in particular[3]. The phenomenon itself can be found described in

1. With the noticeable exception of a few short articles by French museum scholar and ethnomusicologist Florence Gétreau. See *Gétreau, F. and M. Colardelle (1997). Musiciens des rues de Paris: Musée national des Arts et Traditions populaires, 18 novembre 1997 - 27 avril 1998*. Paris, Réunion des Museés Nationaux. and Gétreau, F. (2000). "L'homme orchestre : deux siècles de tradition française." *Revue du Louvre : la revue des musées de France* 50 (5): 67-76.

2. See Emerson, D. and H. Emerson (2003). Let Me Be Your Band. for the former and Austen, J. (2002). "One Man Band Encyclopedia." *Roctober!* (34): 10. for the latter.

3. See Rammel, H. (1990). "Joe Barrick's one-man band : a history of the piatarbajo and other one-man bands." *Musical Traditions* 8. And Harris, D. (2012). *Head, Hands and Feet: A Book of One Man Bands*. Victoria, Dave Harris. For two prime examples.

many generalized dictionaries[4] or popular sources such as Wikipedia which generally all describe a one-man band as someone playing several instruments simultaneously (Wikipedia contributors December 2012). Specialized sources such as *Oxford Music Online* and the *New Harvard Dictionary of Music* do not offer a definition of the one-man band itself, though Oxford Music Online does use the term in some of its entries[5].

While the description of one-person playing several instruments simultaneously can serve as a broad working model for study, I argue that it only superficially addresses the essence of the one-man band. Though we may be tempted to consider the one-man band a purely musical phenomenon, it could be argued that music is only one part of a more complex whole. A careful examination of one-man band performances reveals that the visual aspect of the practice is as important as its audio elements. I believe that seeing the one-man band as the interaction of musical production and visual spectacle is key to developing a better understanding of the phenomenon that will help us follow the practice as new permutations emerge in the digital age. In doing so, the one-man band can serve as a model to help understand our developing relationships with technology. Furthermore, I believe that examining the extra-musical aspects of the one-man band can help us understand the staying-power of the practice by shedding new light on the important role these visual elements play in developing and maintaining performer/audience relationships.

Performance

The one-man band is many things. Léo Vermandel, a third-generation French one-man band describes his performance as a complicated interrelationship of several different elements. "*L'homme-orchestre, c'est un art: la musique, la danse, le rythme, le sport, la force, l'endurance, la condition physique, la curiosité, l'originalité, l'exploit, la performance*." (Calogirou, Cipriani-Crauste et al. 1997). In their One Man Band Encyclopedia, Chicago

4. See (December 2012). One-man, adj. *OED Online*. Oxford English Dictionary, Oxford University Press. and (2013). Homme-orchestre. *Le Petit Robert: Dictionnaire alphabétique et analogique de la langue française version numérique*. J. Rey-Debove and A. Rey, Bureau Van Dijk.

5. See for example "Perry, King", "Pipe and Tabour", and "Minneapolis and St Paul" in (2013). Oxford Music Online. *Oxford Music Online*. Online, Oxford University Press. www.oxfordmusiconline.com Accessed February 13th, 2013.

music magazine *Roctober!*'s editor Jake Austen says that "One Man Bands are about spectacle" and calls them "theatrical" (Austen 2002). Similarly, in his compendium on one-man bands, Canadian one-man band Dave Harris discusses the importance of spectacle in many one-man band acts (Harris 2012). How does the one-man band fit with existing ideas of performance and spectacle?

Henry Sayre, American art historian and author in the 1990s of several widely-used textbooks on art history, distinguishes between two types of performance, one being a particular set of actions which occur in a given situation, and one being the enactment of an existing text. He qualifies this second type of performance as "artistic performance." (Sayre 1995). Until the early years of the 20th century, most notions of performance concentrated solely on "artistic performance" in which qualitative judgement was based on whether an interpretation of a text was as faithful as possible to what the audience and the performer believed the author's intention to be. In this case, the performer and the audience presuppose "that the artist's intentions are embodied in the work itself." (Sayre 1995).

This notion began to be challenged in the early 20th century as artistic movements such as Dadaism began to demonstrate that the authority of a text doesn't always lie with its author as presented by a performer, but that interpretations of meaning can be created by the viewer as well. French literary theorist Roland Barthes describes these ideas in his work *S/Z* in which he labels the former a readerly text, in which the text is a finished product whose meaning is pre-determined by the author and the reader is a passive consumer, and the latter a writerly text, in which meaning is created by the reader through the process of consuming the work. In a writerly text, each new reading can produce a new meaning. Performance can therefore be seen as the interpretation of a text according to the performer's or the audience's intentions, not the author's (Barthes 1970).

By the 1950's, the exploration of performance as an idea began to spread from the artistic movements of the first part of the 20th century into other fields of study. The British linguist and philosopher John L. Austin used the term "performative" during a lecture series at Harvard University in 1955 to indicate that "the issuing of the utterance is the performing of an action." (Austin 1975). In other words, "to say something is to do something." Speech isn't only used

to describe something; it can be used to produce something. Performance shouldn't only be seen as enacting a pre-existing script, rather action or meaning can be produced through the process of performance.

Canadian sociologist Erving Goffman's 1959 book, *The Presentation of Self in Everyday Life*, portrays social interaction through a model based on the theatre, in which we assume different roles for different situations and perform them accordingly. We are therefore constantly performing to suit the occasion. These performances can be analyzed through the setting in which they take place, as well as through our manner and our appearance during the performance (Goffman 1959). Goffman's work takes Austin's ideas to a more individual level by suggesting that who we are isn't a fixed definition, rather our personality and our character is performed different ways in different situations. We aren't being ourselves, we are performing ourselves.

