# Sound and Music in a Mixed Martial Arts Gym: Exploring the Functions and Effects of Organized Noise as an Aid to Training and Fighting

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ARTICLE INFO	ABSTRACT
Available Online April 2014 Key words: Sociology of Music and Sound; Sensory Ethnography; Mixed Martial Arts; Sport.	This paper has two distinct yet interrelated parts. First, it is a study into the sociology of sound and music—an exploration of how the phenomena of noise organizes and structures human behavior. Second, it is an auditory ethnographic excursion into the world of mixed martial arts (MMA) fighting. Using a general qualitative approach grounded by the soundscape, participant observation and semi-structured interviews, we query MMA fighters' experiences with sound and music, noting how these "sonic things" become key aids in bonding, training, and fighting. Lastly, we describe how participants use music to achieve various motivational and psychophysical outcomes.

### 1. Introduction

This paper has two distinct yet interrelated parts. First, it is a study into the sociology of sound and music an exploration of how the phenomena of noise organizes and structures human behavior. Second, it is an auditory ethnographic excursion into the world of mixed martial arts (MMA) fighting. Using a general qualitative approach grounded by the soundscape, participant observation and semi-structured interviews, we query MMA fighters' experiences with sound and music, noting how these "sonic things" become key aids in bonding, training, and fighting. Lastly, we describe how participants use music to achieve various motivational and psychophysical outcomes.

#### 1.1 What is and why study MMA (aurally)

Mixed martial arts is a sport that involves intense contest between two opponents (commonly referred to as "fighters") who use a variety of bodily combat techniques, including classic martial art systems, boxing, and wrestling, to subdue one another. During a combative bout, fighters can engage each other like boxers or martial artists, punching and kicking, or like wrestlers grappling on the mat. A fighter can win a match in four ways: by forcing the opponent to submit ("tap out"), by rendering the opponent unconscious ("knock out"), by prompting the referee to stop the fight ("technical knockout"), or by achieving more points than the opponent based on the judges' decision.

MMA is a rapidly growing sport within contemporary athletics, and yet to date, it has received relatively little attention in the social scientific literature. Existing research has examined it within the framework of a sporting subculture (Van Bottenburg and Heilbron, 2006; Abramson and Modzelewski, 2010), and as a masculine subculture (Milton, 2004a, 2004b; Vaccaro, Schrock and McCabe, 2011; Melzer, 2013). More recent work has highlighted the athletes themselves, exploring their motivations and the realities of their competitive experiences (Spencer, 2009, 2011; Holthuysen, 2011; Jensen, Roman, Shaft, and Wrisberg, 2013; Sanchez and Spencer, 2013). However, to our knowledge, only two works (Green, 2011; Spencer, 2013) have explored and offered a depiction of the world of MMA at the level of the senses. In these groundbreaking studies, Green (2011) explored the sensory and seductive world of pain, while Spencer (2013) offered a broad reflection of the touch, taste, sights, sounds, and smells of training and fighting. In light of MMA being such a unique spectacle of sweat, blood, and noise (Buse, 2006; Cheever, 2009; Swain, 2011) we believe more scholarly work that details the "sensorium of fighting" (Spencer, 2013: 2) in this context will likely be forthcoming in the literature.

So stated, our work helps negate the dearth of "sensory ethnographies" (see: Pink, 2009), by adding an account that details how sound is used by fighters to engage with and comprehend MMA. Specifically, we attempt to "animate through sound" (Classen, 1993: 121) the general everyday environment of the gym as

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well as the lived experience of fighting contests. These aural descriptions are offed as a unique way to articulate how the embodied, temporal and interconnected understanding of MMA are created and consumed. In total, we explore: (1) the creation and use of sound within the geographic space of the MMA gym, (2) how sound enculturates and helps build sociality amongst fighters, and (3) the varied sonic experiences of MMA contests. Ultimately, we hold that an examination of the sonic not only reveals the same underlying truths as offered by traditional ethnography, but also exposes deeper sensorial experiences ignored by conventional investigations.

# 2. Conceptual Parameters

Despite powerful exceptions (Bendix, 2000; Grazian, 2004; Stokoe and Hepburn, 2005; Egan, 2006; Barron, 2013; Spencer, 2013) sociology has largely treated the aural as tangential to its enterprise of knowing and understanding various social worlds. With this work we attempt to produce an ethnographic account that offers readers an impression of what life in a mixed martial arts gym sounds like. Phrased differently, this work is an exploration of sonic reverberations—a study of the production and understanding of noise, sound, and music as a way to gain insight into a specific cultural context. Here, we attempt "to know" a group of people, a space, and a culture by listening to it.

To accomplish this task we are guided by Schafer's (1994: 4) concept of a "soundscape"-that is, "a total appreciation [and description] of the acoustic environment" in order to detail a local cultural landscape. To date, most social-scientific explorations of the soundscape come from anthropological accounts (Samuels, Meintjes, Ochoa, and Porcell, 2010). From this perspective sound is a source of "rich data" and may be used as an ethnographic technique to give voice to a cultural world (Wagstaff, 2002; Howes, 2003; Feld and Brenneis, 2004). Here, we pull from anthropological sources and craft a sensory ethnography of sound. Again, owing to anthropological frameworks, a sensory ethnography (Stoller, 2004; Pink, 2009) is a scholarly framework that explores the touch, sight, smells, tastes, and sounds associated with participation in a "social world" (Strauss, 1978). As a research technique, it involves the description of the senses and sociality of research participants through traditional techniques such as field notes, participant observation and in-depth interviews as well as photographing and audio and video recording, alongside and with research participants (Spencer, 2013).

