

'Put on your headphones and turn out the lights': Exploring Immersive Auditory Horror in 3D-sound Podcasting.

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Following the popularization of iPod and mobile-audio technologies, the last decade evidences a dramatic rise in the production and prominence of podcast audio fiction. This is largely dominated, and arguably pioneered, by the horror genre (Hancock and McMurtry 2017; Locke 2016). Among the most exciting outcomes of this development has been the revival of binaural recording and its long overdue application to horror audio-fiction. Binaural ('3D') recording produces an acoustic form which mimics the way that our bodies physically receive and distinguish sound.¹ This provides the realistic listening sensation of sound moving around, or even inside, the body. Moreover, it potentializes illusions of physical touch: listeners to binaurally recorded 'virtual' haircuts report sensations of tickling as the sound of electric clippers traverse the virtual space surrounding their heads.² In other words, binaural sound affords a uniquely acoustic virtual reality. While hitherto unexplored, the Gothic and horror potential of binaural or 3D sound is immense, and—for the audio form—a tool with revolutionary possibilities, as binaural offers a perfect harnessing of sound's properties of invisibility, intimacy and invasiveness.³ Voices may whisper in the ear; noises may sound from behind or above; footsteps may circle the listener—and all while they are disconcertingly, disarmingly deaf to their real-world environment. If audio horror has previously been understood as eclipsed by television and film, and possibly lacking in accessibility due to the blind nature of the medium, in binaural we may see the audio form's unique capabilities as offering an alternative, and highly effective, form of horror when compared with cinema, gaming, or even literature. Within binaural productions, blindness emerges as a desirable asset, where the sounds that surround the listener are not dependent upon a correlating landscape and thus may offer a more intense audio experience, enabling greater levels of Gothic uncertainty, shock and immersion.

While binaural recoding is not new, having in some form existed since the 1800s, it has largely been overlooked in the entertainment industry due to the necessitation of headphone-listening (deemed by audio-dramatist Marie Runcare-Temple as the form's 'only downside') (Hand and Traynor 2011: 186). Contemporarily, audio-listening trends, those tied to mobility and private headphone listening, are spurring fresh experimentation in binaural form. Justifying their acceleration of binaural experimentation and research, the BBC's Research and Development department cites recent growth in smartphone and fast mobile data service, which has inspired headphone listening, and explains that such listening traits are not accommodated by traditional recording methods, as '[c]urrently all audio we hear over headphones is in stereophonic format, the same content that we play over loudspeakers. But listening to stereo programmes over headphones gives a flat impression with sounds coming from inside the head' (BBC 2017).⁴ New listening cultures require alternate recording methods, not only repositioning what sound scholars Richard Hand and Mary Traynor have previously termed binaural's 'certain limitations' of headphone compatibility as an arguable strength, but perhaps as an eventual aesthetic necessity for audio dramatists (2011: 186). Indeed, with advances in virtual reality technologies and narrative experiences, audio form experimentation is increasingly important, as it is only through first mastering the acoustic binaural experience that audio visual VR may further develop (BBC 2017).

This essay is particularly concerned with the potent juncture between binaural sound, horror, and contemporary headphone culture as a space from which to offer intensely and uniquely immersive horror narrative and experiences. By early 2018, numerous horror podcasts and digital audio drama sites offer binaural horror works, many of which prompt rich meditation upon the form's horror potentials, including the horror properties both of sound itself and the potentials of the headphone listening experience. Here I explore three such works of binaural audio horror, coming from a variety of sources including the BBC as well as independent American and international podcasters. Each of these works offers a unique insight into how 3D sound explores, articulates and redefines the immersive auditory horror experience, particularly with regards to new audio media technology and cultures. Peter Strickland's BBC4 drama *The Stone Tape* (2015) uses binaural to express and explore the horrific visceral effect of sound, how it can enmesh listeners in a scene in which sound itself is realized as a potentially violent and harmful force. The independent international podcast anthology *Earbud Theatre*'s audio play

‘Are You Sleeping?’ (2016) focuses upon sound’s relationship to darkness and in/visibility, and the isolation of headphone listening, in a dreamily immersive work that requires listeners to turn out the lights for fuller immersion. Finally, *Welcome to Night Vale*, a highly successful independent American fiction series, explores sound’s often unnerving and Gothic ambiguity alongside new audio culture’s hallmarks of mobility and privacy in their interactive ‘found-sound’ episode ‘All Right’ (2016). In this episode the listener’s individual environment, and the sounds which their headphones usually block out, are incorporated into the show’s eerie narrative and setting. By their respective utilizations and appreciations of sound’s unique horror properties including viscerality, in/visibility and ambiguity, these audio dramas explore not only the extent to which binaural or 3Dsound may innovate and reconfigure the auditory horror experience, but suggest too that such horror experience is increasingly enhanced by, and incorporative of—rather than disrupted by—the experience of headphone listening.