American Linguist Richard Bauman builds on concepts used by both Austin and Goffman to develop the idea of verbal art as performance. "In such an approach, the formal manipulation of linguistic features is secondary to the nature of performance." (Bauman 1977). In other words, what is being produced is less important than how it is being produced. The text becomes secondary to its performance. This way of seeing things challenged existing ideas of competency. Bauman (Bauman 1992) says that generative grammaticians of the 1960s considered competency to be the ability to speak a language and performance to be the putting into action of this ability. Performance is therefore seen to be deviant and imperfect due to its grammatically irrelevant features such as pauses and stutters. Social linguists such as Dell Hymes, however, emphasize communicative competency which takes into account the ability to speak in socially interpretable and appropriate ways. In this model performance and competency are not at odds with each other. The grammatically irrelevant features which some saw as interfering with the text become, through performance, part of the text. Competency can be seen as knowing how to perform in a given situation so that what we say and do is interpretable by others. Sometimes in speech the pauses and stutters are as important as the words used.

Sayre wasn't the only one to distinguish between performance and artistic performance. Austin's performatives only work in certain situations. It's not by saying "I name this ship *Bottoms Up*" that the ship is given a name, the

utterance must be accompanied by the proper circumstances. This need for proper circumstances led Austen to reject artistic performance, especially theatre, calling performative utterances "hollow or void if said by an actor on the stage, or if introduced in a poem, or spoken in soliloquy." (Austin 1975). Bauman (Bauman 1992) writes of performance as communication and performance as a special kind of action distinguishable by its use of frames which situate behavior within a specific context. Bauman draws a link between this and Goffman's use to the term "keyed" to describe how particular types of performance are put on display.

Musical performance

Within the category of artistic performance we can include music-making. The way that musical performance has been understood has evolved along with the idea of performance itself. As musicology and ethnomusicology began to develop in Europe in the mid 19th century, performing music was thought of as interpreting the author's intent from a pre-established text. Much work of this time concentrated on the study of these texts, either the composer's score or a researcher's transcription. Performance and extra-textual aspects of music were only of secondary importance.

Around the same time that the idea of performance was evolving in linguistics and sociology, ethnomusicology started to develop new ideas on the subject as well. Anthropologists began to understand musical performance as being one part of a larger system which included the setting, the audience, and articulation with other texts or performances. French-born, Brazilian-raised ethnomusicologist Gerard Béhague studied performance by concentrating on the behavior (musical or not) of the participants, including both the performers and the audience. This includes the "social interaction [between participants], the meaning of that interaction [...], and the rules or codes of performance defined by the community for a specific context or occasion." (Béhague 1984). This echoes Goffman's views on performance as being a way of acting in a given situation. In her 1975-76 field study of Sufi music, Canadian ethnomusicologist Regula Quereshi adopts a similar approach, one that "incorporates the dimension of context into the analysis of musical sound (Qureshi 2006). In doing so, musical performance both reflects and is shaped by the culture it is issued from.

In discussing New Zealand philosopher Stanley Godlovitch's book *Musical performance: a philosophical study* (1998), multimedia artist and Senior Lecturer in Sound Technologies at the University of Western Sydney Garth Paine makes the point that musical performance is more than just entertainment, "it is a ritualised form of collective conscience [...] Music plays an important role in the emotional state of the society from which it emerges, and [...] is in part a critique of the fashion (manners, customs and clothing) of the time." (Paine 2008). Here musical performance is essentially a form of social performance, and understanding one without the other becomes almost impossible.

Studying music began to move away from studying a text towards studying the process of enacting or creating the text. As British musicologist Nicholas Cook describes in a 2003 description of a contemporary approach to music performance, meaning exists in the process of performance, and therefore can't be reduced to a product (Cook 2003). This situates musical performance as an act of creation, similar to Austin's idea of performativity. For example, French musicologist Peter Szendy describes how James Brown produces music through performance by singing the arrival of the bridge or a return to the top of a song (Szendy 1997).

Watching music

This expanded understanding of musical performance underlines the fact that it is much more than only what we hear, it is also what we see. As American cultural studies researcher Richard Leppert points out:

> Sonoric landscapes are both heard and seen. They exist because of human experience and human consciousness. Music…connects to the visible human body, not only as the receiver of sound but also as its agent or producer. The human embodiment of music is central to any understanding of music's socio-cultural agency. The semantic content of music [...] is especially to be understood as the result of mediations between the ear and the eye. The sonoric landscape is peopled and hence interactive. It is external to the human subject yet internalized by its sight and sound. (Leppert 1993).

Canadian researchers William F. Thompson, Phil Graham and Frank A. Russo remind us that making music is "also characterized by a continuously changing and meaningful use of facial expressions, body movements, and hand gestures." (Thompson, Graham et al. 2005). Musical gestures, above and beyond those of the hands play an important role in how we understand music.

In a 1988 article, French cognitive musicologist François Delalande divides musical gesture into three levels: effective gesture, accompanist gesture, and figurative gesture. The first serves in the mechanical production of sound. The second associates with and accompanies the first, engaging the rest of the body in movement that is not necessarily directly related to sound production. The third consists of symbolic gestures on the part of the performer (Delalande 1988). This description of different types of musical gesture supports the idea that music isn't only played, it is performed.