In addition to using methodological and descriptive techniques offered by sensory and sounded anthropology, we also pursue a sociology of sound (Roy and Dowd, 2010). A more emergent subfield, the sociology of sound explores themes of the interactive soundscape, including the role of sound and music on listeners' emotional reactions (Juslin and Sloboda, 2001; Schubert, 2007) and identity formation (Martin, 1997; Weinstein, 2000' Turino, 2008). Further, it investigates not only how sonic activity (i.e., composition, performance, distribution, reception) is socially shaped, but also how music and sound, with its unique "discursive and material powers" shapes and builds society (DeNora, 2003: 39). Here we focus more exclusively on the latter—the use of sound and music as a mechanism to organize and structure human activity. Indeed, music is commonly defined as organized sound that arranges disparate sound into a coherent structure (Wade, 2009; Shahriari, 2011). Thus we study how music and organized noise arranges and patterns human action in purposive and community building ways.

Unfortunately, sociological ethnographies of how people listen to and use sound and music to organize human action are rare. Thus, we view this study as timely and opportunistic, and we seek to add to the budding subfield of sociology of music and aural ethnography. In the end, we are guided by what Bendix (2000) has termed "an ethnography of listening," and we take seriously Grazian's (2004) call for ethnographies that study "the consumption [and use] of [sound and] music in real time and space" (206).

# 3. Methodology

The authors conducted approximately 30 hours of focused observations of practices, training sessions, and organized fights with members of a mixed-martial-arts gym in a mid-western U.S. metropolitan city. While we did not approach the field with specific hypotheses, we did employ guiding, open-ended questions centered on themes of exercise performance and techniques of motivation. Our questions were continually modified based on field observations and experiences with interviewees (see Strauss and Corbin, 1990;

Strauss and Corbin, 1998). Final questions and data themes were formed out of these initial experiences, which in turn, acted as a feedback loop to restructure and solidify interview and observational guides. Consistent with qualitative methodology, data collection, analysis, and theory construction was done simultaneously (Glaser and Strauss, 1967; Strauss and Corbin, 1990). In the end, we grouped observations and data themes around "analytical signposts" such as: collective/common agreement, recurring arguments, and intense and emotional reactions. Our collaboration started with a series of observations about the way noise and music was used. Specifically, we began noticing that sound and music were used as a tool of enculturation and social bonding. We therefore decided to focus on these recurring themes (with peripheral attention paid to the use of music to achieve various social-physical and psychophysical outcomes).

Beyond observations, we also collected narratives from casual conversations for analysis (Labov and Waletzky, 1967; Lambrou, 2003). Additionally, we conducted eight in-depth interviews with MMA athletes. These conversations and interviews were gathered through a variety of techniques. First, we traveled to a local gym and, after building rapport with the head trainer, we were allowed to be present and observe the activities that occurred within this environment. Once we became a common fixture in the gym (a process that occurred over several weeks of passive observation and casual conversations initiated by the members), we approached several fighters whom we thought would be most receptive to an interview.

Next, using snowball sampling, fighters were asked to recommend others they thought would be willing to participate. In other cases, Facebook was used to connect with fighters from the gym and to set up interviews. All interviews were conducted face-to-face, and interviews ranged between 45 minutes to 2 ½ hours, with the average interview being approximately 1 hour long. All interviews were recorded and later transcribed. If requested, participants were assigned a pseudonym to preserve confidentiality. All participants were young adults ranging from their late teens to their early thirties. The gym membership was fairly homogenous regarding gender, ethnicity and social class position. Though the gym trained both male and female members, the overwhelming majority of members were male. Further, though several persons identified as Hispanic, or Native American, most identified as Caucasian or Caucasian-mixed. Lastly most members were from working class or lower-middle-class families. Our field observation and interviews lasted from August 2013 to December 2013. Please note that our University's Institutional Review Board and Standing Committee on Ethics in Research Involving Humans approved our research procedures. Participants were informed of the goals and procedures of this work and of their rightsparticularly whether or not participants' names would be used in the study or whether pseudonyms would be substituted (all wished for their real names to be used), as well as the right to review material and the right to withdraw from the process.

In the sections that follow, we identify a number of interrelated features about the use of music and noise in the gym and we have divided this section into three distinct units to better illuminate these observations. First, we start with a general description the observed MMA gym. Second, we focus on the aural activity within the gym and note the various ways sound, noise, and music is used to train and enculturate fighters. Third, we describe the soundscapes of a fight, including crowd noise, "fight songs," and the sounds of the MMA duel.

## 4. General Description of the MMA Gym

The gym in which we conducted our fieldwork is situated in one room of a converted neighborhood school whose redbrick architecture is venerable, rough, and workaday. The schoolhouse, now a community center, shares space with various youth sport and community fitness classes—and the noise of children and adolescents running around and playing is noticeable. Inside the gym, however, we find the space quiet and peaceful. The overhead lights are off and a number of male and female fighters are stretching and putting on their gear in the dark. In lieu of conversations, fighters are engaged with the music coming through their headphones. Many are "head-bobbing" to their selected beats as they wrap their hands and pull on their padded shin guards. The layout of the gym itself is fairly intimate with one end housing "the octagon" (an eight-sided caged enclosure used for mixed martial arts bouts). This takes up approximately one-fourth of the gym while a large mat that is used for wresting, grappling and practicing kicks and hand-strikes covers the remaining three-fourths of the floor. Space is not a luxury in the gym and punching bags, grappling dummies and assorted equipment find space where they can. We find two chairs and place them in a narrow walkway beside the octagon to sit and observe the fighters as they warm up and prepare for the night of training. With space so limited we feel that our presence is burdensome—but the fighters keep assuring us

that "we are fine." In fact, many apologize to us for "cramping our space" as they stack their gym bags around our feet.

Practice begins at 6pm and at approximately five before the hour, Scott (a professional MMA fighter and the head trainer/owner of the gym) walks in and flips on the light—his arrival and the emergence of light into the room transitions the space from a calm, meditative venue to one marked with frenzied energy. The soundscape of the gym is now lively and messy with noise coming from social greetings and general gossip. More fighters arrive and the gym is now packed with people (on a given night, gym membership fluctuates between 6 to 12 people—but the curious as well as potential new members wander in and the gym has been occupied with as many as 30 people).