The Stone Tape

The fruit of the BBC’s aforementioned binaural research and experimentation is showcased in their horror and Gothic radio series *Fright Night*, a seasonal Halloween series that adapts classic horror fictions into audio form. Works have included celebrity readings of David Seltzer’s *The Omen* (1976) and Stephen King’s *Carrie* (1974), audio dramatizations of un-made Hammer horror film scripts, and, as feature ‘showcases’ of the 2015 edition, binaural audio adaptations of Japanese cult horror film *The Ring* (1998), and Nigel Kneale’s critically acclaimed television drama *The Stone Tape* (1972).⁵ The latter work, adapted by Peter Strickland, offers a particularly effective and insightful example of binaural’s unique horror potential to offer listeners explicitly visceral audio immersion.

Strickland’s adaptation broadly follows Kneale’s blueprint, detailing a group of scientists’ explorations of a house whose bricks they suspect are able to record and replay sound, yet which ultimately turns out to be haunted. While Strickland maintains Kneale’s plot and the original drama’s setting of 1970s Britain, the binaural adaptation deftly harnesses an essential difference in TV and audio narrative to create a horror which, in its immersive qualities, effectively implicates and implements sound’s physical properties as to render the listener victim to them. In audio drama distinctions between narrative and audience space are more fluid than television, with no visual parameter of the screen to delineate the characters’ space from the listeners’, and

in binaural sound especially, as radio dramatist Andrew Sachs notes, ‘you, the listener, are always at the center of proceedings’ (1978). For a drama concerned with its characters’ subjection to a roaming, malignant, potentially sentient sound, placing the listener at the centre of a virtual soundscape is highly effective. We are reminded that, as radio historian Richard Hand notes, sound is ‘extremely hard to avoid. We might keep our mouths closed to refuse to taste something, we might shut our eyes to block out something that we do not want to behold, but we cannot shut our ears.’ (Hand 2014: 8) Unlike its televisual predecessor then, Strickland’s audio drama thus situates listeners *within* the play’s acoustic space, with listeners sharing in the discomfiting, almost torturous acoustic experiences of the characters, rather than simply observing them.

From the outset, Strickland positions sound as an emphatically physical, and potentially violent, force. In his version of the story the team of scientists are initially developing infrasonic acoustic mining apparatus. The notion of audio drilling recalls contemporary concerns over fracking, and this element emphasizes sound’s physicality as powerful and potentially destructive. This point moves beyond the symbolic as the play’s early scenes immerse the listener within the sound and, seemingly, sensation of the drill, surrounding the (virtual) body with an increasingly loud, mobilized cacophony of noise, as voices shouting from all around detail the specificities of its increasing volume. In binaural, this produces a highly immersive, visceral sensation of disorientation and physical discomfort, which one character describes as being ‘like all the bad parts of being drunk’. According to evolutionary biologist Daniel Blumstein, the particular sound of a drill is *innately* discomfiting, as the ‘drill’ is composed of non-linear sound, i.e. sound which is amplified beyond its normal or ‘natural’ range; Blumstein argues that this triggers a near-immediate fear response in humans, not least because non-linear sound is a key feature of animal and human distress signals (2010: 751-53). As such, non-linear sound is characteristic of horror cinema scores and sound effects. However, Blumstein posits that ‘neutral’ or (assumedly) non-frightening visual reference can undermine non-linear sound’s unnerving effects, with cinematic sound being subject to visual dominance (Ibid). In Strickland’s audio-only format, however, the drill’s mechanized screech is without visual reference to undermine or codify it. The virtual drill moves around and seemingly within the listener’s body, rendering the listener subject to the involuntary response of fear or discomfort, while suggesting (in the various characters’ shouted warnings and reactions to its steadily increased volume) a

very physical danger to its bodily penetration. The sense of physical co-presence within the drama is heightened by a stark absence of extradiegetic sound with which horror narratives are often over-coded: no creepy music or jolting stings warn of danger's approach, but rather, sound *is* the danger.