In a multi-author study from McGill University and Cornell University, Vines, Wanderley et al. describe how these gestures, what we might call the images of performance, play important roles in giving us more information about what is being performed (Vines, Wanderley et al. 2004). There is usually a cause-and-effect relationship between effective gesture and music. The harder one strikes the strings or the harder one blows into an instrument, the more sound is created. Most often, this extra force can be seen as well as heard. The visual cues of accompanist gesture given by the performer can increase musical intelligibility (Thompson, Graham et al. 2005), allowing spectators to better understand the performer's desired results. Finally, embodied performance and the symbolic aspect of a performer's musical movement and gesture situate the performance of music within a larger cultural context.

The haptic-feedback loop between performer and instrument is a key part of musical creation. So much so that American philosopher Don Ihde suggests that the performer enters into an embodied relationship while playing a musical instrument, to the point where the instrument ceases to be an object in its own right and becomes the means of expression for the performer (Ihde 1990). Paine proposes that the perseverance of acoustic musical instruments can in part be attributed to this embodied relationship "that encourage expression on a highly abstract but simultaneously visceral and rewarding basis." (Paine 2008). The feedback loop between performer and instrument is that much stronger when we consider that musical instruments can have an impact on the gesture and movement of the performer as different instrument designs affect the way an instrument is played and, consequently, how the performer looks when they're playing (Trueman 1999).

Spectacle and defining the one-man band

Both Austen and Harris use the term spectacle to describe the one-man band. Like performance, spectacle is a meta-genre which comprises many different things. But how would we define spectacle, either on its own or as it differs from performance? And how does the one-man band fit into all of this?

One of the first to write on the subject, American anthropologist and historian John MacAloon emphasizes the important visual component of spectacles, related to the Latin roots of the word *spectare* "to view" and *specere* "to look at" (MacAloon 1984). "Like its optical counterpart spectacles which mediates eye with object, the spectacle event serves as a form of mediation between the eye and the affective senses of the spectator." (Kan 2004). However, MacAloon stresses that not every sight is a spectacle. Only those "of a certain size and grandeur" (MacAloon 1984) are spectacles. He refers to a dictionary definition to qualify spectacles as being "public displays appealing or intending to appeal to the eye by their mass, proportions, colours, or other dramatic qualities." (MacAloon 1984). Frank E. Manning also appears to use size of the event as a criteria for defining spectacle. He calls it a "large-scale, extravagant cultural production that is replete with striking visual imagery and dramatic action and that is watched by a mass audience." (Manning 1992).

Despite this emphasis on large-scale events, Manning does concede that spectacle can have two definitions, either the "sweeping, visually impressive public event" he describes, or a "person or thing put on display that evokes responses ranging from admiration through curiosity and contempt." (Manning 1992). Both MacAloon and Manning acknowledge, at least implicitly, that spectacle can also occur in smaller settings by their use of the phrase "making a spectacle of oneself", which usually happens in front of tens of people rather than thousands.

Regardless of its size, and unlike performance, spectacle can't exist without an audience. Subscription to a spectacle is "voluntary and nonbinding, and one is free to leave at any time [...] The only predisposing reason for being there is to enjoy oneself." (Manning 1992). American performer and anthropologist William O. Beeman also considers the audience a necessary component of spectacle, citing performance studies scholars Victor Turner and Richard Schechner in saying that presentation to an observer/audience is one element that separates spectacle from performance (Beeman 1993).

Another way that spectacle differs from performance is its symbolic aspect. Once again Beeman cites Turner and Schechner in saying that spectacle involves the presentation of a symbolic reality which is not necessarily connected or related to the performers' lives outside of the performance. (Beeman 1993). MacAloon also discusses the irreality of spectacle, by saying that it takes the ""realities" of life and defuses them by converting them into appearances." (MacAloon 1984).

Spectacle can therefore be distinguished from performance by 1) the symbolic presentation to 2) an observing audience of material that the performer intends to be and the audience expects to be 3) entertaining (Beeman 1993). If we return to the ideas presented above, Bauman uses the idea of frames to separate the two kinds of performance, performance as doing something and performance as a special kind of doing something (Bauman 1992). Spectacle is a special kind of doing something. Therefore, if we wanted to determine what parts of a performance contribute to making something a spectacle, we could say that elements that emphasize the symbolic aspect of the performance, elements that specifically relate to the audience, or elements that serve to make the performance entertaining all fall under the heading of spectacular.

We have already briefly evoked the importance of the visual component of the one-man band's performance. Many performers wear colourful costumes, make-use of non-musical accessories such as puppets or feathers, or adopt other strategies to appear visual enticing. French one-man band Rémy Bricka paints his instruments white and wears an all-white costumes to match, complementing his suit by releasing live doves and setting off fireworks attached to his instruments during his performances (Bricka 2006). Even without the visual accessorizing, watching a one-man band play several instruments at once can be quite interesting on its own. In fact, it could be argued that the one-man band emphasizes the visual interest of playing several instruments over what it contributes musically to the performance.

Harris concedes that "doing several things at once requires extra concentration and most [one-man bands] would admit that they play better guitar (or whatever) by itself."(Harris 2012). French ethnomusicologist Florence Gétreau remarks that "*l'accumulation des accessoires, poussée à son*

comble, est inversement proportionnelle à la qualité du résultat musical." (Gétreau 2000). In describing the placement of musical bells in his kit, Canadian one-man band Washboard Hank mentions that it is much more appealing to the audience if a musical scale is distributed all over his body - foot then head then arm then back then shoulder then other foot - rather than being arranged linearly in a concentrated space, say only on his chest (Emerson and Emerson 2003). However, arguing that the way an artist looks is more important than the way they sound shouldn't completely diminish the importance of music within the performance.