Following the arrival of Scott, and allowing for a transition period of chatter and final preparations, the gym is broken into distinct training and aural phases. First, the fighters are "called to order" (either by Scott or by a trusted elder fighter) and members begin a routine of organized stretching and warming up. Here, the noises produced are mostly from the body: the air is filled with the rhythm of focused breathing and the sound of members working through a series of pushups, jumping jacks and "falling" exercises designed to train and callous the body for floor-work. This lasts approximately five minutes and then the fighters are told to line up in order to receive instruction on specific techniques of hitting and kicking (see section titled "listening to instruction"). This often involves bag-work and exercises in particular kicking and punching methods. The fighters take turns hitting and kicking a pair of hanging bags on the far end of the room. The bags receive the various hits and return sounds of "booms," "thwacks," or "slaps" (see section titled "the sound of a good hit"). During this portion of training, fighters will often continue to gossip and "playfully roughhouse" or shadow fight (spiritedly mock a punch or kick at the person next to them) as a way to encourage bonding and camaraderie.

After approximately thirty minutes of practicing various kicks and punches, Scott moves the fighters into the high cardio and multi-station portion of the workout. This stage of the workout is thirty minutes of grueling intensity as fighters transition every 60 seconds to a new workout. These workouts are designed to be just as draining mentally as they are physically so that fighters develop the mental toughness they need to get through a strenuous fight (see section titled "noise as social organization"). Often music is played during this portion of the night and fighters will create various playlists for working out (the music genres most commonly played are heavy metal or rap – see section titled "use of music in the gym"). Here fighters will attach a smartphone to a speaker system (though an older "boom box" with various CDs is kept in the gym for moments when fighters forget to bring music). During this portion of the night, fighters rarely utter more than a few words to each other, as they become too enrapt in practice—and are often too tired—to participate in conversation.

In the penultimate section of the night, the fighters transition out of this physically demanding circuit and find partners with which to simulate full fights. Here, the fighters will go for another 30 minutes doing ten rounds (at three minutes each) of one-on-one fighting. Scott will activate the "ring timer" – a blaring box of buzzers and flashing lights that announce the beginning of the round, when 30 seconds remain, and the end of the round. This portion of the night is the most sonically chaotic as the music is intertwined with buzzers, grunts of physical exertion, and rhythmic beatings of gloves and padded feet hitting bodies.

Finally, at the end of an hour and a half—and with the fighters near total exhaustion—Scott turns off the music and unplugs the timer, thus signaling the end of the sparring. He then gathers the fighters into a circle on the mat and each fighter takes a turn calling out a core workout (e.g. abdominal crunches). Each exercise is done to a count of 100 repetitions (which can take approximately 30 minutes total). It is common for fighters to return to joking during this session—and in many ways, the conversation and humor making is welcome and seen as a reward for "surviving" the workout.

### 5. The Soundscape the Gym: Listening to Instruction and Using Silence as a Form of Inclusion

In the MMA gym the acoustic and auditory world takes on a particular social character as fighters need to listen to instruction that trains and enculturates them into the world of fighting. In order to effectively participate in this combat art, the fighter and his/her ear must be well attuned to the commands of coaches and teammates. Consider the following entry from our field-notes:

Scott tells the group that they are going to practice kicks. Everyone gathers at the end of the wrestling mat as Scott waves Joel (a more seasoned fighter) over so that he can demonstrate a kick. "We are going to start with a roundhouse kick... You are going to 'throw' your kick from your back leg...make sure you get enough rotation in your front leg, to the point that your ankle is facing [your opponent] when your shin or face of your foot hits the ear, the neck, or the back of the head... If you can't hit this high, then lower your kick to midsection or thigh and practice good form." He demonstrates the kick multiple times, with his right leg swinging around like a whip... he then guides it slowly into Joel's left ear, saying: "like this" ... "Now your turn." Fighters line up into two rows, and for about five minutes take turns kicking one of two hanging bags. Some do amazingly well and make the high kick, which in turn makes the bag "pop" and swing violently... Others are not as successful, and several fall to the floor attempting their kick or hit the bag with a barely noticeable sound...Regardless, Scott nods encouragingly...As the round progresses, he speaks rarely except for words of encouragement. To the fighters who are approaching a sanctioned fight he will offer more, making specific notes on technique. For instance, he tells one fighter, "Step in to your opponent and rotate more quickly... like this [shows the move again]... you're losing power with your shortened step... He watches again and says "good job" and takes a step back (Field notes, 2013).

While Scott explains technique and offers strategy, it is striking to notice just how little he talks to the trainees/fighters during these training sessions. We have come to conclude that he is using silence (defined here: as an absence of critique/hash criticism) to build a sense of community. This is supported by the following excerpt from an interview with Scott:

I try not to say too much, or offer too much critique or criticism... instead I let people 'be' ... In the gym, we have people with varying skill levels and if I say too much, I feel as though I'll push them away... I want them to feel comfortable and we stress learning through listening, observing, and doing.

Indeed, the use of silence works to deny any intent to harm or threaten the recipient with social exclusion (i.e., everyone will get an approving nod regardless of skill level and is made to feel like a contributing member). We know that humans possess a highly sensitive monitoring system for detecting threats of social exclusion (Wesselmann, Nairne, and Williams, 2012) and Scott's generalized use of silence in this respect works to keep inclusion within the group. As music philosopher Mark Slouka (2007:40) reminds us, "it is the stuff between the notes" (that which is not said) that exists too as communication. Silence, he states, is "not a poverty of communication [but a] requisite for contemplation and the forming of the self" (p.42).