As the house's recordings of ancient screams and footsteps emerge, so too does binaural's potential to Gothicize the physical reception of, and response to, sound itself. Isabella van Elfrin notes that '[s]ound's relation to the uncanny can be described in terms of dorsality: that which is behind our back: the invisible, sinister, sinister presence that just escapes our peripheral vision when we turn around' (2016a: 167). Moreover, '[t]he dorsal indicates that which cannot be seen *unless* we turn around: that which forces us to reconfigure our cognition of ourselves in relation to the world around us' (315; my emphasis). In *The Stone Tape's* 3D soundscape, such reconfiguration becomes a literal endeavor, with listeners' 'real' surroundings being acoustically masked by the binaural's uncannily immediate dorsality and allowing for a truer immersive experience than stereo sound allows. As Sachs states: '[binaural is] a system whereby if somebody's behind you, you as the listener you *actually* want to turn around' [my emphasis] (BBC4 1978). In the house's haunted 'recordings', footsteps seemingly run from behind the listener to the front, before a woman's scream sounds directly in the ear. An involuntary physical chain reaction follows: first, an almost imperceptible compulsion to locate the footsteps' source, to physically turn, or at least to try and auditorily scan the 'surroundings' for an acoustic source; then, as the footsteps skitter by, whence the listener is held in an uncertain 'it's behind you' moment, from the near-left there arrives a woman's nonlinear, animalistic scream. This is perfectly primed to force a startle reaction, wherein the body is shocked into preparation for threat or danger—a pre-emptive fight-or-flight response that relies upon sound's comparative rapidity (in relation to light and vision) to prepare the body for danger. The adrenaline jolt of shock, and the emotive demands of non-linear sound, thus combine within the 3D soundscape to create a space of highly corporeal attention. The receptive listener's body is rendered in an unwitting and unnervingly reactive, oversensitive state, fully embedded within the amplified tensions of Gothic narrative.

As the play develops further this effect is heightened, particularly as sound switches between binaural and mono recording with disconcerting fluidity. In a short behind-the-scenes promotional documentary, Strickland explains using a range of recording equipment and styles

alongside contemporary binaural, incorporating ‘retro’ analogue equipment, to produce the ‘warmth and crackle’ of 1970s sound recording equipment (*The Stone Tape Preview*, BBC4 2015). While this affords verisimilitude, it also heightens the binaural effect, as Strickland notes the extent to which prolonged subjection to binaural sound may lessen its effects (Fitch 2015). Furthermore, the sound switch also increases tension, offering listeners physical relief from the sensation of full auditory immersion, only to plunge them back at the least notice. Thus the distinct composite of recording styles produces a stronger sense of immersion: the listener both hears the realistic 1970s-style ‘recordings’ that the scientists make of the house’s horrific sounds, as flat and distorted as they would be in such circumstance and technological moment, and then, without warning, registers the ‘actual’ noises of the house sounding ‘around’ them as if they too were in the mansion with the researchers themselves. Again, with binaural sound, the horrors of *The Stone Tape* mystery are no longer just observed, but experienced and shared.

Are You Sleeping?

While *The Stone Tape* highlights sound’s horrific physicality, independent podcast anthology Earbud Theatre’s audio play *Are You Sleeping?* explores sound’s relationship to darkness and in/visibility, and the headphone listener’s enforced acoustic isolation, to create an alternate form of binaural immersion. If the once accepted status of radio and audio media as ‘blind’ is now challenged by discussion of the medium’s ability to generate imagined vision (Crook 1999: 53-69; Verma 2012: 1-3), it remains that audio-form drama is largely without objective image. Whatever image we may create in the mind’s eye whilst listening to audio drama remains interiorized, personal, and is likely enhanced by a diminishing of our actual visual environment. Simply put: shutting one’s eyes or turning off the lights while listening to audio drama can be said to enhance the ability to ‘see’ the drama being heard, by allowing the listener to focus more intently upon visualization. Discussing her own binaural work with digital audio drama company *3D Horrorfi*, Runcare Temple notes, ‘[w]e usually recommend that the listener sits or lies down, in the dark, on their own’ (Hand 2016: 186). There is a dreamlike association to this listening behavior, as we give leave of our ‘actual’ physical surroundings to focus more on the imagined experience (indeed audio drama listeners often report listening in bed, with their eyes closed). Moreover, beyond simply allowing us to concentrate on an audio drama’s sonic cues, and thus better focus on the images suggested therein, sightless listening may well afford for a more