A competent performer is one whose audience can recognize what he or she is performing. The piece being performed must meet the audience's expectations enough for the spectator to consider the performance a success. We can enjoy someone playing music, but only if we can recognize what the music is, or recognize that what is being played is in fact music. Otherwise, it's just noise. There is certainly some kind of musical threshold under which the one-man band stops being impressive and merely becomes annoying because the performer can't meet the audience's expectations of musical competency.

The visual and the musical parts of the performance must therefore work together to create the desired effect of the one-man band. The musical element provides the framework for the performance, and allows the audience to judge the competency of the performer. This helps explain why one-man bands who busk on the street often play songs drawn from the pop or rock cannon's greatest-hits. One-man bands who play in bars or on stages are more likely to play original compositions, but often in a style that corresponds to what one could expect to hear in that performance location. However, when compared to an actual band made up of several people, the musical production is only impressive/of interest/entertaining when you consider the spectacular conditions under which it is produced. Like spectacle then, the one-man band has a strong visual component.

The challenge that many performers face, of course, is that many of the instruments they use are often not designed or intended to be played at the same time. One-man bands make and adapt their instruments to fit their needs. This often means using mechanical devices to allow an instrument that is usually played by the hands or feet can be or to be played with a different part of the body. The most common example of this is the foot-powered and back-

mounted bass-drum and cymbals found in many one-man bands, but other foot-operated instruments are also used, such as Joe Barrick's piatar (Rammel 1990), Jesse Fuller's fotdella (Harris 2012), and Pete Farmer's Foot Drums (Farmer 2012).

In light of the ideas of spectacle provided above, this use of mechanical technology accomplishes two things. In terms of musical production, it allows performers to play several instruments at once, which wouldn't normally be possible. Of equal importance is the fact that it also add to the entertainment aspect of the performance. This technology used by the performer is rarely hidden, and becomes part of the show. A particularly elaborate one-man band resembles in some ways a Rube Goldberg machine[6] and the interest is not necessarily in the final product, but in the process itself. It is as interesting to watch how it all works, as it is to watch what is being done. Furthermore, if we allow that what makes the one-man band interesting is seeing rather than hearing several instruments played simultaneously, visible technology allows the spectator to see more instruments being played, and understand how they are being played. The one-man band would probably be much less interesting if the audience wasn't able to see how the performer's foot was responsible for making the drum on his back sound[7].

The one-man band fall into the category of artistic performance (Sayre 1995) or a communicative event (Bauman 1992). Therefore, it is not just doing something, it is a special kind of doing something. Spectacle serves to remind us of the symbolic nature of the performance. In other words, what we're watching isn't a one-man band, it is an artist being a one-man band for the duration of that performance. The way this is signalled to the audience can take many forms, but can range from a variety of common performance frames such as time and place, to the integration of theatrical elements such as costumes and staging, to perhaps most tellingly the creation of an on-stage persona, such as The Straniero, The Lonesome Organist, or Chucklefoot[8]. In Canadian filmmaker Derek Emerson's documentary, *Let Me Be your Band*, Hank Fisher

6. Named after an American cartoonist, a Rube Goldberg machine is an elaborately complicated machine that performs a simple task, often through a chain reaction of incongruous events.
7. This causality of movement instead of a uniquely symbolic content could also be helpful in separating one-man bands from dance, for those who would be interested in doing so.
8. See http://www.thestraniero.com/, http://lonesomeorganist.com/, and http://www.chucklefoot.co.uk respectively.

says that being “Washboard Hank” (his on-stage persona) is his job, letting us know that off-stage he’s not Washboard Hank (Emerson and Emerson 2003).

Through all of this, we can see the bases of a particular one-man band performance esthetic emerging. Performers use a variety of limbs, appendages, and mechanical devices to simultaneously play several instruments, replicating what would commonly or normally be played by several different people. Though the musical output is important, as it helps the audience determine the performer’s competency as a one-man band, its role is to provide the framework for the spectacular parts of the performance which consist of, among others, visible mechanical processes, costumes, and the adoption of stage personas by the performers. The end objective is a live performance in front of an audience.

The correspondence between this description of the one-man band and the definitions of spectacle as presented above are clear. If spectacle is a sub-category of performance, then clearly we can say that the one-man band is a type of spectacle, and that spectacular elements play an important part in the one-man band’s performances.

While it isn’t necessarily our goal here, the lack of an existing definition of the one-man band that takes all of this into account obliges us to create some frame of reference that can be used in developing and defending many of the arguments that follow. Rather than try to provide a fixed and all-encompassing definition of the phenomenon, I prefer to use the description of the one-man band above to lay out the three building blocks of the art form: simultaneity, maximum usage of one’s body, and spectacle. Spectacle here includes the visual and symbolic aspects of the performance, as well as elements which serve primarily to entertain the audience.

I feel safe in saying that, to my eyes at least, the performance of a true one-man band must include some part of these three aspects, though the exact recipe used may vary from performer to performer. One of the advantages (or disadvantages, depending on your point of view) of examining the practice through this type of model is that rather than being a definition of absolutes (i.e., this is a one-man band and that is not), it is a definition of degrees. This allows us to use this definition to examine the wide-variety of acts and performers that call themselves one-man bands.