#### 5.1 The Soundscape the Gym: The Sound of a Good Hit: Hearing and Feeling the "Thwack" of the Bag

The sound of "how" hands, elbows, knees or feet crash into bags is also a crucial and functional noise of training. Take for example the following field note:

The sound of a good hit can be quite exhilarating... and creates a characteristic noise that tells the fighter they have made a good hit. Acoustics certainly influence the perception of the quality of the hit... a "thwack" for instance suggests a solid hit... whereas, a "slap" indicates a weak or missed/grazing connection.... Interestingly, the sound of a good hit and what fighters describe as "feeling" a good hit are fairly synonymous. After Tabbi (one of the female fighters in the gym) executed a powerful kick to a high bag (which made a deep a whooshing "boom") she turned to the fighter behind her and said that it "felt good - it felt 'solid'" (Field notes, 2013).

Sound is more central to training than most people realize. The pops or plunks that originate from hits are valuable teachers. A good, solid sound from the bag can be an indication of improved performance while an inferior sound infers that a fighter is "hitting the wrong notes" (field note, 2013). In this context sound has the capacity to create "a habit of knowing" (Feld, 2012) and the sound of hitting the bag "the right way" functions to underline the expectations of training and creates learning and knowledge by sound.

If nothing else, fighters also like the sensory act and auditory art of hitting. On more than one occasion, various fighters were heard to say: "I love that sound." Indeed, when researching the auditory pleasures associated with fighting, we found this seductive description, and although members of the gym did not pen it, they gave their approval of the description:

Pop! Pop! Pow! Wham! Whoomp! As you walk into the gym, you hear the familiar sound of boxers hammering the heavy bag. Pop! Pop! Pow! Wham! Whoomp! Sounds like a double jab, straight right, hook, uppercut combination. The sounds are easy to recognize. The "pop" is the snapping crack of the jab. The "pow" is the exploding smash of the straight right. The "wham" is the crashing blast of the hook. The "whoomp" is the thumping report of the uppercut. The heavy bag absorbs it all. It takes all the hits and responds with thuds, creaks and groans, but never a whimper. You love the sounds. There is something primal about them. There is a deep down visceral feeling of satisfaction (Bresnahan, 2003: no page number).

## 5.2 The Soundscape the Gym: Sound as a Disciplinary Function

However, while sound can be sensual and exhilarating, it can also be disciplinary. In particular, the "thwack" or "pop," can also serve as an indicator for fighters when they violate training protocol. Sometimes when a sparring session gets a little rough or when a fighter isn't listening to instruction, a trainer or fellow fighter will hit them in the body or leg with hard and noticeable "pop" to get their attention. Consider the following exchange:

A seasoned fighter was sparring with a "newbie" (a neophyte or uninitiated member of the gym)... the newbie accidentally (and perhaps instinctually) head-butted the seasoned fighter several times during their sparring session... after the most recent infraction, the seasoned fighter, pulled back and gave a hard, striking kick to the newbie's thigh (where the muscle mass is thick and less apt to receive damage)... the sound was noticeable, with a "pop" that echoed throughout the gym. The seasoned fighter then stopped to tell him to watch his head-butts and they resumed their session (Field notes, 2013).

## Similarly, Chris, a relatively new member of the gym, relates the following:

If you're not paying attention you can get your "bell rung." Sometimes [a fighter] will give you a whack to teach/train you to keep your guard up, your hands up...or if you're doing something that puts you or them at risk they'll "pop " you... It's not meant to hurt you but to get your attention and teach you not to do that...sometimes the loud 'pop' is also meant to shame you...others take notice of the sound and turn and look... if you're doing something wrong, others in the gym with be notified.

Thus the noise (and the accompanying snap of pain) is part of an auditory and physical educational ritual. As fighters like Chris note, it is not meant to inflict lasting pain but to force your notice and reinforce "good and safe" learning techniques in the gym.

### 5.3 The Soundscape the Gym: Noise as a System of Social Organization

The word "noise," along with other words we chose to describe sounds (e.g. thuds, bangs, etc.), are culturally constructed phenomenon that cannot be separated from its social production and interpretation (Feld, 2012; Chandola, 2013; Gershon, 2013). All sounds get their meaning partly due to their embeddedness in temporal, spatial and contextual settings—and the MMA gym is no different. Here, there are many noises that signify very specific training actions.

As noted in the opening description of the gym, fighters often become too entranced in training-and often become too tired—to participate in conversation. As a result, the noises of the gym act and are understood as coded voices that arrange human movement. They become a script that choreographs a series of real-time, social interactions between fighters. Specifically, the gym is "sonically sequenced" by the yelling of one word, "Next!," and the blaring of buzzers that serve as timers to "cut-up" training sessions into particular parts. For example, fighters will group around several stations: (1) solo with a floor bag (2) solo with a grappling dummy, (3) with a partner to practice hits, (4) with a partner to practice kicks and (5&6) two sessions with a punching/kicking bag.

On the floor next to the fighter working the "ground and pound" bag is a stopwatch, and it is this fighter's responsibility to yell "Next!" after 60 seconds has passed as a signal to switch stations or positions. This swirling action is repeated over the next thirty minutes and sounds are a combination of music and "musically sounding" breathing as fighters hit bags and each other. From our notes:

We witness a fighter, first with one clenched fist and then with two interlocked hands, "pound" the floor bag for approximately a minute – He is straddling the "ground and pound" bag issuing a series of devastating blows that cause the bag to "wheeze" every time he hits it... a mere three feet away is another fighter tussling with a life-sized grappling dummy—he picks it up and powers it to the floor in one powerful move that resonates with a "Slam!"... Five feet from him are two fighters engaged in a boxing routine. The male fighter has on punching mitts to receive his partner's blows –he motions his gloves counting "one-two-three-four" – here he is indicating where (and in what rhythm) he wants his training partner to hit his hands. She responds with a series of quick-fire punches, hitting the gloves in the desired order breathing in unison "shoo, shoo, shoo, shoo" ... another pair of fighters are trading skin kicks—one is bracing a bag against his shin while another is whipping their leg into bag making it "whoosh" ... behind them are two hanging bags where fighters are practicing various kicks and punches—We watch the bags dent and hear the metal chains that affix the bags to the ceiling crinkle as metal rubs against metal... We turn to the original fighter on the bag as he yells "Next!" indicating that it has been 60 seconds and that it is time to rotate to the next training sequence...