intensified hearing experience. Research at the Johns Hopkins University Mind/Brain Institute suggests that in darkness hearing becomes extra sensitive, primed to inform and protect us of that which our eyes may not (Lee 2016). Sound historian David Hendy likewise notes the extent to which hearing is tied to location and navigation, with shifts in volume and sound quality informing us of a sound's potential source 'like bats in the night sky' (2013: 4). This innate, unconscious navigational function is rich for binaural horror exploitation: when our audio environment is supplanted by the horror world, what rich tensions and uncertainties await us.

Such concepts underpin *Are You Sleeping?*, a binaural play designed for, and exploratory of, sightless and isolated listening. Before the play's start, listeners are told: 'put on your headphones and turn out the lights.' On doing so, the experience of the binaural effects and of the drama itself become significantly more immersive. The play revolves around notions of sleep and darkness, situating listeners alternately in and between the perspectives of three friends (Tina, Grace and Jessica) who are sharing a hotel room for the night. Of course, in horror tradition, this seemingly simplistic, harmless setup harbors deep undercurrents of threat and deceit. Grace's announcement of her early pregnancy (itself an 'unseeable' secret until audibly revealed) spurs Jessica to confide in Tina that she has recently been sleeping with Grace's husband. Tina's hurried admonishments are silenced by Grace's return, and the women retire to their hotel room where they each reveal a history of sleep disorders. Grace admits to childhood sleepwalking, Jessica to sleep paralysis (wherein prior to or following sleep, one's body is rendered temporarily immobile while the mind is alert), and Tina reveals a more sinister problem. Since staying at a haunted hotel, Tina explains, she has been prone to talking in her sleep in an unknown male voice, which often foretells the imminent nightmares of whoever is in the room with her. Thus we enter a trajectory for the waking secrets of the women that can only be resolved through sleep. Once the lights are out, Tina begins to talk in her sleep, in a masculine voice which instructs—and seemingly compels—cuckolded Grace to sleepwalk and strangle the sleep-paralyzed Jessica.

Rather than subjecting listeners to overamplified or non-linear sound to scare listeners, *Are You Sleeping?* relies more upon acoustic subtlety and attentive listening: the quieter it gets, the greater the danger. As the characters move from the garish, richly acoustic environment of a casino bar, wherein fruit machines, waiters and drunks 'surprise' listeners from every angle, to a near-silent hotel room, the effect of binaural conversely heightens. In the room's quiet the

characters chat, move, switch beds and positions, then realign themselves around the listener. The effect of the listener being enmeshed within the scene is heightened as Tina, being asked which side of the room she wants, replies, speaking with a foreboding firmness, into the listener's left ear, 'This one'. Given the anticipation of Tina's sleep disorder, such intimacy is rather too close for comfort, and the listener is primed for a shock. However, this is delayed further; as the women's voices lower, and they prepare to sleep, the listener is afforded further anticipation as they must almost strain their ears to decipher location and meaning. Murmurs and gentle snores give way to near silence, and for the in-the-dark listener, there follows roughly ten seconds of anchorless drift, a tantalizing sensation of anticipation and uncertainty which affords all the more effect to the ambiguity of Tina's emergent, increasingly masculine, snores and half-whispered appeals to Grace to wake up because 'there's someone here who wants to talk to you'. Such an introduction is perfectly suited to in-the-dark listening, and makes good use of Hendy's previously noted observation regarding the ears' role as navigational watchdogs. Having so carefully used their ears to establish character location, the intrusion of the newcomer is highly destabilizing for the listener, placing this new element nearly anywhere, and putting the listener on high alert to more clearly detect their presence and location.