Interestingly enough, this idea of a particular performance aesthetic for one-man bands also brings into question the idea of it being one person performing alone. The name one-man band implies that there is only one-person performing, and the vast majority of one-man bands do perform alone. However, there are several examples of bands or groups who subscribe to the performance aesthetic of one-man bands and fit into models used by other one-man bands, but who do not perform alone[9].

The Electric one-man band

Since the 1980s, the advent of increasingly affordable and easily available digital and electronic technology has had a noticeable impact on music-making practices, including one-man bands. With a laptop and a library of pre-recorded samples, with a microphone and a looping pedal, or with pre-recorded backing tracks, more and more people are able to reproduce the sound of an entire band by themselves. But are they one-man bands? The use of digital technology has allowed these artists to combine musical production with the display of images (still or in motion), animation, and video played or projected during the performance. How does this fit with the *Mary Poppins* version of the one-man band? Or does it even fit at all? At the same time, film is seeing a resurgence of the idea of live cinema, a term initially used to describe silent movies accompanied by live musicians but now employed by a number of multimedia artists who create video performances in real-time in front of an audience. Some of these artists take control of the audio and video elements of their performance, while others, like their late 19th and early 20th century counterparts prefer to leave the sonic elements to their musical accompanists[10]. What relationship do these performers have, if any, to one-man bands?

One-man bands have always used technology to expand their ability to play several instruments at once, be it through head racks that allow pan-pipes or a harmonica to be played without occupying the hands, or through straps and

9. See for example the Vermandel family in France, Otto and Barnelli in Italy, and the Puta Madre Brothers in Australia. See also Gétreau, F. (2000). "L'homme orchestre : deux siècles de tradition française." *Revue du Louvre : la revue des musées de France* 50 (5): 67-76. for historical examples of this same thing.

10. This is, of course, not counting magic lantern shows or phantasmagoria which often combined music and images produced and controlled by one performer.

pulleys that connect heels to a bass-drum on their back. New electric and digital technologies provide the opportunity for one-man bands to expand the visual and sonic elements of their performance. Digital processing of sound provides musicians with a greater range of control over timbre, rhythm, volume, and pitch. Furthermore, the increased accessibility of video capture, manipulation, and projection that digital technology affords allows artists to easily integrate video into the visual aspect of their performance.

French historian Bertrand Gille developed the idea of a "*système technique"* in his 1978 book, *Histoire des techniques* to describe the interrelation between the development of a technological system (based on a particular type of technology such as stone tools or mechanical power) and the social, economic, and political systems which emerge synchronistically. Gille theorized that human history could be divided into a series of successive *systèmes technique*, each based on a different type of technology. By integrating digital audio and video manipulation, one-man bands can be seen as moving from the mechanical *système technique* present at their emergence with the industrial revolution of the 18th century to the digital and information *système technique* of the 21st century. Just as the mechanical one-man band can take different forms, so can these new digital one-man bands.

The 2002 performance of *Afasia* by Spanish digital media and mechatronics performer Marcel.lí Antúnez has been labled a "one-man-multimedia-band" (Jordà 2002). In *Afasia*, Antúnez is fitted with a sensor-suit and uses it to control animations, video, and music while playing the only human role in the piece. The music is produced by four on-stage robots who are each controlled (or "played") by the performer while a sampler, cd player, and effects module all controlled by the performer help provide audio support for the performance. The performer also controls both 2D animations and video samples while a camera fixed to his arm provides live video images. Though the piece follows a set narrative arc, it is not the simple recitation of a text. The performer can act and react to what is displayed on the screen behind him, both creating what is seen and responding to it. The system used allows a variety of final forms to emerge, "from free audiovisual improvisation to completely pre-recorded sequence playing." (Jordà 2002).

robotcowboy[11] [12] is both the name used by American musician and multimedia artist Dan Wilcox to describe his on-going performance project using the robotcowboy wearable based platform and other associated musical instruments and the stage persona he assumes when performing. The robotcowboy wearable platform features a variety of interfaces (such as a digital guitar, a gamepad, and a touchpad) and connected to a lightweight portable computer through usb, MIDI, and sound card ports. All of the equipment is worn on the performer's body. Early incarnations of robotcowboy featured a modified i-mac as a wearable video display, with video output sometimes connected to a projector or other visual system[13]. robotcowboy is currently being reworked as robotcowboy 2.0 to take advantage of changes in technology since its debut as well as the evolution of the performer's ideas and artistic direction.

While robotcowboy could be seen as a musician who includes visual elements in his performances, live cinema performers often emphasize the aspect of visual creation while adding musical accompaniment. British live cinema scholar Toby Harris uses two definitions of his art form, one referring to it "as a contemporary, experimental relation where improvisation and performance become inevitably intertwined." The other using it to describe any audio-visual presentation or experiment based on a live performance. Either way, Harris believes Live Cinema's key elements to be "a theatrical presentation of audio-visual material, a claim to authorship, and a claim to performance of this material." (Harris 2012).

Live cinema is described by practitioner Mia Makela as consisting of four main parameters : (1) Live-time manipulation and (2) projection of video and audio elements in front of an (3) audience (4) sharing the same space as the performer (Makela 2008). Though sharing certain aspects with both cinema and VJing, Makela maintains that there are important differences. Unlike cinema, live cinema isn't linear storytelling, and unlike VJing, the live cinema

11. The use of a lower-case r at the front of robotcowboy is in keeping with the artist's orthography.

12. www.robotcowboy.com

13. During the 2009 Ars Electronic Festival in Linz, Austria, robotcowboy's visual display was connected to the grid of giant illuminated panels which cover the outside of the ARS Electronica Centre. See Wilcox, D. "robotcowboy.com." Retrieved October 1st, 2012, from http://robotcowboy.com/. and ARS Electronica. (2013). "ARS Electronica - Center." Retrieved January 31st, 2013, from http://www.aec.at/center/en/. for more information.

performer strives to communicate personal and artistic goals to an audience that is attentively watching the creative process. While VJing often takes place at clubs or festivals where the audience is enjoying various sensorial inputs, live cinema often takes place in theatres and adopts the traditional proscenium model of audience/performer interaction.

Spanish live cinema performer Rafaël[14] uses a combination of MIDI controllers, Resolume software, guitars, keyboards, and preselected video samples to create his performances. He describes his approach as being narrative, but which allows improvisation to play a larger and larger role in his performances (Rafaël 2012). Though performing from behind a laptop, he often uses his feet to draw sounds from a guitar set on the floor in front of him.

The three artists presented above each arrive at some form of the digital one-man band from different backgrounds. Antúnez considers himself less a musician and more a performance artist. In *Afasia* he develops different ways to control what is happening on stage while leading the audience through the narrative arc of the play. For Antúnez, *Afasia* was less about pushing the one-man band envelope and more about continuing his exploration of performance pieces using mechatronics[15]. On a personal level, robotcowboy seeks to add the stage presence and energy of his punk/new wave past to his new interest in computer music, while simultaneously proposing a new paradigm for electronic music, which he believed was suffering from a lack of a true performance esthetic (Wilcox 2007). Finally, Rafaël, originally a photographer, desires interaction with his work and seeks a greater ability to show narrative structures than still photography allows (Rafaël 2012).

Though both robotcowboy and Antúnez in *Afasia* self-describe with more than a passing nod to the one-man band, not all live multimedia performers necessarily see themselves as being part of the one-man band tradition, nor do all multimedia performers fit into our definition of the phenomenon. Our goal here is not to undertake a detailed analysis of each of the performers and each of the variables to determine where they might fit on our sliding scale of one-

14. www.leafar.be

15. *Afasia* was Antúnez third performance piece featuring mechatronics, but only the first where the performer had control over the actions on stage. The first two pieces featured installations or performances which were manipulated by audience input.

man bands. For the time being, it will suffice to say that despite the differences in technology used, robotcowboy, Rafaël, and Antúnez's work in *Afasia* do indeed fit within the framework of the one-man band as we have described it above.

We argue that these three case studies use digital technology in the same ways that traditional one-man bands use mechanical technology to create a greater sense of spectacle, which is essential in developing and maintaining the performer/audience relationships that underpin the staying-power of the practice. Furthermore, by bridging the one-man band tradition into the digital age, we believe these electric one-man bands can serve as a model to help understand our developing and changing relationships with technology while resituating the body and embodied practice within digital music.

Technological relationships

American professor of theology and computer science at St. John's University, Noreen Hertzfeld, believes that one of the defining elements of humanity in a world of technology is our ability and our desire for interaction and relationships between humans (2012). Technology can either be used to enhance this ability or diminish it.

In the case of the one-man band, it initially appears as though technology is being used to avoid inter-human contact. Music is generally thought of as a social behaviour. Many people join bands for the enjoyment of creating something with other people. The traditional one-man band appears to use mechanical technology to avoid having to interact with other people, to remove the other humans in the band. The electronic one-man band does the same but with an array of digital technologies. As already noted, most, but not all, one-man bands perform alone. However, to say that the one-man band exists in isolation would be to completely ignore the importance of the audience. The one-man band may be a solitary figure, but, to borrow an idea from French philosopher Gilles Deleuze, it is a crowded solitude. Rather than using technology as a way of distancing themselves from this crowd, the one-man band uses the spectacular nature of his performances as a way of entering into contact with his audience and developing a relationship with them. I believe, in part, that it is this relationship which draws people to the one-man band show.

We have already discussed how new electronic and digital technologies of the 20th century have influenced music making. However, these same technologies have also impacted how music is consumed and its effect on an audience. Performance studies scholar Philip Auslander notes that as most people (at least in developed countries) access music through recorded sources, performers are not usually present as their performance is being heard. Such "seemingly disembodied performance has been the norm since the popularization of the phonograph that began in the 1890s." (Auslander 2006). Furthermore, the increased popularity of the music video format and use of music within films, television, and advertising also means that many of us are used to hearing music in conjunction with visuals that aren't necessarily related to the production of what we hear.

By changing the traditional causal relationship between gesture and musical production found in acoustic instruments, electronic and digital music has distanced the role of the body and the human element in its creation. With an electric keyboard, for example, the performer can be in one room and the amplifier in another. The sound produced is split from its source. This is the basis of Canadian composer and theorist R. Muray Schafer's concept of Schizophonia in which sounds "have been torn from their natural sockets and given an amplified and independent existence." (Schafer 1977). This separation of product from source is even more noticeable in digital music.

According to W. Andrew Scholss, professor of computer music at the University of Victoria, the cause-and-effect relationship between gesture and musical production has disappeared in the use of computers in live performance to the point where "the relationship between gesture and result becomes so blurred as to be often imperceptible." (Schloss 2003). Traditionally, the movement towards digital music making and the laptop as the genre's instrument of predilection de-emphasized the bodies role in music making. "Computer based music [... dissolved] the embodied relationship the musician previously enjoyed with their instrument [...] raising questions about the role of gesture in musical performance and the value of haptics in successful musical instruments." (Paine 2008). Removing the embodied relationship found between acoustic musicians and their instruments can have an impact on audience reception. If "the audience are unable to identify the role the performer is playing in the production of the music they hear, they question the authenticity of the action." (Paine 2008).