Following the various workouts described above the fighters will then partner up to simulate one-on-one fights (though it is common for this to occur simultaneously with the circuit training described above). In this sparring session, round-timers are used to cut up 3-minute rounds of fighting: the first series of noises, a pronounced "Beep-Beep-Beep-Beep" initiates the beginning of the round, another prominent "Beep" announces when there is 30 seconds left and another series of "Beep-Beep-Beep" signals the end of the round. Taken together, the swirling physical movement and the orchestra created from the music and the noise and sound of fighting can be overwhelming if one is not attuned to it.

### 5.4 The Soundscape the Gym: The Role of Music

As an accompaniment to the buzzes that sequence training, music is often played in the background of gym practices. Music genres range from county and pop to rap and metal. The choice of music is often dependent on the one "who remembered to bring music" and is routinely decided on a first-come-first-serve basis. Musical choice, however, was subject to commentary by the members, be it positive or negative. Consider, for example, the following vignette from our field notes:

When the fighters are running drills they use music to zone out and push themselves. At one practice, Tabbi stated she had music to hook up to the stereo. One of the trainers replied: What? Is it the "Lion King?" (followed by laughter)

Tabbi replied:

No, it is a new mix I made for practice.

It was obvious from viewing prior practices that the music Tabbi had chosen was not going to suit the other fighters. It was one particular song by Katy Perry, titled "Roar," that Tabbi was excited to listen to and stated, "this is my walk out song!" (for her fight). The other members of the gym were fairly dismissive of this song and another member actually changed the music before the song was over, saying that the song was "making him weak." In its replacement, the music was switched to heavy metal.

This illustrates that what one person counts as "delightful music," may be defined as "hideous noise" by another and be used as the basis of a complaint (Stokoe and Hepburn, 2005). Music is not just a matter of social definition and interpretation but also a matter of descriptive–evaluative practices. In this case, the evaluative process is also gendered. With reference to the literature on gender and listening preferences during exercise, several scholars (McCown et al., 1997, Pieslak, 2008; Priest and Karageorghis, 2008) found that aggression, male gender and extraversion were all positively associated with a preference for exaggerated rhythm and beat in music.

In this work (while recognizing that our participant population is small), we do find support for this scholarly observation. Indeed, the men of the gym had a strong preference for music with pronounced rhythm and bass, finding it "motivational." The female fighters on the other hand, were the only ones to identify that lyrics could also be highly motivational. In this sense, songs were chosen less for rhythm and beat and more for a sense of personal meaning that could be generated from the lyrics. For example, Tabbi reported that she responded to lyrics because they reflected elements of her own life and charted her own life ambitions. "The words are very important to me, just listen," she sings:

"I used to bite my tongue and hold my breath Scared to rock the boat and make a mess So I sat quietly, agreed politely I guess that I forgot I had a choice I let you push me past the breaking point I stood for nothing, so I fell for everything You held me down, but I got up (HEY!) Already brushing off the dust You hear my voice, you hear that sound Like thunder gonna shake the ground You held me down, but I got up (HEY!) Get ready cause I've had enough I see it all, I see it now

I got the eye of the tiger, a fighter, dancing through the fire Cause I am a champion and you're gonna hear me roar..."

Although Tabbi has the respect of the men in the gym, her music choice was something they saw as creating a "feminine space" – and femininity (defined in their eyes, as something akin to weakness) is managed by being made distant and unapproachable. It is important to acknowledge that the organizational culture of the gym is structured so as to emphasize and de-emphasize gender (see: Acker, 1990). The MMA gym is like other male dominated venues where men orient participants to exhibit hyper-masculinity and view participating as a test of manhood (e.g., Messner, 1992). Thus, in the gym, the men see themselves through a traditionally gendered gaze that highlights both the insecurity of masculinity and the strength of its presence—as expectations around dominant notions of gender impress its subjectivity even on something as minute as music listening<sup>i</sup>.

Apart from this interaction, the majority of workouts used rhythmic-heavy rap or metal as a fulcrum to push a desired intensity for gym training sessions. In our observations, fighters came to be attuned to the rhythm of music, linking body movement with beat and tempo. This is to say: bodily movement can become linked to a framework of auditory associations. As (Spencer, 2013: 13) states, "bodies can latch on to auditory signals... for purposes beyond the pleasure of listening. Here music can frame the way in which a fighter engages with an exercise, framing the ways bodies perform a movement."

Here then, music choice may interact with the listener to influence his/her psychophysical state and stimulate and help guide body movement. The following statements were typical: Fighters said that music is used to, "get me up," "get me going," "pump me up," "rev me up," "excite me." In particular, it was felt that the rhythmical and resonant properties of music led to an increase in energy and physical output. One fighter stated: "music is a motivator...The vast majority of fighters are fans of heavy metal –at least at the gym...The loud, aggressive music, keeps you elevated between [exercise] stations."

But the effects of aggressive rhythm synchronization can also have a downside. For example, one of the fighters, Gary, related the following:

I lost my last fight and it was because I was too amped up... I came out in the first round and I just dominated – but I also exhausted myself before the latter rounds. I had little left for the next rounds... Now I come out to more low-key music – I need something that slows me down, calms me and relaxes me... I use it to just slow me down and remind me to save myself for the fight.