Once the newcomer begins to speak, the subtlety and softness of the binaural soundscape is pulled into sharp relief, not through over-loud or nonlinear shock, but through the arrival of a deep, smooth masculine voice from the space where Tina has previously been murmuring and whispering. When Grace, waking at this, asks 'who are you? What are you doing in here?' the male voice responds '[w]hy don't you turn on the light and find out?'—amplifying the horror of darkness, as well as its potentiality. Grace, however, is immobilized by sleep paralysis, thus she must remain in suspense, and simultaneously the diegetic and extradiegetic darkness remain in sympathy. As the voice torments Grace further, saying, 'you can't turn out the light? Probably for the best, you might not like what you see', the void of darkness becomes limitless in the horrors it may conceal. Whatever the listener imagines may produce the voice is there, waiting and watching. As the characters move about the room at the voice's command, the listener is, like Grace, placed in static hyperawareness. The auditory position never shifts, while the horror, the sounds of Jessica approaching Grace and throttling her to death, and the nameless voice coaxing and teasing them both, shift and move in the virtual, dark space.

Are You Sleeping?'s requirement of 'blind' listening, alongside its themes of sleep and suggestion of the listener's audio position as within the character's bed, emulate the dream state; by the play's end we may recognize the title as a double entendre. As, through in-the-dark binaural listening, the listener is engulfed within both narrative and scene, the question 'are you sleeping?' seems as pointed to their own drift from reality as the characters'. In the dark, binaural horror can take the listener to new realms of audio experience, developing the imaginative, dreamlike state while the listener's hearing is both heightened to the world of the play, and disconcertingly deafened to the potential sounds within their own dark room.

All Right

Welcome to Night Vale's 'All Right' offers an alternative form of binaural immersion, based in new headphone culture's properties of privatized mobility, and sound's inherent attributes of ambiguity and liminality. Rather than immersing listeners within a recorded 3D soundscape, 'All Right' uses stereo recording and directed earphone listening to create an individualized, interactive audio horror experience which incorporates the listener's *actual* three-dimensional audio surroundings into the virtual podcast world. By having listeners remove one headphone before navigating them through a series of interactive listening tasks (in which their actual surrounding acoustic environment, rather than the recorded soundscape, forms the 3D soundtrack) 'All Right' creates a personalized immersive binaural horror experience that allows the listener an almost literal experience of immersion within the fictive horror world of *Night Vale* (2016: ep 94).

In this unique episode, all direction is framed within the show's usual diegesis, with the listener being – as always—addressed as a typical Night Vale citizen, listening in to the town's community radio show. The episode thus begins with host Cecil explaining that, by local Secret Police mandate, all citizens must listen to today's broadcast via headphones. However, Cecil continues, since 'a very dangerous creature' is currently roaming Night Vale, listeners must keep one headphone out for the broadcast's duration. 'I am reporting today,' he explains, 'only from your right ear ... Please remove the headphone from the ear that you are not hearing me from. I need you to be able to hear the world around you. This is vitally important to your continued survival.' Compliance causes an immediate disruption of the headphone environment. The ordinarily private, interiorized podcast world is suddenly enmeshed with the soundscape of the

previously distanced, muted reality. However, this breach of the headphone world's parameters, and its acknowledgement of the listener's actual surroundings, is deftly integrated with the fictive space of Night Vale as Cecil explains that the dangerous creature 'could be any place that this radio signal reaches.'

The sounds (or silences) of the listener's physical environment are co-opted into the Night Vale diegesis, and Cecil pleads with the listener to remain highly attentive to that which the Night Vale soundscape ordinarily smothers, pleading with listeners to

keep one ear open to what is around you. Listen for what could well be stalking you. This creature is an expert at stealth. A brutal, perfect killer. Any noise you hear, no matter how slight, no matter how seemingly normal, could be the claw step, the tip of the tentacle, the opening of the jaws of this monster.

Even while encouraging detailed analysis of even 'slight', seemingly 'normal' sounds of the listener's individualistic surroundings, Cecil highlights the need to remain just as attentive to his shared, broadcast voice. As the listener's acoustic guide, Cecil positions himself as a tether of safety in an unsafe world, saying, 'keep one ear open, and keep one ear on my voice.' The listener is thus both alone, purposefully isolated in their encouraged re-immersion within their respective environments, and yet also remains part of Cecil's collective audience, and of the Night Vale world which now, it seems, includes all that the headphone listener ordinarily evades.