In a 1993 article, Godlovitch lays out his theories on the integrity of musical performance. One essential difference between recorded music and performed music, which calls the integrity of the former into question, is the correlation between perceived input and output by the performer, what Godlovitch terms "causal immediacy". "[We] require of any performance that what we hear bears some paradigm causal relation to what the performer causally contributes." (Godlovitch 1993). In the 21st century, we are used to hearing recordings where overdubs, editing, and mixing play a large role in the final musical product, and most people no longer concern themselves with the causal relationship between what their favourite band played and what they hear on the record. However when watching a performance we still expect a measure of coherency. "Spectacle is the guarantor of presence and authenticity, whereas laptop performance represents artifice and absence, the alienation and deferment of presence." (Cascone 2003)

Live cinema appears to suffer from some of the same issues regarding audience reception. In digital practices, audio and visual information exist in the same format before being broadcast to the audience. The performer controls neither audio nor video, but in both cases manipulates a digital flow of information. Because the type of information is the same, the same tool, in most cases a laptop, can be used for both mediums, and both types of performance can be subject to the same criticism stemming from audience expectations.

Computer music composer and researcher Kim Cascone believes that audience expectations are shaped by a certain set of performance codes as promoted by mass media and popular culture. "[T]he unfamiliar codes used in electronic music performance have prevented audiences from attributing "presence" and "authenticity" to the performer." (Cascone 2003). For example, in laptop performances, "the standard visual codes disappear into the micro-movements of the performer's hand and wrist motions, leaving the mainstream audience's expectations unfulfilled." (Cascone 2003). In most forms of cinema, the expectations of performance are quite different because the audience sees a product, not a process. The act of creation isn't live. In live cinema, however, the fact that it is created or edited in real-time creates the expectancy of being able to see the person doing it, or more accurately, the expectancy of being able to understand the person doing it through visible cause-and-effect relationships between the performance and the performer.

The one-man band's use of their body provides the spectator with the necessary level of authenticity to appreciate the performance while also serving to meet audience expectations about the performance they are about to see. We have seen how mechanical one-man bands use their bodies and technology to create spectacle within their performances, but this also holds true for electric one-man bands. In a personal conversation with Dan Wilcox in December 2012, he noted that the use of visual displays in his robotcowboy performances served to accentuate or expand the physical movements of his fingers on the controls.

By subsuming technological processes within the hidden world of electronics, microchips, and computer processors, the spectacular effect of the activation of technology is mostly lost in the digital age. Sound creation process passes from the visual world (mechanical processes and flailing limbs) to the invisible world (digital processes and button pushing). However, within electric one-man bands digital technology is used to create visual elements which both add to the spectacle of the performance and reinforce the body's role in sound production. This allows easier identification of the cause and effect relationship which is seeming important to audience satisfaction.

The full-body approach of the one-man band can also bring the audience and the performer closer together by creating the perception of a shared experience between the two. "[V]isual aspects of performance signal that performers are not merely producers of sound but are themselves listeners, highlighting the musical activity as a shared experience between performers and listeners." (Thompson, Graham et al. 2005). A shared experience or some form of interaction between performer and spectator appears to play an important role in our three case studies.

Rafaël, robotcowboy, and Antúnez all state that interactivity with the audience was one of their goals for moving towards the particular performance styles that they adopted. The surface understanding of this is that the greater mobility and freedom accorded to the performer allows him or her to interact better with the audience. What isn't often mentioned is that interactivity is a two way street. The audience must also respond to the performance they are witnessing. It could be argued that these performers adopted a style similar to

the one-man band to solicit greater reactions from the audience, allowing for the greater interaction that they were seeking.

In a heavily mediatised world where technology has helped at times blur the lines between reality and imagery (think of, for example, the use of special effects in movie making), the human body and its presence represents reality. Because we have become accustomed to disembodied performance on recordings, corporeity becomes a stand-in for liveness, particularly in mediatised situations. Spectacle, despite its seeming artifice, helps establish the realness of the performance.

In discussing the idea of liveness and its importance in regards to performance, Toby Harris cites Philip Auslander to show that Live Cinema artists, such as Rafael, are not really live. The creation of their work takes place in the studio before hand, and the performance is simply a way to confer authenticity on their work (Harris 2012). Whether the performance is truly live or not is in some ways immaterial. What matters is that the audience experiences the performance as live. This is achieved through presentation and spectacle.

The aspect of simultaneity within the one-man band can be seen as a way of asserting the body's role in the here and now, particularly in the increased presence of an online world which is without time nor space, or faced with the placelessness of the modern world (Augé 1992). When it comes to the one-man band, seeing is believing. For the electric one-man band, spectacle helps situate the performer within the live-time of the performance.

Musical cyborgs

Coined in 1960 by musician and scientist Manfred Clynes and pharmacologist Nathan Kline to refer to a human whose organic systems had been extended to meet the requirements of space exploration (Clynes and Kline 1960), the term cyborg has often been used in science fiction to describe beings who are part human, part machine. Though the enhancement of human capabilities through the addition of technological devices to our bodies is not new (O'Mahony 2002), British sociologist and author of the influential book *The Body and Social Theory* Chris Schilling describes the increasing influence that technology wields in our lives and in our bodies. "[P]roductive techniques

have moved *inwards*, to invade, reconstruct and increasingly dominate the very contents of the body." (Schilling 2005). This suggests that technology is making us reconsider the very nature of our bodies. Plastic surgery, replacement body parts, and the ever thinning line between technology and the body, the physical self and the virtual self means that the body has shifted from being a source of technology to a location of technology (Schilling 2005).

The body/technology dichotomy present within the one-man band can be seen as a continuation of the traditional nature/culture dichotomy within anthropology. However, an increasingly co-joined relationship between the two could be signalling the end of this division and the creation of what Schilling calls the "technological body". In doing so, the separation between body and technology becomes increasingly artificial, and the claim to studying either one independently becomes increasingly difficult to defend. This is similar in some ways to the idea of a "technological singularity" as discussed by American computer scientist Verner Vinge (Vinge 1993) and futurist Ray Kurzweil (Kurzweil 2011), among others. In scenarios relating to a technological singularity, humans construct technological creations whose intelligence, capabilities, or other features surpass the abilities of those who created them. In some such scenarios, technology ceases to become a tool used by us, rather we become a tool used by technology. In utopian outlooks, by becoming the tool rather than the user, humanity allows these super-creations to work for the benefit of all, solving problems whose scope surpasses our ability to counter them. A dystopian view sees these creations taking over, either enslaving us or eliminating us completely.

As seen, views taken of a conjoined relationship between body and technology are not always positive. "Critical theory and science fiction seem to present us with only two possible scenarios: either we become slaves and caretakers to technology, or the human body will be forced to evolve through technological augmentation and genetic manipulation." (Wilson-Bokowiec and Bokowiec 2006). However, the one-man band provides us with a symbiotic relationship between body and technology that shows that we can live with technology, not have it dominate us.

Though the use of technology to augment human capability is not new, the degree to which technology becomes integrated with our bodies is. Though rarely cited as such, the one-man band may be one of the early predecessors of

the cybernetic organism. Gétreau cites a 19th century description of a one-man band so covered in instruments that "*le moindre dérangement des muscles, le moindre tremblement de jambes, le moindre clignement d'yeux, le moindre tressaillement des nerfs produirait aussitôt, la plus déplorable cacophonie*." (Gétreau 2000). Covered in instruments using straps as tendons and constructed frames as bones, it can sometimes be hard to see where the one-man band stops and where the human begins. This idea of a musical cyborg is taken further with digital one-man bands. Wilcox makes it one of the central ideas of his robotcowboy project. "In placing the computer directly on the body, this [project hopes to suggest a paradigm which fosters] a physical, semiotic, and instrumental return to the body in the realm of electronic and computer music." (Wilcox 2007). Rather than seeing technological elements overwhelm organic ones within computer music, the full use of the one-man band's body serves to reaffirm the central role of the human organism in a technological age.

The potential negative reception of the artist as a dystopian cyborg is reduced through our understanding of the voluntary nature of the artist's relationship with technology. As previously mentioned, one important aspect of spectacle is its existence in the symbolic realm. By using spectacular elements, the one-man band reinforces the symbolic aspect of his presentation, allowing the audience to understand what it sees as being clearly "show" and distanced from reality. More importantly, this helps the audience understand that what they are watching is a temporary reality, entered into voluntarily by the performer. This both permits the audience to feel comfortable watching the performance, diminishing the feeling of voyeurism or unauthorized watching, and to admire the one-man band's abilities, his competency measured against the framework of the music being performed.

Spectacle and staying power

The one-man band has existed in essentially the same form for at least the past 250 years. Even with the addition of new variations on the format, for example with the emergence of vaudeville in the late 19th century and some of the digital practices described above, the traditional model of the mechanical one-man band has continued playing in the streets and on-stage right up to today. These new practices then, don't replace or supersede existing ones, rather they layer on top of existing practices to create a greater variety of one-man bands. Why has the one-man band survived for all of these years? Why has it not been replaced by something different, or evolved into a different form of performance entirely?

I believe that the one-man band's ability, both as individual performers and as a type of specialised performance, to develop and maintain performer/audience relationships is a key element in explaining the longevity of the art form. These relationships are strengthened through the use of spectacle, which is shaped by a highly visual performance style and an accentuated use of the performer's body. Both simultaneity and the use of technology contribute to drawing the audience's attention to the use the performer makes of his body. The spectacular nature of the one-man band sets it off from everyday life and gives the performance a symbolic quality, which allows the audience to enjoy it for what it is, a show.

Though not the most utilised approach, some multimedia performers have intentionally or not built upon the tradition of the mechanical one-man band. Though the new possibilities of digital technology make it much easier for one performer to *sound* like a full band, much less common are electronic artists who actually simultaneously create the different musical parts heard by the audience, as their mechanical counterparts do. The invisible nature of digital technology can be countered by the use of visual aids that help magnify and accentuate the causality of the performance. The combination of causality and simultaneity help reinforce the live quality of the performance and help situate the performance in the present, in the here and now.

The embodied nature of the one-man band is particularly important in the digital age. By placing the body at the centre of its performances, the one-man band reasserts corporeity amidst disembodied computer or laptop music and performers, thereby helping meet audience expectations and providing

spectators with the authenticity they seek within a performance. Furthermore, by presenting a symbiotic relationship between man and machine in artistic creation, the electric one-man band provides us with a positive model of the body as a site of technology. To return to a citation by Kim Cascone “Spectacle is the guarantor of presence and authenticity, whereas laptop performance represents artifice and absence, the alienation and deferment of presence.” (Cascone 2003)

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