Similarly, Holly offered this insight:

I like to listen to rock music when I work out and train, but if I had a really bad day, I'll be too amped so I'll put on classical music to totally calm me down ... it just soothes me ... it's like meditation. It helps me clear my head and helps me find a sense of inner peace.

Lastly, in a related fashion, Chris says:

We had several guys from the UFC come and train with us (note: the Ultimate Fighting Championship is the largest mixed martial arts promotion company in the world and hosts most of the top-ranked fighters in the sport). The UFC fighters talked about the value of music in training. They suggested using smoother, softer and more relaxing music while doing groundwork—on the ground, you need to stay calm and work methodically—so pick music that works in [a similar] fashion. On the other side of the coin, they suggested music that is heavy and upbeat for doing floor-work (punching, boxing, etc.)... you really need to find a balance... if nothing else the music reminds you that you need to train differently for different [aspects of your game].

In this way, music becomes part fight-manual, training the participant to use sound and rhythm as patterned corporeal engagement. With this, we now transition out of the gym and into the arena of the fight, focusing on the sounds and audio landscapes that structure this unique environment.

#### 6. Soundscape of the Fight: Hearing the Audience

During the fight event, fighters are confronted by a cacophony of noise from not only the fans in attendance, but also from the environment itself that hosts the MMA event. From our field notes:

The first thing that hits your senses, beyond the sight of the swelling humanity as people cluster and crowd the venue, is the blaring of music... the event is being hosted in a dance-club (with an after party to follow) and it seems as though they forgot about the fight and started the party early... the music (a combination of in-house dance jams and classic rock) is so loud that we are yelling at each other in order to communicate and we are only sitting inches apart... our voices become raw and weak and by the end of the night we've taken to texting one another to communicate (Field notes 2013).

Indeed, the event and pre-fight staging is very sonorous and "physical," and several fighters describe it as such:

Yeah, it's a bit loud tonight... being in a bar/dance club... but you do what you got to do and fight where you can... generally you are able intermingle with the audience, watching other fights before yours... It can be a [spectacle]... the noise reverberates off you... you can feel it (Fighter, pre-fight conversation, 2013)

I like it... the noise... I find being backstage boring... here [with the audience] you can feel the excitement... (Loni, pre-fight conversation, 2013).

However, apart from the aforementioned comment, most fighters sequester themselves away from the audience and try to remain focused on their upcoming fight. The fighters often listen to music on headphones during these pre-event preparations. The most frequently reported motives for listening to music in this venue was to "tune out" crowd noise, increase levels of mental activation (that is: visualize and mentally "walk through" the fight), and motivate themselves with "the beat of the music" and/or through "motivational lyrics" (participant interviews, 2013). These responses extend previous findings (Bishop et al., 2007; Priest and Karageorghis, 2008; Laukka and Quick, 2013) and suggest that emotional and motivational uses of music are an integral part of both training and preparing for competition.

### 6.1 Soundscape of the Fight: "Fight Songs" and Arrival to the Octagon

All fighters use music to announce their arrival and entrance to the ring. These songs serve multiple functions. First the music, as noted in earlier sections, is used to prepare and psychologically ready fighters for "combat" and potentially "psych-out" their opponent:

My walkout song is "Bad Moon Rising" by Creedence Clearwater Revival... It's a great song... and I chose it because of the lyrics: "I see the bad moon arising. I see trouble on the way...I hear hurricanes a' blowing. I know the end is coming soon." My name, Kat, is short for Katrina—and like Hurricane Katrina, I'm going to do some real damage...I'm coming [for you] and I'm going to be trouble for you... (Smiles) (Fighter interview, 2013).

Similarly Joel shared:

My song is "Mein Teil" by Rammstein...The song is slow, dark, and scary... essentially it's about a man who eats another man... its about cannibalism ... so symbolically, I'm telling my opponent that I'm going to consume him—I'm going to slaughter and defeat him (Fighter interview, 2013).

However, several fighters also described their music choice as a type of "personal pep talk" used to control their fear and manage emotions (see Vaccaro, Schrock, and McCabe, 2011). They stated:

The song gets me ready (she sings, "I got the eye of the tiger, a fighter, dancing through the fire 'Cause I am a champion and you're gonna hear me roar" by Katy Perry)... it's like a personal pep talk, let's me know that I deserve to be here...that I'm good enough to be here (Tabbi, Fighter interview, 2013).

My song is "The Gun Show" (by In this Moment). It totally pumps me up...I use it to remind me that I've worked hard to get here and that I deserve [to be here]... but it's also a mind game... the lyrics say that it's going go be a "gunfight," so I use it to get ready and to tell my opponent to "get ready for me." She sings: "Hey cowboy I hope you're fast 'Cause I'm the baddest gunslinger in the west..." (Holly, Fighter interview, 2013).

Fighters also describe the use of music as beneficial to concentration and managing mood. Music scholar De Nora (2000: 60-61) writes, "Music has the power to configure a space [toward] concentration...because it dispels random or idiosyncratic stimuli, aesthetic or otherwise." Indeed, several fighters stated:

With the loud music, [there was less expectation] of talking, which allows me to stay focused" (Joel, Fighter interview, 2013).

With the music being so loud, there is no empty silence... which encourages me or others to talk... I hate getting into conservations before a fight... so the music is a good way to cut all of that off and just concentrate on the fight (Kat, Fighter interview, 2013).