From this point on, the usually-excluded sounds of the actual world become integral to Cecil's narrative, as he directs listeners through a series of acoustic exercises aimed to anticipate the monster's sound, and to test the safety of their surroundings (and which also serve, in reality, to ensure that the listener *has* sounds around them to incorporate into the drama). Cecil instructs listeners to rub their ear canals; to hum; to turn in circles, and move location; to pick up and manipulate nearby objects and note their various noises. He asks listeners to prick their ears to silence and sound, and to physically affect change upon those states. He probes them to contemplate their source and meaning. This interaction heightens as Cecil draws listeners' attention to the multitudinous range of sounds around them, and asks them to '[p]ay close attention to the world around you. Try to pick out the noise of the creature. It could be any noise. Try separating the noises around you by type.' Cecil offers such categories as artificial, (radios,

traffic); natural (birdsong and wind); and unnatural (ghostly footsteps, or a psychic scream for help, sent to you by a stranger). This both draws the listeners closer to their actual ‘3D’ soundscape, and yet also draws that soundscape further into the Night Vale world, making fantastic and impossible that which may before have been mundane, irritating or simply ignored. The listener who wishes to escape to Night Vale, it seems, has *almost* been granted their wish: Night Vale is now virtually present in the listener’s space, breathing its special brand of weird from every traffic drone and footfall.

Diegetically, this is highly effective. Bert Coules explains radio as innately tied to the individual experience, arguing that

Radio is just about the most intimate of all performance media. When everything’s working well there’s a glorious feeling that the story is being told not only to you, but for you, and only for you. Audio drama can get deeper and more affectingly inside your head than almost anything else, and of course the more personal the experience, the more unsettling the horror. (Hand 4)

We may argue such potential to reach ever further with the mobilized, DIY ‘binaural’ of ‘All Right’. As the episode continues, the creature seems to draw close to each individual listener alone, stalking them through their solitary experiences of space. This proved highly popular with listeners, with many reporting through the *Welcome to Night Vale* reddit.com page the pleasure of co-creating their own, personalized horror experience:

This was an awesome episode. I listened to it last night at 11 pm while waiting at the subway station. It was, of course, not as crowded as it is during daytime hours. The usual silence and calmness got unnerving with the episode. I started to take short looks at big air vents on the ceiling (Faithplate 2016).

Sine (*sic*) I listen to WTNV at night, it didn't have to same effect, as the only sounds I could here (*sic*) were the occasional train or police car. However, in some ways that made it better, as a (*sic*) was listening super hard for every teensy sound (D34thL0ck 2016).

Yet, despite the episode’s effective development of an individualistic 3D sound experience, as the episode reaches culmination all diegetic threat is swiftly removed, and the narrative turns its

focus to the terrors of the actual world. Following the musical interlude (which is each week referred to as ‘The Weather’), Cecil explains that, during the interval, local man Wayne Ferry was attacked and killed by the monster, and that the monster has now been captured. Night Vale is once more as safe as it will ever be. From this split-second resolution of fictive, shared, danger, Cecil seemingly breaks the usual shared, imagined role of the listener as Night Vale citizen and addresses the show’s increasingly cited function as audio escape:

I know my role. You come to me for escape, loyal listeners. To forget about the world, or...not to forget about it, but to hear its dangers organized, put into a narrative framework, turned into a story that can safely end.

As Cecil’s uncharacteristic breach of the fourth wall continues, he asks the listener to acknowledge the world beyond the earphones, and the dangers that they each face there alone. Calmly and sincerely, Cecil explains, ‘no matter how deeply you enter into the stories I am telling you, you can never fully escape. The world is around you. You can hear it with one of your ears right now.’ The 3D sound play that each listener has constructed and performed alongside Cecil’s narration is reconfigured as the inescapable, continuous envelopment of reality:

Listen closely. What you are hearing is not the sound of a monster. There are no spirits in that sound. No lurking or lurkers, no stalking or stalkers, nothing hunting you. All you were hearing is the sound of the world you live in. And you can put headphones on. You can listen to my voice. But you can never fully escape that world. You are always half there, no matter where the rest of you is.

The audio escapee’s sanctuary, it seems, is rumbled. No matter how loud they might turn up the volume, and no matter how succinctly Cecil may enmesh his world with theirs, this can only be temporary relief. Headphones cannot transport us from our actuality.

Yet, Cecil maintains, this is no bad thing, as ‘in those sounds, in that inescapable world’ is rendered ‘every joy’ that the listener ‘will ever experience’, ‘every beautiful person [they] will ever meet. Every wonderful surprise that will ever wonderfully startle [them].’ In the sounds which surround each listener, Cecil reminds, ‘is the good and the bad. It is the sound of the

world. A world that will kill you, but also a world that will allow you to live.’ As the final tether to Night Vale is seemingly broken, Cecil swiftly mends its fracture, reassuring his listeners that, ‘as you exist in this world, half hearing my half voice, remember: you’re all right. You are alllll riiight. All right, Night Vale. Goodnight.’ In Cecil’s final re-affirmation of his listenership as part of his community radio audience, and in his assertion of the listener’s being ‘all right’, there is a suggestion that, as they listen to Cecil speak entirely into their right ear, they *are*, in a sense, as much a part of his realm as their own. If only by acts of imagination, emotion, and devoted listening, through manipulation and exploration of their headphones, every listener is a listener of Night Vale, and together they are all a part of the fabric of Night Vale community. (2016: ep 94)

In the three case studies offered here, there is a broad and burgeoning potential of binaural horror fiction, one which may redefine the auditory horror experience as increasingly and fruitfully based in and exploratory of, rather than hampered by or overlooking of, headphone culture. By experimenting with the potentials of binaural soundscapes (both pre-recorded and ‘found’ or collaboratively created with the listener), the works here prompt reconsideration of the headphone set’s role within auditory fiction. Alternately enveloping and excluding, immersive and pervasive, headphone listening and technologies enable rich growth in the audio horror genre, bringing to fruition radio’s long understood properties of intimacy and invasiveness to offer horror experiences which explicitly and unerring place the listener within, and physically tied to, the horror soundscape. As such experimentation continues, and as headphone listening shows little sign of disappearing, we must begin to consider the future potential of audio horror within the wider genre, and its applicability to other art forms. Immersive sound company In the Dark produced a well-received immersive listening event of *The Stone Tape*, where listeners donned headphones in a lightless cellar. While this was a promotional event, with very restricted numbers, it proved popular, and binaural sound is already being extended to the public entertainment and arts arena in installations and shows such as those produced by companies including In the Dark, and FanSHEN, and by individual artists. Horror is again prominent and effective, as is evidenced in Glen Neath and David Rosenberg’s sell out Edinburgh Festival piece *Séance* (2017), which required listeners to listen to binaural sound feed of a spiritualist event whilst seated around a table in a pitch black container—an environment in which the sudden

placing of hands upon listeners' shoulders, and violent shaking of the table, proved highly effective. As 'blindness' and headphone listening are becoming recast as desirable and developmental to new VR horror experience, then we may see audio horror move from the margins of mainstream attention, and what is often sadly surmised as 'supporting' roles of soundtrack and sound effects, and take a more prominent, central, and celebrated role in its own right.

¹ A more detailed explanation of binaural's technological and historical context is provided in Sterne 2003, 192-193.

² This phenomenon is commonly understood as occurring because, on hearing two tones with different frequencies from either ear, the human brain processes these as a third frequency, which can produce disorienting physiological experiences. This technique is used by the company 'Binaural Beats', for example, to produce meditative and euphoric sensations, and has a long history of shamanistic and religious practice.

³ That the creative renaissance of binaural sound is largely focused upon the horror genre is somewhat inevitable. Audio and horror have a long and special relationship, and in radio particularly, Gothic and horror fiction have always been leading genres. Yet radio's rich history of horror and Gothic audio-fiction has traditionally been geared toward, domestic (or at least static), collective, stereo and speaker-phone listening; forays into binaural sound have been eschewed in favor of recording techniques which suit such listening styles.

⁴ There are, of course exceptions to this, and the BBC has developed a number of binaural works before the digital era. Most famous, perhaps, is Andrew Sachs's *The Revenge* (1978) - an audio play in which narrative is rendered without any dialogue, and wherein binaural recording is employed to situate the listener alongside a man being chased by police. However, as Sachs noted at the time in a post-broadcast interview, 'it was a 'look-no-hands' exercise, it was an experiment, and I don't think it has much scope.' (1978)

⁵ While *Fright Night* was broadcast live in stereo-suitable format, for the latter works listeners were encouraged to don headphones and listen to the binaural versions which were subsequently released as podcasts.

List of References

Are You Sleeping? Rivet, Jared (Director) Earbud Theatre, October 2016.

Bakhtin, Mikhail, *Rabelais and His World* Bloomington: Indiana University Press, 1984 [1965].

BBC Research and Development Department 'Binaural Sound: Immersive Spatial Audio for Headphones', bbc.co.uk, 2017.

Blumstein, Daniel; Daviatan, Richard; Kaye, Peter, 'Do Film Soundtracks Contain Nonlinear Analogues to Influence Emotion?' *Biology Letters*, Vol. 6, No. 6 (December 2010) pp. 751-754.

Bull, Michael *Sound Moves: iPod Culture and the Urban Experience*, London; New York: Routledge, 2007.

Crook, Tim *Radio Drama: Theory and Practice*, London: Routledge, 1999.

D34thL0ck, '[Discussion]: Episode 94 - All Right', reddit.com/r/nightvale, September 2016.

De Castella, Tom, 'Are iPods making us Antisocial?', *BBC News*, 27 September 2011.

Faithplate, '[Discussion]: Episode 94 - All Right', reddit.com/r/nightvale, September 2016.

Fitch, Alex 'Remixing The Stone Tape: Interview with Peter Strickland' *Electric Sheep Magazine* 28 November 2015.

Ganz, Cheryl, *The 1933 Chicago World's Fair: A Century of Progress*, Urbana; Chicago: University of Illinois Press, 2008.

Hand, Richard J. *Listen in Terror: British Horror Radio from the Advent of Broadcasting to the Digital Age*, Manchester: Manchester University Press, 2014.

Hand, Richard J.; Traynor, Mary, *The Radio Drama Handbook* London; New York: Continuum, 2011.

Hendy, David *Noise: A Human History of Sound and Listening* London: Profile Books, 2013.

Hancock, Danielle, 'Our Friendly Desert Town: Alternative Podcast Culture in Welcome to Night Vale', in Jeffrey Weinstock (ed.) *Welcome to Night Vale Collection*, (forthcoming Spring 2018).

Hancock, Danielle, 'Welcome to Welcome to Night Vale: First Steps in Exploring the Horror Podcast', *Horror Studies* Vol. 7 No. 2 (2016) pp. 219 - 234.

Kaulingfrecks, Ruud; Warren, Samantha, 'Mobile Clubbing: iPod, Solitude, and Community' in D. E. Wittkower (ed) *iPod and Philosophy iCon of an ePoch*, Chicago; Illinois: Open Court, 2008, pp. 167 - 180.

Klich, Rosie, 'Headphone Theatre, Haptics and Multimodal Perception' presented at *Headphone Theatre, Podcasts and Radio*, University of Kent, 27 June 2017.

Lee, Hey-Kyoung, 'Talk Louder So I Can See You', *Neuron*, Vol. 89, No.5, (2 March 2016) pp. 887 - 888.

Locke, Charley, 'Fiction Podcasts are Finally a Thing! Thank You Sci-fi and Horror', *wired.com*, 24 October 2016.

Sachs, Andrew (Director) *The Revenge*, BBC Radio 4, 1978.

Sterne, Jonathan *The Audible Past: Cultural Origins of Sound Reproduction* Durham and London: Duke University Press, 2003.

Strickland, Peter in BBC Radio 4, '*The Stone Tape* - Preview', bbc.co.uk, 19 October 2015.

The Stone Tape, Strickland, Peter (Director), BBC Radio 4, October 2015.

Van Elfrin, Isabella, 'Sonic Horror', *Horror Studies*, Vol. 7, No. 2 (2016) pp 165 - 172.

Van Elfrin, Isabella, 'Sonic Monstrosity', *Horror Studies*, Vol. 7, No. 2 (2016) pp. 307 - 318.

Verma, Neil, *Theater of the Mind: Imagination, Aesthetics, and American Radio Drama*, Chicago; London: The University of Chicago Press, 2012.

Welcome to Night Vale Fink, Joseph and Craynor Jeffrey, Commonplace Books (2012 - present day).