Lastly, and more playfully, several fighters indicate that the music is also used to communicate to the crowd a bit of their personality. Chris said it this way:

Yeah, we are always talking about walkout songs... we joke about it and we suggest songs that we think mirror [the fighter's] personality... Fighters sometimes will ask for suggestions on Facebook and they get back ridiculous things—things that don't mirror their style or personality.... Yes, the walk out song is used to encourage focus, but the fighter won't get interviewed or talk to the crowd after the fight...so this is really the only chance they get to "talk" to the audience... so they pick a song that "shows" the audience a bit of their personality (Fighter interview, 2013)

Indeed, each walkout song can be drastically different from the next, which shows how diverse each fighter can be. Sometimes fight songs are funny and unexpected. For example, one male fighter selected, "Strawberry Wine" (about a young girl's blossoming sexuality) as his walkout song because it reflected his "goofy and playful personality...and because he hoped to catch his opponent off guard" (Fighter interview, 2013). Others indicated that they pick a song because it offers insight into their core values—and that they hope the audience will "know them" by hearing their selected lyrics. For example, one fighter said he would pick Tupac Shakur's "Never Had a Friend Like Me" as his song because it's about "loyalty and dedication... if you are my friend, you're my friend no matter what... but if you are here to harm me and mine then I will [fight you]" (Fighter interview, 2013).

#### 6.2 Sound scape of the Fight: "In the Cage" and Listening in a Fight\_

Fighters commonly refer to the octagon shaped fighting space as "the cage" and they routinely describe the sonic (and emotional) world inside the cage as being quite distinct from the one outside the cage (Van Bottenburg and Heilbron, 2006). As one fighter stated:

When you walk up there you got all these people staring at you... some are cheering for you... some are booing... it's intense... but then you hear the door shut behind you and all the noise seems to go away... I rarely hear anything after that. You just try to cut it all out... (Gary, Fighter interview, 2013).

The reality of the "closed cage" and the transition from outside to inside is clear and powerful for the fighters. One described the unique sensation of entering the cage like, "entering a whole new world." Tabbi

remarked that, "You never know what's gonna happen in there... you train for it and you [simulate] it in the gym but it's one of the most unique experiences of your life." She further explained, "Fights are scheduled for three or five-minute rounds, with a one-minute rest between. But anything can happen in that time... and things can turn on a dime."

With that said, once a fight has begun fighters must rapidly react to the violent situations that they find themselves in and learn to listen to the specific instructions of their coaches. This, of course, is often easier said than done, for once the competition begins and the demands of the fight became their total focus, fighters appeared to have little or no awareness of anyone outside the cage. The only exception (outside of their opponent) might be that of their coaches. Situated in a corner outside of the cage, coaches are instructed to sit and are barred from touching the cage, but they can shout instruction into the cage during a fight. Fighters acknowledge that in the midst of the chaos and noise of the cage they can often (but not always) "make out" their coach's voice. As Joel described:

You've got a hundred people yelling stuff like "kick his ass" (laughs), but I don't remember hearing any of that ... but I think because of the intense training and the relationship you build up over time, I can often hear [coach] telling me what to do...(Fighter interview, 2013).

To strengthen this notion we offer a particularly telling event witnessed during a fight. From our field notes: We are sitting right behind our gym's corner watching coaches yell instruction into the cage. Dan is fighting tonight and his brother (a fellow fighter) and two coaches from the gym are sitting together... The fight has been particularly long and brutal ... Dan came out swinging and knocked his opponent down almost immediately and began pounding his face and upper torso with his fists... but his opponent (a strong wrestler) got Dan's head in a lock and the fight did "turn on a dime" ... Two rounds later and Dan is locked again and his corner begins yelling instruction and technique to get out ... both coaches are screaming simultaneously over the crowd... I wonder: how can Dan hear them, especially with the deafening crowd noise and the fact that they were "talking/screaming" over one another... But then Dan's brother (Andy) repeats the coaches' instruction, and suddenly and surprisingly, Dan seems to hear him and reacts accordingly. He leverages his body and pulls out his head and trapped hand to begin delivering a number of hammer-like blows to his opponent's face...This is enough to give Dan a point advance and he is declared the winner... How did he hear his brother in this cyclone of sound? Eighteen plus years of living, fighting, and knowing his voice, he said (Fighter interview, 2013).

In the end, the aural connection between coach and fighter can be integral and is often the key to success in combat.

## 6.3 Soundscape of the Fight: Hearing Defeat ... Hearing Victory

The collective energy and "fight lust" (Oates, 1987; Rotella, 2002) generated by the audience can be imposing and fighters are often sonically celebrated in victory or made a target of their jeers when defeated. We begin first with the sounds of defeat and note this harsh reality. On this subject, several fighters offered:

Losing is the worst feeling in the world—especially when you hear everybody cheering and congratulating the other fighter...[your friends and training partners] tell you good job, but you don't want to hear any of it ... you feel embarrassed and disappointed ... so yeah, hearing them call out the other person's name is painful (Fighter interview, 2013).

I lost my last fight- and it wasn't just that I lost- but it was that my opponent ran around the ring screaming and yelling like a [crazy person]... she was much more experienced than me, and I was like, come on, act like you've been here before... It was totally upsetting... she was screaming and I just wanted to cry... I just wanted her to show some respect (Fighter interview, 2013).

Additionally, several scholars (Oates, 1987; Rotella, 2002; Wacquant, 2006) have noted and recorded audience members calling out and shaming fighters after a loss. For instance, Vaccaro, Schrock, and McCabe (2011), identify numerous instances where members of an MMA crowd shouted emasculating terms (e.g., 'you're a pussy') to the non-victorious male fighters. While we were not privy to such exhortations, we did nonetheless hear male fighters mocked for their failure to fight. In the world of MMA it is not unusual for fighters to withdraw from competitions (for reasons due to injury, health and fear) and thus they become open to criticism and derision.

Regarding female fighters, we did unfortunately hear stories about women being objectified with derogatory statements—and this was apparently quite common regardless of victory or defeat. For example, one husband of a female fighter told us the following:

I was at my wife's first fight with her dad and we were standing next to these two guys and they were looking at my wife and her opponent [in the cage] and one turned to the other and said, "I don't care who wins-I'm gonna fuck one of them." Not me, said the other one, "I'm gonna fuck the winner." Its hard hearing this shit, you know. It's unnecessary stuff like this that fighters have to put up with (Interview, 2013)

For both male and female fighters, audience members tend to draw on the larger culture of sexism as fodder to help shame fighters (Connell, 1987, 1995, 2002). In the end, MMA fighters are subject not only the physical demands of training and the violence inherent in fighting-combat, but they are also open to aural insults and ill and vehement noises of disrespect. While most say they can "tune it out," it is nonetheless an unfortunate reality and a factor of consequence for those who are brave enough to step into the cage.

On the other side of the coin, is the more pleasurable sound of victory. Consider for example this excerpt from the first author's field notes:

The competition has lasted for approximately three hours and now the last fight of the night, "the title fight," is finally here. Gary, a fighter we've been shadowing, is going for a belt (an amateur championship) in the 170 pound weight class. The crowd seems restless and is ready for the fight to commence... He is the second of the two fighters to make his way to the "cage" and he comes out calmly with a classic rock tune announcing his arrival...Once the cage door clicks and the ring referee motions for the fight to begin – the crowd explodes with shouts "rooting on" their chosen fighter... Almost immediately Gary dives at his opponents legs and pins him to the mat... both ring corners are shouting instructions and I hear the audience behind me yell at them to "get off the ground" seemingly disappointed with the lack of punching and standing action.... The second round begins, and again, almost immediately Gary goes for the legs and takes his opponent to the ground. Half the crowd yells in affirmation and the other half groans with disappointment at the prospect of another "wrestling match" ... There is shifting on the ground and Gary loses his dominant mounted position and both fighters rush to standup and close in on each other... Gary is faster and catches his opponent and to the surprise of many lifts him over his head. Again, everyone is seemingly stunned by this development and the noise of the crowd is muted-the sonic focus instead is on the sounds coming from the fighters: I hear feet pressing the mat and grunts of the players.... Finally, and with a resounding "Thud," Gary slams his opponent to the mat... The crowd noise is instantly restored to full volume and a section within the audience begins shouting his name: 'Ga-ry!, Ga-ry!'... Gary now has his opponent on the ground and begins pummeling him with blows to the side of his head... I can hear his hands (and his opponents face) bouncing off the mat: "twaph-thunk," "twaph-thunk," "twaph-thunk"... after what feels like 30 seconds of this the ref finally steps in and stops the fight... this violent sound is replaced by a surge of crowd noise, celebratory yells, and the clapping of hands.

### 7. Conclusion and Discussion

Because MMA is such a distinctive sensorial spectacle of sweat, blood, and noise we undertook this study to detail the world of MMA at the level of the senses. In specific, we focused on various aural and sonic experiences, noting how sound, noise, and music served as key aids in bonding, training, and fighting. In the first section of this aural ethnography, we provided an overview of the sounded world of an MMA gym, highlighting the production and understanding of noise and sound as specific cultural understandings relevant only to the fighters. In particular, we described how noise was experienced by members of the gym and how it helped to "sonically sequence" human movement and behavior.

In the second section, we went into greater detail accenting the use of talk (and silence) to train fighters. Here, we also noted the auditory power of a "good hit" as a tool to enculturate quality work habits and to discipline fighters when these training norms were violated. Next, we described the noises of the gym and how they became a script that choreographed real-time, social interactions between fighters. As fighters became entranced in training (and became too tired to participate in conversation) the noises of the gym were understood as coded voices that arranged human movement. In the final portion of section two, we

explored the role of music in the gym. Specifically we described how bodies latched on to auditory signals that provided inspiration in the form of personalized-meaningful lyrics and motivational beats. We also detailed the gendered construction and gendered segregation of music listening in the gym, showing the strength and insecurity of hyper-masculinity in the social world of this MMA gym.

Our final section –the soundscape of an MMA fight—reflected on how fighters sonically experienced the audience, how they used music to interact with the crowd and their opponent, and how defeat and/or victory was heard. In the end, our descriptive reflections offered a spectrum of varied emotions, telling how fighters experienced fear, disappointment, and joy.

Using a sensory and sonic focus, we endeavored to create an empathetic and vicarious ethnography—where the information carried in the soundscape of this particular MMA gym could be more fully heard by an audience. We acknowledge that this was a fairly unusual and nontraditional approach, yet we feel this was an effective mode nonetheless to offer insight into the highly sensorial world of mixed martial arts. It is our hope that by creating this meager ethnographic soundscape, sociologists and other scholars will be encouraged to engage the full potential of sound, noise, and music to investigate various sociocultural contexts.

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#### Endnote

I like it when the beat goes da na da na Baby make your booty go da na da na Girl I know you wanna show da na da na That thong th thong thong I like it when the beat goes da na da na Baby make your booty go da na da na Girl I know you wanna show da na da na That thong th thong thong

The fighters begin shaking their heads and one of them says, "Come on Man!" Smiles and laughs breakout and one fighter begins to playfully dance as if in a club. In reality, the song could be viewed as a masculine and hetero-performative tune since it speaks of sexual arousal and female bodily objectification. But from my perspective, the song evokes a particular type of physical intimacy that threatens the masculine toughness/performance of the session. When the next song (another heavy metal tune) arrives the fighters return to hitting the bags and their sparring partners.

<sup>&</sup>lt;sup>i</sup> With regard to the construction of masculinity via music listening—the first author was witness to a telling and humorous event during one training session in which no females were present. From his field notes: The gym has a particular presence of hyper-masculinity tonight as no females are present... jokes and body gestures seem more coarse than usual... One of the members of the gym has plugged in his smartphone and selected a self-constructed "gym/workout mix" ... the music has been non-stop heavy and thrash metal...and the guys are working extremely hard until Sisqo's "Thong Song" booms through the speakers, and its beat and lyrics seem wildly out of place with the previous deep beats and screaming lyrics—and the fighters take notice. They stop sparring, and begin looking around at one another as the lyrics repeat: