

Emptying Media:
Sleep Podcasts in the Attention and Experience Economies

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ABSTRACT

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In a technological culture marked by ubiquitous media, consumers increasingly seek tools to help them navigate relentless and often overwhelming media flows. One such tool is the 'sleep podcast' genre, a form of media that paradoxically facilitates disengagement to induce sleep. It is a 'non-empty' media format that relies on the spoken word and informational content to ultimately disconnect the listener, unlike other forms of 'orphic media' (Hagood) like white noise generators and ambient music that function principally on a psychoacoustic level. A close analysis of the sleep podcast and its technological infrastructure reveals the growing phenomenon of leveraging information as a form of background noise for affective remediation. In a media landscape where 'engagement' is the principal metric of success, the sleep podcast stands apart: both as a valuable media prophylactic against the potential harms of 'the attention economy', and as a final frontier in attention monetization.

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List of Abbreviations

SWM	<i>Sleep With Me</i> podcast
UI	User Interface
CEPs	Category Entry Points
ToD	‘Time-on-device’ engagement metric
CHT	Centre for Humane Technology

The media occupies days: it makes them; it speaks of them. The term day can be deceiving: it excludes night, it would seem. Yet night is a part of the media day. It speaks, it emotes, at night as in the day. Without respite! One catches waves: nocturnal voices, voices that are close to us, but also other voices (or images) that come from afar, from the devil, from sunny or cold and misty places. So many voices! Who can hold back the flows, the currents, the tides (or swamps) that break over the world, pieces of information and disinformation, more or less well-founded analyses (under the sign of coded information), publications, messages – cryptic or otherwise. You can go without sleep, or doze off...

(Henri Lefebvre 46)

Chapter 1: Introduction

I started listening to podcasts much later than my peers, and in very odd circumstances. This was in 2019, and my primary job at the time was music composition and sound design in the performing arts. I was hired by a company in the United States to create the music for a small touring circus. The plan was to create the show with the dancers, acrobats and choreographer during a week-long residency in a venue that could accommodate circus infrastructure – beams, silks, mats, and the like. The producer of the circus booked a relatively remote rural venue – what looked in pictures to be essentially a giant gazebo - called the ‘Dragon’s Egg’, a short drive out of New Haven, Connecticut. As the date for my departure to the US approached, more details about the residency slowly trickled into my inbox. There will be no internet and scarce phone reception, they said, but there is a public library about a 10-minute drive away. Accommodation will be provided, which they later revealed to be a collection of some dozen futons placed side by side in said giant, off-grid, gazebo.

I didn’t know any of the other artists attending the residency and was becoming a bit wary of what I had signed up for. My foremost concerns were around sleep. As a long-time insomniac, the thought of sleeping exposed among some dozen strangers for a week, and without even the compulsive escape hatch of disappearing into one’s phone, seemed – pathetically, I thought – slightly daunting.

I still went, of course, and it was exactly as described. The only factor that I didn’t take into account was that, during my circuitous 48 hour journey into the unfamiliar depths of rural Connecticut, I was rapidly becoming very, very sick. If this wasn’t over a year prior to the COVID-19 outbreak, I would have said it was a clear case of the alpha variant, and a bad one. For the week, shivering on my single mattress in this cavernous gazebo, among a dozen acrobats, I tried to sleep.

In search of privacy and rest, I found myself tracking down podcasts for company. There was one spot in ‘the Egg’ where, if you stood long enough, you could get a bar of reception – where indeed I stood, and downloaded episodes of a podcast I had heard about called *Sleep With Me*. Armed with my Spotify app and headphones, I distinctly remember the first time I listened to an episode, huddling in darkness, feverish, and trying to transport my mind and body elsewhere. The first thing I noticed about the podcast was the host’s voice - Drew Ackerman has a distinct timbre; a somewhat nasally and grainy voice, and not obviously soothing in the way that one imagines the resonance of a late-night radio host. I have no recollection of the episode’s details, but I remember the almost sublime feeling of disorientation I felt while listening to his words. As one thought digressed into another, rarely returning to the first in a seemingly unending run-on sentence, he vaguely introduced the structure and intent of the podcast in a way that seemed to last hours. Fragmented bits of information and unfinished anecdotes flitted past and felt impossible to retain as he droned on. I asked myself: is this the podcast, or my fever? At some point amidst this patchwork of language streaming quietly into my ears, I would have fallen asleep – I’m sure of this, because I’d never actually heard the end of a *Sleep With Me* episode until I began my research for this thesis.

In retrospect, this marked a significant evolution in my ongoing fascination with sound studies, moving gradually from being interested in what people listen to, to what people do with sound. Listening to music as a form of entertainment in and of itself is a rarity today, and yet audio media has arguably never been more important to the media ecosystem. Within one year,

Facebook, Reddit, and Twitter all released their own version of the audio-based Clubhouse platform, an audio streaming app where users freely listen in on live conversations around chosen topics or themes (Culliford; Peters; Koetsier). In April of 2021, Facebook announced their new focus on audio products, including ‘soundbites’ (the audio-only version of an Instagram reel), podcasts, and the implementation of live audio throughout the platform (Simo). Today, leading social media platforms like Tik Tok are competing with Spotify and Apple Music to become the leading source of audio streaming (Malik). The mass corporate turn to audio indicates a shared vision of the profit potential of sound-centered media, somewhat counterintuitively when considered alongside concurrent high-tech innovations like the Metaverse or VR.

These attempts at innovating how and where we listen to audio-based media evolve in tandem with how, and why, people consume it. Music is inherently an affective medium, but the expansion of sonic formats and technologies have opened the opportunity for specifically targeted, and advertised, affects. In 2022, an international survey published in the *Drug and Alcohol Review* concludes that ‘digital drugs’, such as binaural beats, could be considered as an emergent category of substance use - complicating the essence of what a psychoactive drug is and by what means they can be consumed (Barratt et al. 1130). Aural-based media today is widely used to achieve explicitly advertised states, including sleep, and the market has rapidly opened up to produce, market, and disseminate these sonic tools.

Even the sound of language, in all of its unambiguity, can be used for psychophysiological effects, as I discovered in my feverish circus residency and throughout my research. It can be an effective sleep aid, and there’s also money to be made with it. In a unique meeting of worlds in pop culture, the wellness and meditation app Calm, named iPhone app of the year in 2017, partnered with RZA (of the Wu-Tang Clan) to produce a sleep story episode (Hissong). Narrated by NBA all-star LeBron James, he advertises the partnership with the tagline, “Greatness lies on the other side of sleep.” (*Greatness Lies* et al. YouTube) From independent producers like *Sleep With Me* to mainstream apps studded with cultural icons, an influx of media producers have been innovating ways to get people to sleep with the sound of speech, and experimenting with how to monetize it within the current economic paradigm. In the so-called ‘attention economy’ today, the sleep podcast is a final frontier in the monetization of media, and at the lowest form of engagement.

In this thesis I unpack how the sound of information is situated within the broader trend of functionalized background noise, like white noise machines or binaural beats, using the sleep podcast as the focus of my analysis. As there is little to no academic writing on the sleep podcast genre itself, I rely on the diverse areas of research that make up such an idiosyncratic genre, mapping it as a constellation of cultural, technological, and economic articulations (Slack and Wise).

To first get a sense of how the sleep podcast is situated in today’s media ecosystem, I tracked the presence of sleep podcasts on Spotify using the ‘Podcast Charts’ page and the Internet Archive during a one year period (2021) and then periodically since (e.g. Figure 1). In tandem, I have documented representations of sleep media in popular culture, particularly in news articles and social media. Counter to their purpose, I’ve listened closely to and annotated three episodes of popular sleep podcasts (*Sleep With Me*, *Nothing Much Happens*, and *Get Sleepy*) to understand the kinds of techniques used to put listeners to sleep (e.g. Figure 2). At the end of this chapter, I will provide a brief overview of how I have come to define a sleep podcast based on this research.

In chapter two, I contextualize the kinds of listening practices afforded by sleep podcasts within existing sound studies literature. Informed by thinkers like Mack Hagood, Paul Roquet, and Hildegard Westerkamp, I investigate other examples of audio media innovations and how they shape cultural attitudes towards noise and background listening. Hagood's concept of 'orphyic media' is a central inspiration to my analysis, loosely defined as media technologies designed to regulate affect rather than deliver information. Sleep podcasts, and the forms of listening they enable, suggest that 'orphyic media' should be regarded not merely as a media category but also as a user practice that can be applied to non-orphyic media. I propose 'orphyic media practices' as a way to understand how the sleep podcast is used.

The sleep podcast and the technologies that disseminate them are inextricably tied. In chapter three, I focus on Spotify as a primary infrastructure of the sleep podcast genre, demonstrating how such an infrastructure is a product of 'the experience economy' and its logics. Examining Spotify's business practices uncovers both the enabling of sleep podcasts and their impact on fostering receptive listening cultures for this genre.

With the technological foundation and complementary listening culture in place, in chapter four I account for the podcast's popularity within that groundwork. Listenership statistics tell a story around how podcasts are situated within the experience economy – how much they are listened to, by whom, and how. Accounting for the popularity of this long-form medium in the broader media trend of miniaturization reveals how the sleep podcast is particularly well situated to succeed, economically and culturally, in the experience economy.

In chapter five, I turn to the popular framing of the technocultural zeitgeist today, 'the attention economy', to account for how sleep podcasts can be economically sustained for producers. I briefly outline how the historical and discursive milestones that inform the attention economy provide the backdrop for how sleep podcasts are monetized. Ultimately, the sleep podcast reveals itself as a final frontier for monetizing attention within this technoculture. Current research in marketing science contextualize the sleep podcast as a viable conduit for potentially abusive marketing practices, such as dream incubation and innovations in advertising for inattentive, or even unconscious, audiences.

As an extension of the media day, sleep podcasts resonate questions of sustainability for media producers and consumers alike. However, anecdotal accounts from sleep podcast and sleep media producers demonstrate the limits of attention extraction, marking the shifting boundary of where abusive economic systems cannot extend due to the uncompromising need to sleep. Ultimately, the sleep podcast emerges as a form of media that extends the 'media day' (Lefebvre), though paradoxically used to hold back other forms of media flows.

What is a sleep podcast?

A sleep podcast is a genre of podcast that is designed to help listeners fall asleep. Podcasts are digital audio files made for streaming or download that are centered around dialogue and the human voice. In a sleep podcast, this voice may be accompanied by layers of ambient music or natural soundscapes that evoke predictably relaxing atmospheres. More often, they depend on the content of the narrative to soothe the listener: *The Office ASMR – A Podcast to Sleep To* soothes their listeners to sleep by narratively recounting every episode of *The Office* sitcom without the listener having to look at the screen. Others may include guided meditations and breathing exercises in conjunction with other narrative elements. Many sleep podcasts rely

on the form of the narrative structure itself as a key pacifying ingredient. Some narratives meander, some repeat, but most avoid the common narrative structures of tension, conflict, and resolution in a delicate balancing act of engaging the listener's interest, but as minimally as possible.

A central component to podcasts in general, and a key consideration for the sleep podcast, is that they are a longer-form audio format that are released as episodes over time. Beyond listening, 'following' is one of the medium's unique modes of engagement, in that it assumes an ongoing relationship with the podcast and, typically, a familiarity with the host. This contrasts with models of music listening, where artists may release new material every couple of years, and in the interim the previous releases will be relistened to. Podcasts, on the other hand, assume an ongoing and active engagement with the creator(s) of the audio. This increased frequency of engagement with the creator(s), contrasting with the depth of engagement of repeat listening, creates parasocial relationships between listener, creator, and imaginary listening audiences that are integral to the format.

Spotify's "Podcast Charts"

February 14, 2023

Search parameters: United States, Health & Fitness, top 50

- #6 White Noise & Sleep Sounds (12 Hours)
- #7 Relaxing White Noise
- #14 Nothing much happens; bedtime stories to help you sleep
- #19 Starry Nights Podcast
- #22 Get Sleepy: Sleep meditation and stories
- #24 Guided Sleep Meditation & Sleep Hypnosis from Sleep Cove
- #34 8 Hour Sleep Music
- #36 Bible at Bedtime

February 14, 2023

Search parameters: UK, Health & Fitness, top 50

- #7 Guided Sleep Meditation & Sleep Hypnosis from Sleep Cove
- #8 White Noise & Sleep Sounds (12 Hours)
- #13 Starry Nights Podcast
- #18 Nothing much happens; bedtime stories to help you sleep
- #25 Get Sleepy: Sleep meditation and stories
- #34 Just Sleep – Bedtime Stories for Adults
- #43 Sleep sounds by nature
- #48 Brown Noise for Sleep

Figure 2. Excerpts of 'sleep podcast' monitoring on Spotify's "Podcast Charts". Search parameters reflect US and UK as the Canadian charts were limited to a single category (top 100).

Chapter 2: Technologically mediated paradigms of listening (theoretical overview)

Theories of self-discipline are often at the heart of literature surrounding listening technologies and their cultural practices, from Muzak, the iPod, and Spotify. The empowerment afforded by technology is often accompanied with the compulsion towards self-discipline within the expectations of society and the state. Before such technologies were developed, Foucault developed an early conceptualization of this demand for self-discipline in the form of biopolitics, where an embodied governmentality is compelled of subjects in the absence of the direct state control that was characteristic of premodern societies. Foucault defines the tools and operations to enact this individual and embodied governmentality as ‘technologies of the self’ (1982). Framing mechanically reproduced music and sound as a ‘technology of the self’, and a form of governmentality, is a consistent motif in sound studies and literature around personal media devices, such as in Michael Bull’s anthropological study of the iPod (2007), Paul Roquet’s study of ambient music in Japan (2016), Hildegard Westerkamp’s analysis of Muzak (1972), and Mack Hagood’s conceptualization of orphic media (2019). Roquet frames governmentality as “Foucault’s term for the way behaviors important for the continued functioning of the state become reimagined as practices of self-care, so much that people often believe they are acting out of their own self-interest rather than in accordance with external social demands.” (10) This kind of governmentality, though not termed as such, has become established within popular discourse, particularly in the context of the wellness industry. The self-help and wellness industry has brought to bear the often-untenable standards of personal productivity and self-optimization in contemporary technological culture, and the profit-backed motivations behind creating new, and sometimes absurd, channels towards self-optimization.

In his comparison between media and pharmaceuticals, John Crary argues, “As with digital devices and services, there is a fabrication of pseudo-necessities, or deficiencies for which new commodities are essential solutions.” (55) The sleep podcast is a prime example of one of these commodities, the economic dimension of which will be explored more thoroughly in the following chapters. Here, I point to some relevant examples of governmentality within sound studies that contextualize the types of social conditioning that the sleep podcast functions in response to.

Mack Hagood’s concept of ‘orphic media’ as outlined in his book *Hush: Media and Sonic Self-Control* (2019) is a useful starting point through which to understand the surrounding technocultural landscape of the sleep podcast. Hagood conceptualizes orphic media as types of media that (explicitly) attempt to regulate affect and sonically remediate one’s environment, rather than deliver information - citing technologies such as white noise machines, hearing aids, early recordings of natural soundscapes for relaxation, and noise cancelling headphones. He centers these technologies as the most distilled expression of the concept but argues the claim that desire for affective control “motivates the use of nearly all electronic media today.” (Hagood 4) The increasing ability to personalize one’s media, and therefore our mediation between ourselves and the world, subsequently affords the ability to better pursue “what feels enlivening and enabling—and to avoid what makes us feel diminished and disabled” (5), in terms of the kind of information and sensations we seek. Further, reframing media usage as a means to control how we are affected by the world around us, rather than the delivery of ‘content’, has significant sociological implications – for example how media use shapes public/private spheres via media echo chambers, urban noise, online noise, and even fake news. (4) While

individualistically empowering, Hagood cautions that a risk of such media practices is an exacerbated listening sensitivity – metaphorically and literally represented in the form of tinnitus – and a decreased ability to listen across difference, both acoustically and politically. Emerging forms of orphic media, then, speak to a cultural standard of affect: the acceptable levels to affect and be affected by others and the world around us. For the purpose of this thesis, I will be borrowing Hagood’s definition of affect as “the continually changing states of bodies that condition their abilities to act and be acted upon” (5). With this framing of affect, Hagood proposes that media is used as an attempt to self-control the degree to which our environment moves us and our subsequent ability to act, or in this case, sleep, within it.

Paul Roquet, in his study of the socioeconomic and cultural conditions that proliferated ambient music in Japan, similarly illustrates in what ways affective media empowers individuals but also divides social space, shifting the border between public and private. He describes: “Every atmosphere includes a largely imperceptible border demarcating who can move seamlessly within it and who is made to feel uncomfortable, out of place, abject.” (Roquet 16) Publicly diffused ambient media aims to delineate space and provide affective homeostasis for those even peripherally aware of it, which is useful for navigating noisy and urban political spaces. However, to be effective across subjects, such media-induced atmospheres must impose hegemonic conceptions of how affect within urban spaces should be delineated. Borrowing heavily from Hildegard Westerkamp, Roquet discusses how publicly diffused music, such as Muzak, acts as a hegemonizing force that encourages designated types of behaviour such as labour in the factory, or consumption in the shopping mall. The space that Muzak delineates compels hegemonic ideas of urban space and its populations to its listeners, but also carries the voice of dominant forces within the articulation of the ambience itself. For example, the pseudo-classical instrumentation of Muzak, in the time that Westerkamp was writing, upheld Western Classical, post-Romantic music as the most universally accepted and revered form of music. The evolving styles of Muzak and ambient media can be read as a kind of ‘neutral affect’ of the moment, and the hegemonic ideals therein.

Through her analysis of Muzak, Westerkamp makes the case that becoming your own sound-maker is a form of activism against these hegemonizing sonic forces. Speaking as a woman within the overwhelmingly male-dominated sphere of music and sound studies, she illustrates her own personal case study as a sound-maker and listener in active resistance to the hegemonic and pacifying voice of the ‘music-as-environment’ she terms. Background noise, such as ambient music and Muzak, has been documented as influential in reshaping the public and private spheres, and notably demarcating social and political power.

The transition to mobile listening technologies shifted the border between the public and private, and consequently the locus of resistance and/or conformity to the kinds of dominant sonic and social forces that Westerkamp and Roquet discuss. With the greater personal freedoms that miniaturized and personalized technologies afford come the similarly personalized responsibilities of self-control, or governmentality, to remain within social demands. For example, Michael Bull documents in his study *Sound Moves: iPod culture and urban experience* (2007) the ways in which the iPod allowed its users to manage and transform linear time. The iPod is a sonically isolating tool that is used by individuals to fight against the dominant rhythms of daily life, though as a result personalizing, and therefore embodying, those rhythms. Mobile media technologies allow individual subjects to exert control over the world around them – the information they receive and the degree to which they’re affected by their physical environment – by withdrawing into a world small enough to exercise that control. Simply put, the auditory

border between the private and public is smaller and closer to the body, but the control over that radius is more exacted. Roquet addresses this paradoxical exchange between the individual freedoms afforded by personalized media, and more personalized forms of governmentality: “Personal media use holds out the promise of self-determination, but the technologies also serve as ways for governments and other social institutions to offload more and more of the labor of subjective maintenance onto an increasingly isolated subject.” (14) Greater personal control over mechanically reproduced sound invites greater responsibility of the individual to use that sound to utilitarian advantage, conceptually reframing even the most casual and intimate moments of music consumption.

However, even Muzak, as a technology-of-the-self does not preclude pleasure. In his concluding chapter, Bull examines “the nature and meanings associated with the seeking out of a consumer empowerment that is fully mediated by the products of the culture industry itself” (147), indicating the paradox of curating intimately private spaces via mass-produced and mass-disseminated products of the culture industry. In so doing, he makes the argument that embodying dominant social rhythms is necessary to exercise this miniaturized self-control over an individual’s environment. However, the Adornian analysis of the iPod as an outlet for *mass-media* loses some of its potency in the era of hyper-personalization and algorithmically curated media. Bull’s account of the abilities to resist/conform to dominant social rhythms through personalized media feels just as pertinent today. The algorithmically generated music and mood playlists that characterize a platform like Spotify align with Bull’s hypotheses that personal listening devices encourage the embodiment of dominant social rhythms, but due to the platform mechanics that deliver the audio, rather than the music itself. Even if the music is different from one user to another, the algorithmic logic of moods and atmospheres are the same. In the era of streaming and algorithmic profiling, the algorithms and user interfaces of the platform are the mass media object, rather than the music itself. This personalization, in theory, makes the process of governmentality all the more pleasurable, unique, and well-integrated into daily life.

This thesis continues within this legacy of sonic governmentality but turns its focus to forms of governmentality exercised at night - or at least during sleeping hours. The empowerment and affective regulation of miniaturized listening has the effect of pushing the ‘media day’ into the night, and into sleeping hours, as painted by Henri Lefebvre in the epigraph of this thesis. Indeed, the media day speaks to its denizens “without respite” (46). His somewhat dramatized description of the media day at night seems to tangibly resemble the informational and affective overload of contemporary technological culture, asking: “Who can hold back the flows, the currents, the tides (or swamps) that break over the world, pieces of information and disinformation, more or less well-founded analyses (under the sign of coded information), publications, messages...” Though Lefebvre was writing during the time of broadcast media, he captures the affective reality of contemporary digital media just as well. In Lefebvre’s context of broadcast media, the rhetorical question of “who can hold back the flows?” takes on a tone of resistance to temptation: television sets and radios can be turned on at any moment to access the endless – but relatively uniform - stream of broadcast voices. Within the context of hyper-personalized media, both in terms of the content of the information and how it interfaces with our bodies, ‘holding back the flows’ implicates a more surgical navigation, of greater flows, within a smaller space. While I may turn off the television to focus on my writing, I cannot turn off my laptop to accomplish the same: I must turn off certain apps, interfaces, and connections – each with their own design to remain as ubiquitous as possible – to achieve the same form of

resistance as turning off the television. As we will discuss, media formats like the sleep podcast emerge as a form of media to paradoxically hold back other forms of media flows.

It is these characteristics of personal devices and personalized media – like social media, the Google Home, the Apple Watch – that inch their engagement further into sleeping hours, reshaping the borders between attention and inattention. Lefebvre’s brief allusion to the affective environment of the media day, at night, seems prophetic to works such as *24/7* by Jonathan Crary, in which he documents and bitterly critiques the effects of neoliberalism and hyper-productivity on sleep. Crary describes sleep as “an uncompromising interruption of the theft of time from us by capitalism” (10), working against the addictive design of standard digital media platforms. Beyond their immediately intended design, the effects of these platforms tend to ripple beyond direct engagement and well after they’re put away. A 2018 New York Times article discusses the proliferation of audio gadgets like the white noise machine for sleeping; Christopher Suarez, the engineer behind a DIY white noise machine, describes,

“Even if you turn off the pings on your phone and turn away from your devices, you’re still thinking, ‘What’s happening with Facebook? With Congress?’ There is so much going on, and so little resolution. When was the last time you heard the end of a story?” (qtd. in Green)

A simple and relatable sentiment, Suarez contemporizes the insights of Lefebvre’s ceaseless flows in the context of personal devices. As these devices allow their users to interface with and embody dominant social rhythms, users are perpetually left with incomplete narratives – from friends to politics – alongside the 24/7 potential for the update.

Crary seems to directly respond to Suarez in his critique of 24/7 capitalism, stating: “As an advertising exhortation, [‘24/7’] decrees the absoluteness of availability, and hence the ceaselessness of needs and their incitement, but also their perpetual non-fulfillment” (10). In this framing of 24/7 capitalism, Suarez never gets the end of the story. The compulsion to self-discipline while opting-in to personalized media and technology generates a friction between our public and private narratives and, in some cases, breeds innovation: for Suarez, a recipe for a DIY box fan that works as a white noise machine in service of drowning out the noise of media hyper-accessibility. New forms of bedtime stories, and apps that deliver them, are innovated to drown out this noise. While white noise nor the sleep podcast has no tangible effect of masking the allure of screens, these orphic medias assert a temporary personalized border of acoustic, affective, and informational private space.

I look to the example of the sleep podcast to suggest a trend that challenges these theoretical frameworks in some ways. Initially, I was most inspired by Hagood’s insights around orphic media and the trending ways media is used to remediate sensation, rather than deliver information. However, I found Hagood’s distilled forms of orphic media – noise canceling headphones, white noise machines, and early LPs of nature sounds – useful in elucidating the concept but coming up short in reflecting the realities of popular media trends today. Rather than as a *form* of media, reframing orphic media as *practice* opens an analytical frame in which media, regardless of its design intent, can be viewed as a tool for orphic listening. When the sleep podcast is listened to as an orphic media – a form of media that asks to be backgrounded and aims to drown out psychological noise – it seems to function similarly to a white noise machine; even though the fundamental constituents of the genre, namely the spoken word, evade the common characteristics of orphic medias that Hagood documents. Orphic media, he says, are

‘empty’ of content and function on a purely affective or psychoacoustic level. White noise, for example, is defined as a type of noise that plays all frequencies simultaneously, making it an effective tool at masking other sounds, but is itself, by definition, empty of its own meaning. Like white light, white noise is “medium without a message” (McLuhan). Sleep podcasts are ‘full’ in that they contain little else but the spoken word, and are full of meaning - but the listening practice they compel is one that empties its own meaning. The sleep podcast attempts to transition the listener from hearing human speech into hearing human voice, before entering a state of complete inattentiveness altogether. While not an orphic media of the first order, by Hagood’s definition, it is a form of media that compels orphic listening. To listen to the sleep podcast as an orphic media offers a moment of generative contradiction, a paradox of attention and inattention at the stage of hypnagogic sleep, that opens a new analytical framework for media trends and their associated practices; like ASMR, the *Sleep With Me* podcast, or any kind of media that is reappropriated by its consumer to sleep to.

As a conceptual bridge between orphic media and the realities of this nonconscious and paradoxical moment of sleep media, I draw on Dylan Mulvin’s (2018) concept of ‘media prophylaxis’. Media prophylaxis intersects with orphic media insofar as it engages with the more peripheral functions of media and its design over its content. In the way that sleep podcasts are emptied of content and distilled to their use functions, I consider them as media prophylactics, if not in form, in practice. Sleep media, overall, plays a unique role in the audio media landscape in that it can be construed as a form of entertainment but is explicitly operationalized for a vital human function. Setting aside the cultural function of music and organized sound in the more general sense, sleep media is a unique audio format in its targeting of a daily and biological function for the user. The design intent of the media, alongside its popularity, suggests a potential response to a need, and therefore the harm creating that need: the inability to sleep.

Mulvin defines media prophylactics as “the techniques, technologies, and design choices that are made on behalf of or by users to pre-empt the ill effects (whether imagined or concrete) of media use, participation or environmental exposure.” Mulvin contextualizes the idea within the historical development of light filters for personal devices, which were initially designed to alleviate excessive exposure to blue light, ultimately evolving into standardized features like NightShift on the iPhone. By outlining the history of circadian rhythm research alongside blue light filter patents, Mulvin demonstrates how these light filter technologies act as indexes to the unequal distribution of darkness and rest. This analytical frame, more broadly, invites us to investigate media genres and their formats as a materialization of media’s harms and the technological response to those harms. The proliferation of sleep media and their diverse manifestations similarly indicate responses to vital needs, and the materialization of respectively diverse forms of media-induced insomnia.

While orphic media as an analytical tool is useful to better understand the mechanics, affects, and uses of the sleep podcast, media prophylaxis offers a framework through which to better understand its origins as a form of harm mitigation. Therefore, rather than study the sleep podcast as a form of orphic media in essence, I study the sleep podcast as an orphic listening practice; a method of remediating one’s environment in response to the harms of a ubiquitous and compulsory media infrastructure; the endless and embodied flows; an infrastructure driven by the largely inhumane attention economy logics of exponential growth and attention extraction, regardless, and often in spite of, human need.

In this chapter we looked into some of the key theoretical frameworks which undergird the kinds of listening practices embedded within the sleep podcast genre. In the following, I look

to pervasive economic trends that inform the production and distribution of sleep podcasts, representing the dialectical relationship of media produced in response to user need, while perpetuating that need as a result of dominant economic models.

Chapter 3: audio and the economies, brief introduction

“An economy may make strategic or tactical alliances, even accidental ones, with particular organs in order to break open the resistance of others.”
(Matthew Fuller 97)

The genre of the sleep podcast, like any media genre, is in part a result of the flows of money; streams of capital carved by the broader climate of dominant economic theories, the user practices they encourage, the technologies they create, and the media that, by one way or another, gets financed. The authority of economic theory forms the foundation of 21st-century globalized societies, extending beyond its control over government, public policy, and finance. It engages in a dialectic with culture and a shared language that, in turn, shapes these governing institutions. In the words of economist Kate Raworth, economics is the “mother tongue of public policy, the language of public life, and the mindset that shapes society” (16). Dominant economic models shape public policy as much as they are mapped onto individual bodies, shaping the tensions and allegiances between our organs and flows of capital.

The role of music in economics, and the bodies and ears that listen to it, has been documented thoroughly within sound and cultural studies, from Adorno to Westerkamp, and famously articulated in Jacques Attali’s insight, “wherever there is music, there is money” (3). While this simple idea has been frequently cited within sound studies, the broader context of this quote brings us closer to my area of research. In the preceding line, Attali contextualizes, “Today, it is unavoidable, as if, in a world now devoid of meaning, a background noise were [sic] increasingly necessary to give people a sense of security. And today, wherever there is music, there is money.” Beyond music for its own sake, Attali more specifically makes the link between money and a sense of security through noise, and further indicates the mode of engagement with music as one of background noise.

His analysis goes on to engage with the formal characteristics of the Western Classical oeuvre as a precursor to the political organization of the 20th century, claiming that the formations of noise inscribe political change faster than broader societal transformations, making music a credible source of social and political foresight. He gestures towards the phenomenon of Muzak, a derivative form of Western Classical music with the overt design of consumerism and labour, which Westerkamp later elaborates upon. For our purposes, I return to the context of his iconic quote to elaborate his insight beyond music, to audio media in general, incorporating his acknowledgement of the *mode of listening* insinuated within his analysis. With the supremacy of audio formats like broadcast and Muzak some decades behind us, today the rapidly evolving formations of background noise and the affective security it affords, perhaps, is where the money is.

Formally speaking, there is very little in common between a podcast and recorded music other than the fact that they are both forms of audio. Despite that, podcasts occupy similar spaces to music both in terms of dissemination and user practice: on the front page of the Spotify user interface, music and podcasts are equally featured alongside each other. Recent studies have been done investigating the competition between music and podcasts in terms of overall streaming time (Li et al). Reading it today, Michael Bull’s study of listening practices with the iPod feels dated, not because of the now-discontinued technology (Mickle), but due to the exclusive focus on music, leaving out podcasts and other forms of non-musical audio. On the production end, in the same way that technology has lowered the barrier of access to producing

and distributing music from home, podcast production requires considerably less technology and has joined music as a pervasive folk medium.

The formal dissimilarity between music and podcasts calls to question the cultural and economic underpinnings that draw them into the same sites of production and consumption. Within the corporate ‘audio turn’ seen across media platforms, I investigate the economic mechanics that undergird commodified listening, even in sleep. To answer this, I draw from two popular framings of the economic paradigm of the last two decades which saw the rise of streaming - the ‘attention economy’ and the ‘experience economy’ - to tease out the role of audio media within these paradigms, the ways in which listening becomes commodified, and the mechanics that make the sleep podcast financially sustainable to produce. In the following, I identify specific instances of how these economic framings create the material and cultural foundations for sleep podcasts. Revisiting Attali’s assertion that ‘where there’s music [background noise], there’s money [security]’, the sleep podcast reveals the emerging economic and affective significance of listening to information in a media-saturated culture.

Chapter 3.5: streaming infrastructure and the experience economy

The experience economy is one such economic paradigm that fosters a technoculture conducive to the habitual use of sleep podcasts. The experience economy is a term initially popularized in business and marketing circles in the late 1990s, in the playfully written and influential *The Experience Economy: Work is Theatre & Every Business a Stage* by James H. Gilmore and B. Joseph Pine II. I first encountered the term during a conversation I had with a professional qualitative marketing researcher. I was becoming increasingly fascinated with instances of commodified background noise, specifically trying to better understand the possible motivations of a business partnership I stumbled upon between Spotify and Frontera, a mass-produced Chilean wine. A Spotify-green QR code in the shape of an audio waveform is printed on the back of the bottle, linking the wine-drinker to a Frontera-themed Spotify playlist. With no insider knowledge and having no affiliation to either company, he pointed me in the direction of the kinds of business practices that give rise to such an affiliation, encouraging me first and foremost to understand the basics of brand identity and the experience economy. Though in some ways dated in its origins, *The Experience Economy* is still actively referred to in current brand and market research, and its legacy has ultimately shaped the ubiquity of audio media in our current technoculture.

In the experience economy, the sleep podcast is not defined by its material qualities so much as the experience of consuming it: comfortably going to sleep. Gilmore and Pine discuss the value of this kind of re-framing of products as experiences. By charting the Consumer Price Index (CPI) between commodities, goods, services, and experiences long-term, Gilmore and Pine demonstrate how the market value of commoditized goods remain volatile and contingent upon broader economic forces such as inflation, while the market value of ‘experiences’ see the steadiest, and steepest, growth in CPI. The premium value of well-crafted experiences, from a business and marketing perspective, lies in their ability to create lasting memories that “refresh mental structures” (Romaniuk and Sharp 40) and create positive brand associations. Gilmore and Pine emphasize that consumption is a multisensorial experience, drawing on the multisensorial design elements of the theatre – lights, sound, performance, video – to guide companies in developing their market brand by ‘branding’, or leaving an impression, on an individual’s experience and ‘refreshing their mental structures’.

The Frontera wine and Spotify partnership exemplifies an imagined consumption experience, combining wine and music as design components. In the context of the experience economy, the event of drinking Frontera wine and listening to popular music becomes the product. Employing associative network theories, Spotify and Frontera strive to secure their positions as go-to design components within this experiential domain. Streaming platforms like Spotify succeed in covering a vast net of Category Entry Points (CEPs), which are cognitive links consumers use to consider which brands to purchase. By associating with various experiences and scenarios, Spotify solidifies its position as a go-to brand within consumers' long-term memory.

‘Sleep’ is a lucrative CEP that audio streaming platforms are particularly well-situated to capitalize on. Spotify and user-made sleep playlists abound on the platform, alongside sleep podcasts tailored to niche interests. Sleep podcasts often advertise for third-party products, as we will explore in greater detail in chapter 5, while most sleep music playlists simply sell the experience of aurally enhanced sleep, for the price of a subscription. The Frontera partnership is a straightforward instantiation of this kind of marketing strategy but is unique insofar as selling a

physical product is involved with creating that experience (i.e. a bottle of wine). More generally, Spotify's curatorial metacommodity sells the act of listening itself, subsuming whatever other commodities, goods, or services involved within that listening experience.



Figure 3. Aaron Lewis. Twitter screenshot by author. January 19, 2020, twitter.com/aaronzlewis/status/1219023105219342336

Before streaming became the principal source of audio media consumption, (save the years in which radio broadcast was the standard mode of consumption), the consumer relationship to audio formats like cassettes, vinyl, or the mp3 was principally one of ownership. Now, in the era of streaming, it is one of access to affect: the QR code provides access to a wine-accompanied musical experience rather than digital files. The privileging of experience over ownership is evidenced throughout the user interface of Spotify, which foregrounds mood playlists and algorithmically curated content based on genre or tone, rather than albums or other discreet musical formats. The home page of the “Your Library” tab on the Spotify app features playlists generated based on previous listening habits, rather than albums or songs – emphasizing that your ‘library’ of audio media is not a library of things, but a catalogue of tailored affect based on genre, mood, lifestyle, or activity, sleep among them.

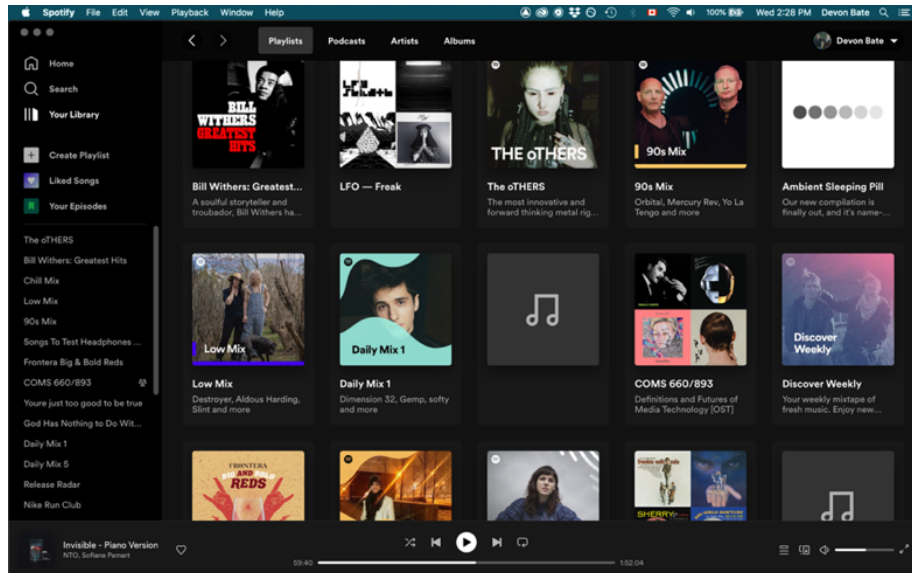


Figure 4. Screenshot from personal computer. May 18, 2022.

Maria Eriksson’s *Spotify Teardown: Inside the Black Box of Streaming Music* (2019) describes this product as a “metacommodity” (117) in which individual commodities (songs, podcasts) are curated, repackaged, and tailored, “under the assumption that the new whole is greater than the sum of its old parts and that another new whole is only a recombination away” (qtd. Morris 162). Rasmus Fleischer, historian and co-author of *Spotify Teardown*, documents how Spotify moves away from digital distribution in favour of providing a “unique service” (20), emphasizing experience over product. This business model of curation and algorithmic recommendation as product has been termed “Spotifyfication”, following a league of spin-off companies branding themselves as a ‘Spotify for books’, ‘Spotify for art’, and so on (Fleischer). Theoretically, this curatorial service can personalize any experience of consumption using the same techniques of machine learning and data collection that characterize the recommendation systems of platforms like Instagram or Tik Tok. There is an assumption embedded into Spotify’s metacommodity model that streaming audio is always in accompaniment to something else, insofar as individual commodities are best reconfigured to adapt to the contexts of individual consumption - framing streamed audio as but one design component for a larger experiential ‘product’.

In this sense Spotify takes the consumptive logics of Muzak, as a musical category, and situates those logics within the act of listening itself. In the way that Muzak does not stand on its own as a discreet musical object but as a tool to facilitate labour or encourage consumption, the product Spotify markets is, more broadly, ‘sound to live better to’. In “The Woes of Being Addicted to Streaming”, an article published by the music publication Pitchfork, Jeremy D. Larson states, “Music becomes an advertisement for the streaming service, and the more time and attention you give it, the more it benefits the tech company, not necessarily the music ecosystem.” Critics like Larson fear that artists’ creative output becomes operationalized as an advertisement for the affordances of streaming services and their utilitarian ends, rather than working as a distribution platform for the artists who create the commodities. While Muzak is somewhat of an outdated genre, the spirit of it is integrated, phenomenologically and economically, in the current logics of streaming platforms like Spotify.

Spotify uses various mechanics and technological innovations to make the experience-product as readily available as possible, from morning until sleep. Westerkamp bemoans the

relative ubiquity of Muzak, framed here as a proto-Spotify of sorts, in its capacity to alienate echolocated subjects from their natural environments, measuring mobile listening devices, like the Walkman, as the most phenomenologically disruptive form of all. The alienation experienced from not being able to echo-locate oneself within the natural world is exacerbated to the extreme by the Walkman, in a form of auditory alienation she terms “schizophonia”, following R. Murray Schafer (43). Streaming media endeavours to facilitate this schizophonia to its temporal limit: the Spotify ad reads, “you can soundtrack your *entire life* with Spotify. Whatever you’re doing or feeling, we’ve got music to make it better” (Eriksson et al. 121, emphasis mine). There is curated sound for every situation, and the sound runs seamlessly as it algorithmically generates a continual playlist. The ‘infinite playlist’ model, like the ‘infinite scroll’ design feature of social media feeds (Andersson), affords a level of ubiquity that plays into the broader cultural shift in attitude towards sound and listening that Westerkamp feared.

However, while the idea that music can be used to control one’s body and mind is not new, the mode of “ubiquitous listening” facilitated by streaming services seems to correlate with a broader turn toward a utilitarian approach to music, whereby music consumption is increasingly understood as situational and functional for certain activities (rather than, for instance, a matter of identity work or an aesthetic experience). (Eriksson 123)

The pervasive infrastructure of ubiquitous listening has expanded functional and situational listening beyond music and across different media formats, including ones featuring language like the sleep podcast.

This ubiquity is actively promoted within the app's user interface and marketing efforts, encouraging developers to incorporate Spotify across new devices. In 2019 the Spotify.design website first introduced their design system, Encore, which allows designers and engineers to create their own Spotify platforms by providing the design assets, code and documentation for integrating the app into various other container technologies (Sterne).



How many design systems can you think of that include both phones and fridges? It's a lot of stuff.

Figure 5. Screenshot of ‘Encore’ promotion on Spotify website.

spotify.design/article/reimagining-design-systems-at-spotify. Accessed June 2022.

Furthermore, the Spotify Connect feature allows the user to maintain an unbroken stream of audio from device to device, by transferring a more-or-less continuous stream of audio between different sound sources. As your Spotify account streams the audio from their servers, rather than the audio device itself (as an iPod would), Spotify can facilitate the smooth transference of your personalized stream from phone, to car, to watch, to fridge, and wherever Encore can be installed.

With these technologies in place, a Spotify Free account imposes barriers to continuous affective management: advertisements play every few songs, breaking the stream. Additionally, song skips are limited to six per hour and the playback mode defaults to shuffle, thus limiting the personalization of the stream (Willings). Leanplum, an app analytics company founded by Google software engineers, claim that the sustainability of Spotify's business model relies upon this disruption. Spotify's Premium subscribers are a minority of its user base, yet converting free-tier users to Premium members accounts for 90% of its 2017 revenue (Leanplum). Though selling ad space to advertisers is also source of revenue, the premium value of this ad space lies in its ability to affectively disrupt the listener. The platform lays out the technological infrastructure and an implied mode of engagement – background, and ubiquitous – then is sustained by the minority who can either afford its full potential or feel like they rely upon it.

Though Spotify is but one example of a tool that facilitates media ubiquity, organized, mechanically reproducible, and 'useful' sound becomes habit, and its absence becomes felt. This is part of the self-fulfilling economic prophecy that feeds media ubiquity and a cornerstone of the experience economy.

The passive listener, who has been conditioned to live with an acoustic backdrop, will experience silence as something negative, as a vacuum, a nothingness, an emptiness. This is a frightening experience for people unless they know how to activate their hearing sense again, or unless they understand that the ear simply needs to recover physically before it can hear the subtleties of a hi-fi soundscape. If people do not give themselves that time to adjust, they will feel lost in silence and will desire sound around them. Music-as-environment then becomes as desired a sound in such a situation as in a lo-fi soundscape. (Westerkamp 28)

Framing silence as an emptiness or 'vacuum', as Westerkamp describes, is the inadvertent cornerstone of Spotify's business model, and a key reason why more users are bringing audio to bed. Streaming platforms like Spotify act as a sonic safe haven when faced with the silence that runs counter to the kind of compulsive affective regulation of orphic media practices. While the innovation of the Mp3 monetizes the gaps in human hearing to proliferate digital audio files as widely as possible, Spotify successfully monetizes gaps in daily time through our listening, standardizing the augmented reality of the mediated everyday, encouraging listening as a habitual act of consumption, bringing the pains and pleasures of a derivative 'retail therapy' home and, for many, into bed.

Chapter 4: situating podcasts in the experience economy

How much do we listen?

The podcast format is a unique actor within this broader infrastructure of compulsive – and consumptive – listening. Though podcasts are most often found within the same technological infrastructures that facilitate music listening – streaming platforms, headphones, smart home devices – they operate via different modes of engagement, and therefore take up a unique position in the experience economy. These evolving modes of engagement contextualize how sleeping to the sound of information becomes second nature.

The basic formal characteristics of podcasts are important for understanding how the podcast expands and complicates the ‘media day’. For one, they’re longer, running counter to the more pervasive new media trend that takes audiovisual content and edits them to short soundbites. This is a proliferating feature (‘‘TikTokification’’) that has been recently incorporated across major platforms today – Netflix (*About Netflix*), Instagram (*About Instagram*), Twitter (Hutchinson), Youtube (*YouTube*), and Facebook (Heath). Even within the music industry, the format of the full-length album or LP is marketed less frequently by music distributors in favour of individual songs or singles. Though long-form fixed media (‘fixed’ excludes participatory media like video games and social media) is not the media trend of the moment, and podcasts continue to flourish, ranging between 20 and 40 minutes in length (Branka). The popularization of a longer-form media is counterintuitive within the broader shift towards competitive miniaturization, as shorter formats are more likely to find, and encourage, the filling of the media day by small increments – and perhaps more significantly, more habit forming as the ratio of gratification to time-spent is significantly lower (Schull 55). In this chapter, I analyze current data on listenership trends to understand where long-form podcasts are situated within this broader trend of miniaturized experiences. As the duration of the media day approaches its limit, the accommodation of emerging long-form media like the sleep podcast is made possible through the *stratification* of the media day.

A survey of recent listenership statistics across audio media can shed some light on this outlier. Edison Research and NPR conducted an ongoing survey tracking time spent listening to forms of ‘Talk Audio’ – divided into the categories AM/FM Radio, Podcasts, and Other. The study discovered a stark transformation in recent years: In 2014, 74% of the time spent listening to Talk Audio was via radio, with podcasts at a mere 12%. As of 2021, and for the first time, Podcasts surpassed radio as the main venue for the spoken word - 41% and 39%, respectively (*Edison Research*, “the rapid change of talk”). These numbers might suggest an unsurprising progression of users simply ‘churning’ from one media platform to another as the technology evolves, but the age statistics tell a different story: In 2021, the majority of listeners (68%) age 55 and up still use radio to access talk audio. The broader shift can be accounted for by the emerging and unprecedented listening habits of Gen Z’s, rather than the shifting habits of other age groups. The Spoken Word Audio Report in 2022 shows that Gen Z’s spend 214% more time with spoken word than 13-34 year old’s did just eight years prior, further leading the shift toward podcasts. On average, and across age groups, for the first time, “those who listen to spoken word audio daily spend 51% of their total daily audio time with spoken word.” (*Edison Research* “The

Spoken Word Audio Report”) In other words – for the first time in recent history, spoken word audio has surpassed music, principally due to the avid consumption of podcasts by Gen Z’s.

How do we listen?

Surprisingly, this trend does not necessarily mean less time listening to music or engaged with other media. Rather, the media day is stratified by emergent forms of multitasking. A 2020 study of the competition between music and podcasts concluded that, while there is a certain degree of vying for attention between the two, they are not substitutes for each other. They report that “users open another time window (20% longer streaming time per week) to listen to podcasts.” (Li et al.) By opening another time window and evolving new ways of listening, podcasts are a key contributor in stratifying the media day, and a key reason why sleeping to the sound of information has become a trend.

As the media ecosystem expands in this way, new audio genres and forms of aural engagement are afforded. As Marshall McLuhan describes, people arrange feeling, thought, and perception around new technology (qtd. in Mark 3). The way people arrange their experiences around podcasts differs from that of music because podcasts generally have clearer and less ambiguous meanings, requiring a different level of decoding when listening to them. While spoken language complicates the interfacing of one media over another – it is easier to listen to music while reading, than listen to a podcast, say – the fact that it is engaged with aurally still affords emergent forms of multitasking that make up that 20% increase in streaming time per week. New mediums, depending on how they interface with the bodies they encounter and their evolving capacities, find their place in the media day both in terms of when in the day, but also where within the strata of engagement. This stratification is facilitated by emergent forms of multitasking, resulting in a heightened capacity to cognitively move ‘content’-heavy media to the background as an orphic media practice.

The late-aughts and 2010s saw a proliferation of research around the structures and modalities of multitasking, especially surrounding digital media and youth. Being born into digital technologies, the younger generations are thought to spend more time multitasking and, some argue, are better cognitively equipped for it. As Ettinger and Cohen observe across this literature, “research has demonstrated a correlation between higher levels of multitasking in a technological environment and higher multi-sensoric integration” (Ettinger and Cohen 626). In early research from the 1970’s around multitasking, different modalities were identified based on the sensory input of the task: for example, visual, audio or verbal (Kahneman). Intuitively, it is suggested that when simultaneous tasks involve the same modalities (sight and sight, sound and sound), the output of the task is lowered. On the other hand, when the task involves different modalities, some research shows that the output of the task is unaffected and, in some cases, improved. Some research demonstrates that listening to music or audiobooks can help concentration and a sense of well-being. (Ettinger and Cohen 627) While a language-based medium like a sleep podcast may seem more cognitively ‘heavy’ than ambient music, for example, research has shown that a ‘technological environment’ lends itself to new and higher forms of ‘multi-sensoric integration’, especially for younger generations born into this environment.

Ettinger and Cohen explore how these simplified modalities (visual, audio, verbal) are nuanced in today’s technological environment, showcasing the complexity offered by current media like social media, video games, music, and texting. They observe how young people

integrate these different modalities into their daily lives. Each activity requires varying and sometimes changing "cognitive loads" (Sweller et al.) Music is a commonly multitasked activity, hypothesized to have a lower cognitive load compared to activities like texting. However, this difference in cognitive load can also be influenced by cultural context and attitudes towards the medium. For example, watching television is often considered multitasking, even though it involves a high cognitive load due to its visual and audio complexity. Surprisingly, multitasking with shared modalities, like watching television while reading, is also popular, and with practice, individuals adapt to handle this hybrid experience.

Much of the research around multitasking today is conducted in laboratory settings with time restrictions, while Ettinger and Cohen's more contextualized methodology demonstrates a temporal creativity in how young people engage with emerging forms of media. Outside of the laboratory setting, they observe that "tasks have a meaning and purpose which provide both motivation and the means to prioritize and combine tasks successfully" (Ettinger and Cohen 635). Most studies demonstrate that *without time restrictions*, the quality of the activity is not impaired while multitasking. The 'cognitive load' of any type of media is appraised by the assemblage of medias surrounding it, and the creativity of the multitasker's engagement with it. Within a frenetic and exponentially expanding media landscape, new norms of engagement creatively offer new possibilities for perceptual stability and affective regulation.

These modalities, cognitive loads, and emerging forms of engagement account for how a daily 20% increase in streaming time is even possible, with only so many hours in the media day. Though centered on spoken word and the information carried with it, the podcast has opened new forms of multitasking. One such form of multitasking is observed with sleep podcasts, where spoken-word content is decoded with a relatively higher cognitive load than music, yet individuals engage with it to help them fall asleep. Sleeping to the sound of information, as paradoxical as it sounds, is a significant and evolving node within the media landscape.

Why do we listen?

Similar to how Muzak and Spotify offer affective regulation, podcasts also provide an experience that involves affective regulation, distinct from Muzak and Spotify as discussed earlier. The top podcast genre in the U.S. in 2022 is comedy (Edison Research August 2022), and the primary reason users give for listening to podcasts is "to learn new things" (Li et al.) – both of which are not generally fulfilled by music. Such listenership statistics indicate that the podcast is filling a perceptual gap, both in terms of needs/desires as well as in time and cognitive space. A qualitative uses and gratifications (U&G) study of podcasts links podcast listenership to a feeling of productivity, while that enjoyment is facilitated by parasocial relationships with podcast hosts and other listeners (Perks and Turner). The discussion around these kinds of parasocial relationships have been discussed since the 1950s in broadcast radio, television, and movies (Horton and Wohl).

Specifically, the U&G study resonates strongly with Silverstone's psychodynamic analysis of television and the types of parasocial connections that played a pivotal role in popularizing the medium. Silverstone characterizes television as a 'transitional object,' akin to the first possessions of early infancy that help establish the fundamental differentiation between self and others, such as a blanket, a toy, or a pacifier. These objects require consistency, in an environment of care and security, and take up a significant amount of cognitive and emotional activity (Silverstone 9).

Perhaps the first observation to be made is that television will become a transitional object in those circumstances where it is already constantly available or where it is consciously (or semi-consciously) used by the mother-figure as a baby sitter: as her or his own replacement while she or he cooks the dinner or attends, for whatever length of time, to something else, somewhere else. The continuities of sound and image, of voices or music, can be easily appropriated as a comfort and a security, *simply because they are there*. (Silverstone 15, emphasis mine)

The sleep podcast, though coded by language, involves a degree of intuitive comfort just in its basic formal qualities. The podcast in general is an ideal transitional object, both in the infrastructure of ubiquitous access previously described, and that the voice is its formal foundation. The human voice has helped popularized new audio media formats since early forms of audio reproduction: the first ever French broadcast radio talk shows were to accompany truck drivers at night⁵ and the early popularization of the phonograph which used the fidelity of a woman's voice as the arbiter of quality (Gitelman). The sound of the human voice has been a driving force in the evolution of audio technologies, no less the sleep podcast.

Meanwhile, the podcast's need for 'continuity' as a transitional object is supported by the growing infrastructure of streaming media, as explained in the preceding chapter. Despite the broader trend towards miniaturization, the long form of the podcast provides continuity and sustained presence that is largely missing in the 'Tiktokification' of other forms of popular media. The podcast emulates the 'endless flows' of broadcast:

Television survives all efforts at its destruction. It is, in Williams' (1974) terms, in constant flow, and switching it off (in anger, in frustration, or in boredom) does not destroy it. We can switch it on again and it demonstrates its invulnerability and its dependability. (Silverstone 15)

The sleep podcast's format of regularly released content, featuring familiar voices, harbors a potential energy, even when not actively being listened to, ensuring continuous access to a sense of sustained presence, always within reach. Repeat listening is not a part of podcast listenership in the way it is for music: the continuity and reliability of an ongoing 'stream'-of-consciousness is one of the medium's key affordances.

The structure and supporting infrastructures of the podcast extend this element of dependability beyond the confines of traditional broadcast television in the domestic setting, as Silverstone describes. Theoretically (or ideally, for media distributors), it transcends the barriers of access between the subject and transitional object that would have limited television, and even audiovisual mobile media with more restrictive modalities or 'cognitive loads'. A key nuance to Perks and Turner's U&G study of the podcast is that the ability to be productive "travels with listeners", and "in various physical and mind-expanding ways". Mobility and subsequent diversity of listening contexts is important to users. Taking the comforts of television on the road allows the streamed podcast to interface with various other physical activities, contexts, and finally, orientations among other forms of media. While Spotify, in its initial conception, provides 'the soundtrack to *your* life', the podcast more directly implicates the creator of that soundtrack within the experience – though it is your soundtrack, you are not alone within it. The

⁵ Lost this citation - TBD

human voice transcends the abstraction of musical languages and affords a direct and reliable link to companionship. This security is afforded within the activities and gaps of time that were otherwise accomplished solo, even if with music.

This is not to say that even the somewhat incoherent Sleep With Me podcast does not lack informational content. As discussed earlier, podcasts occupy a unique position, blending the affective regulation of music, the continuity of television, and the self-governance of neoliberalism, as seen in ambient music and Muzak. The ‘ability to be productive’ while listening to podcasts in various environments is the primary form of affective regulation, where the emotional impact of having access to information and companionship precedes the specific content.

Similar to how ubiquitous Muzak can pathologize our perception of silence over time, podcasts have the potential to shape our perception on other forms of noise, including music, as unproductive or antisocial. This is due to their constant accessibility and latent potential for enhancing productivity. While podcasts do contain valuable information, studies on listenership demonstrate that they are almost always consumed alongside other activities. This complementary engagement style emphasizes the role of podcasts as companions rather than merely informational sources. The sleep podcast becomes an orphic media practice by cognitively ‘backgrounding’ the information without sacrificing the continuity of companionship nor the affective potential for productivity. Like ambient music, the ambient information of the sleep podcast holds the potential for continuous engagement, facilitating a shifting attentional modality that can modulate freely between full, sub, and unconscious attention. In this fragmented media day, the podcast ties time together in the way ambient music ties space together: where TikTokified media minimizes its duration to fill gaps in time, the sleep podcast fills cognitive gaps through sustained duration.

The functioning of a sleep podcast heavily relies on its duration and how it seems to modulate the passing of time. In Lionel Ruffel’s book *I Can’t Sleep* (2021), he reflects on the practice – in his case, the compulsion and necessity – of reading before going to sleep, and recounts the dynamics that arise when realizing you may reach the end of the book before going under:

Feeling the end coming, and doing more than feeling it, because an object like a book has the peculiarity that you literally see the end of it, the sudden jolt to consciousness took precedence over the undulations of reverie, relegated to the background, as if automatically put on hold, and the sudden jolts jolted forward, *hop hop!* are we there yet? is it soon? how much further? how many more pages? what’s going to happen? and a different kind of attention was put in place, a regime of alert, which is fundamentally that of awakening. (Ruffel 29)

Ruffel captures what the sleep podcast specifically, surgically, serves to avoid with digital media as we head to bed. In its familiarity and, as crucially, its length, it presupposes to sustain its presence for you after you’ve gone under, nullifying any questions of what will happen and how it will end.

The strategy of each podcast varies: in Sleep With Me, the stories meander and digress without resolve or narrative tension, as visually depicted in Figure 1. Meanwhile, the description of *The Sleepy Bookshelf* (the #4 Fiction podcast in the US Podcast Charts as of December 2021) addresses the tension Ruffel describes: “Each episode begins with a brief moment of relaxation

followed by a quick summary of the prior episode. That way, you can fall asleep whenever you're ready and always stay caught up.” (*American Podcasts*) Whether it is within the overall narrative of the episode (*The Sleepy Bookshelf*) or within the structure of each inconclusive sentence (*Sleep With Me*), the sleep podcast soothes the listener with the message: you won't miss anything, and it won't stop. There are no disruptive 'jolts' toward the end as Ruffel describes, as the absence of an ending is what the genre, and the sleep timer in tandem, promises.

Maybe that's why I can never finish a novel before going to sleep, maybe it's because I can't bring myself to feel the sudden jolts of this death that invites me to reflect on the meaning of life. [...] The serial seems to plunge us into a matrix of infinite dreaming where we are no longer ourselves, and where we hope to find rest. (35)

The 'sudden jolts' Ruffel describes is what drives the 'Tiktokification' of media within the attention economy. The compulsion to know 'the next' without the conclusion (or 'death') of the current, facilitated by technological ease: the 'infinite scroll' interface combined with the most ergonomic finger movements, the automatically generated playlist, or the podcast that is too long to finish. The sleep podcast targets this compulsion, continuing media use all the way into unconsciousness by modulating the form of engagement into inattention, without ever having to stop the stream.

The idea of 'attention modulation' transitions us into another popular framing of today's technoculture, and the topic of the following chapter. The mechanics of 'the attention economy' contextualize how sleep podcasts are able to monetize and sustain themselves. As we will investigate, the sleep podcast is a natural extension of attention economy logics, beautifully captured in Ruffel's account of 'nocturnal fiction':

That's how it is: the more that voracious capitalism expands its empire, the more insatiable our need for nocturnal fiction becomes. Sometimes I can start one in the middle, other times I prefer to watch two episodes of a series that I will never finish, and there I understand the danger that lies in wait, in this false reverie that is nothing more than a permanent awakening, an occupation, that multiplies ends and beginnings ad infinitum to keep us in forced wakefulness, eyes wide open to the infinity of consumption and unfulfilled need. (36, emphasis mine)

The attention economy generates this wakefulness via the potential for infinite 'consumption and unfulfilled need', resulting in what is popularly termed as a global 'sleep crisis'.

The attention economy emphasizes the ways in which media is delivered to its audiences, often in spite of the information contained in the media. Cray writes, "Most important now is not the capture of attentiveness by a delimited object – but rather the remaking of attention into repetitive operations and responses that always overlap with acts of looking or listening." (52) Repetitive actions such as sleep, for example, can be monetized by overlapping with the act of consumptive listening.

Sleep and the attention economy are inextricably linked, as we will explore in the following chapter. A 2023 survey of Gen Z's media usage by Edison Research demonstrated that most of the participants personally felt that they engaged with media too much or were in some way problematically dependent on it (Edison Research 2023). In tandem, the study reported a

recurring theme of 'rest' as a marker of personal identity and interest, reflecting a pervasive mental fatigue. Therefore, to target Gen Z engagement, Edison Research advises: “Be one of the places they can go to rest. Can your content help them recharge or rest? Are you presenting it to them in that way?” Audio media, like the sleep podcast, presents a paradox: it is a highly effective gateway to engage audiences profitably, but the audience is already exhausted. To maintain media engagement for an exhausted audience, media forms like the sleep podcast emerge to help engage their exhausted audience in the repetitive action of rest.

Chapter 5: how sleep podcasts monetize sleep

“When an economic force is thinking through your flesh, calculating its capacity of becoming, sleep becomes an obstacle to its self-realization.” (Fuller 97)

In the constellation of media today, the sleep podcast may be a more fruitful area of research than music, categorically, to revisit Attali’s assertion, ‘wherever there is music, there is money’. He makes the claim that music acts as a herald of times to come, but significantly makes the equation between ‘background noise’ and ‘music’ in his argument – given the diverse genres of audio on offer, this distinction may hold more weight today than in its initial publication. Listening consumers today are not merely invested in the ‘organized sound’ of music, but rather the ability to organize the sound themselves for particular times and activities: These sounds include that of language, of noise, of music, of information, of noise-cancellation, and the curated layering of all these. The difference between sleep podcasts and music captures this evolution, in that the former incorporate informational noise instead of music, and inherently relies on the specific listening context of sleep. The sonic commodities are not just products of and for the culture industry, like songs or albums, but rather diverse forms of audio, instrumentalized as tools for achieving particular affective states.

As Attali asserts, these sonic commodities are prophetic of social and economic organizations to come, and are important conduits for the movement of money in the attention economy. The paradox of the sleep podcast is a herald, elucidating the ways in which *inattention* and media *disengagement* are a prominent frontier in monetizing media production and distribution. We can therefore look to the successful monetization strategies of sleep podcast producers as a barometer for the role of audio in the media landscape, and as a portent for where the attention economy is headed.

Attention economy background and overview

The attention economy is a broad and evolving concept, but most importantly for this study, it is the backdrop for how new media makes money and is sustained today. Three key milestones that have marked its evolution and are also fundamental to the economic role of the sleep podcast: the business practices of the early aughts, the popular political discourse of the 2010’s, and the public health considerations of attention following COVID-19. These themes and key historical moments contextualize how the sleep podcast, as a commodity of the attention economy, is economically situated and experienced today.

Sound and noise is in the foundation of the attention economy. The idea of ‘attention economics’, as it was initially framed, dates back to World War 2 in an inquiry around the distraction of noise on radar operators (Nelson-Field 79), demonstrating the tactical importance of mitigating noise and the perils of distraction. However, similarly to the experience economy, ‘the attention economy’ was more broadly popularized later via business literature around the turn of the millennium, notably by Davenport and Beck in their 2001 book *The Attention Economy: understanding the new currency of business*. It was written in the era of Web 1.0, and the preoccupations around attention have shifted dramatically since its publication, but their core insights remain relevant today. Put simply and in their words, “telecommunications bandwidth is not a problem, but human bandwidth is.” (Davenport and Beck 2001) In this early formation, attention is framed as a precious resource within the internal functioning of a business, and they

propose ways to mitigate “organizational ADD” both internally as well as externally to clients. Significantly, they frame human attention as “psychobiological” and “organic” (56), rather than in the mechanical and rational framing of the Enlightenment-era subject, where the focus of an individual’s attention is the result of conscious choice. This reads as a precursor to the later preoccupations around consumer habits, compulsions, and attention management.

As media technology developed and miniaturized, the discourse around the “organic”, affective, or pre-conceptual dimension of attention broadened beyond business practices and into the mainstream, especially following the 2016 Trump election in the United States. The discourse around how social media was able to sway the election by way of fake news and echo chambers spurred a broader public discourse around the insidious mechanics of social media platforms and their potential for influencing public decision-making. The conversation turned to the exploitative design mechanics of social media apps, popularizing the idea that social media feeds off human instincts in ways that some perceive as an existential threat to a healthy and functioning democratic society (*Center for Humane Technology*; Puusalu). The mechanics of media algorithms and their user interfaces – from Spotify to Gmail (Lewis) – interact with human impulse in such a way that we are often scrolling, posting, buying, or otherwise redirecting our attention before a decision was made. For example, clickbait headlines, a cornerstone and distilled manifestation of such an attention economy, target affective first impulses even if the information is meaningless (Munger et al). The “content” on the other side of the link is superfluous, and the text of the headline itself is not designed to inform but simply produce the motor-response to click. Within an era in part characterized by ideas of ‘fake news’ and ‘post-truth’, the blurring of information and affect has been a growing field in media and sound studies (Hagood; Paasonen 176). The obligation to discern what is noise, what is information, and where to put our attention has expanded beyond business practices and became deeply ingrained in the technoculture of this moment. The emergence of new tools, such as the sleep podcast, intentionally explore these tensions between noise, information, and the pressures of self-governance.

The conversation around the politics of attention and self-governance has increasingly become a health consideration in recent years. Unsurprisingly, there is a wealth of literature around the ill-effects of media overconsumption and compulsive media habits – self-esteem issues, attentional dysregulation, and insomnia are of the chief concerns. However, at the onset of the COVID-19 pandemic, these public concerns around media consumption shifted in tone. Though the legitimacy of their health benefits is debated in current literature, and their data-brokering practices widely critiqued (Cosgrove et al), wellness apps like Headspace, Calm, and Mindstrong boomed in popularity. During the beginning of the pandemic, the state of New York collaborated with the app Headspace to provide free subscriptions for New York residents. Meanwhile, companies like TikTok, Netflix and Pornhub marketed themselves as useful tools for keeping people at home to limit the spread of the virus. Despite the well-documented and popularly discussed negative effects of binge-watching and binge-scrolling up to this point, the pandemic helped partially reframe these forms of media engagement as a means towards better public health. Netflix marketing campaigns, hashtags like #staythefuckhome, and the daily reality of many who became isolated at home helped re-normalize recently stigmatized habits and even repositioned boredom as a chief cause of spreading the virus (Kendall). The parasocial affordances of streaming media mitigated the boredom and loneliness of the pandemic, keeping people at home, while online conferencing platforms like Zoom became the default media prophylactic for spreading the virus. Despite the recent wake of political controversy, the

pandemic forcibly brought into light the ways in which compulsive media engagement can have legitimate health benefits, particularly in times of crisis.

Sleep podcasts are of the most significant media prophylactics coming from this era of concern around attention and public health, and a significant tool within the so-called sleep crisis that has accompanied the evolution of the attention economy. Electric light, 24/7 work culture, and the psychological difficulty of ‘unplugging’ (the affective shift of breaking the flows (Lefebvre), the ‘jolt’ of seeing the end (Ruffel)) is thought to have eroded peoples’ sleep time across the globe. The above financial, political, and health considerations that undergird the media of the attention economy, significantly, play out during waking hours. Deliberately or not, media producers and distributors must work against sleep in order to compete in a saturated media landscape to financially sustain themselves – either by creating content that resists disengagement or, less commonly, innovate ways that sleep can be monetized. Thinking back to Crary’s insight that sleep is “an uncompromising interruption of the theft of time from us by capitalism” (10), the merchants of the attention economy must guard its products from the unproductive biology of sleeping bodies, both shaping human sleep and the innovations of the attention economy as a result. Sleep podcasts are one of the many new media genres on the outskirts of the attention economy that must finance themselves on the efficacy of their ability to ultimately disengage the listener. The monetization practices of the sleep podcast must be considered to understand how the sound of information, as a media prophylactic, can be remunerative in the attention economy, and what this tells us about the state of the attention economy itself.

Distribution of sleep podcasts in the attention economy

Podcasts continue to be a booming folk medium, and monetization strategies are therefore emergent, diverse, and widely discussed. To monetize, the first step is to reach listening ears. Examples of how audio media infrastructure delivers sleep podcasts was covered in chapter 3.5. Cloud-based (rather than device-based) streaming facilitates a single and continuous audio feed between an increasing number of ‘smart’ devices with audio compatibility, while endless algorithmic recommendation (the sonic equivalent of ‘the infinite scroll’) precludes the need for user intervention to keep the stream going. This fosters the habit of ceaseless aural engagement and the demand for content that can remain affectively useful - or at least non-disruptive – right until the final chapter of the listener’s media day. The affective dimension of “liveness and compulsory continuous connectedness in social media” (Lupinacci) is most efficiently delivered through audio given the user’s ability to multitask, as discussed, even though its audiovisual counterparts like Tik Tok are most emblematic of the phenomena. The audio media infrastructure plays a vital role in expanding the market for continuous connectedness and exploring potential avenues to monetize emerging forms of this connection, as exemplified by sleep podcasts.

Monetization begins with distribution. Within media studies today a parallel is often drawn between new media trends and the mechanics of machine gambling, as outlined in Natasha Dow Schull’s work. Schull’s research on the rise of slot machines in the American gambling industry serves as a fitting analogy for understanding the habits of attention

modulation associated with digital media. Though a far cry from slot machines, attention modulation and affective regulation are key objectives of the sleep podcast genre and the comparisons are surprisingly generative. The process of establishing habituation in slot machines, as described by a supplier of such machines in Mexico, is comparable to establishing habits in podcast listeners as described in chapter 3.5. He says, “what you’re doing is establishing player habits. We get our machines down there, and the players start becoming familiar with them and they like them, and you keep those players.” (Schull 34) By first distributing sleep podcasts effectively, creators then have the opportunity to cultivate listener habits and familiarity, thus setting the stage for successful monetization strategies.

An easily accessible audio media infrastructure facilitates familiarity and habituation, in turn opening up the market for further interventions of audio in the day-to-day. A salient example is the brand partnership between Spotify and Google in 2019, where Spotify offered a complimentary Google Home device to users subscribing to a Premium account (*Spotify Newsroom*). This collaboration effectively combines voice-activated "smart home" technology with Spotify's algorithmic mechanics, transforming domestic spaces and individual rooms into mediated listening environments that require minimal user intervention. Such brand partnerships further embed audio media into our everyday lives. As Silverstone eloquently explains, this integration is “Not as a result of some arbitrary political imposition of a medium on a resistant culture [...] but as the result of its occupation of the particular spaces and times of a basic level of social reality.” (22) In simpler terms, regardless of any kind of initial need or demand, ‘once the machines get down there’, familiarity and habituation can be nurtured foremost by ubiquity and ease of access. In the case of sleep media infrastructure specifically, Spotify prominently features tools like the "sleep timer" on its user interface, a feature that has been a mainstay across platforms since its integration in 2019. This timer allows users to set a predetermined duration for their listening session, eliminating the need for any further intervention after hitting play. The feature offers users a gamble, as they try to strike a balance by setting the timer long enough to prevent hearing the stream shutting off, yet short enough that it doesn't interfere with their sleep once they drift into unconsciousness.

The addition of the sleep timer to the Spotify user interface in 2019 marked a significant milestone in the platform's evolution, coming just a year after the incorporation of podcasts. Although there is no explicit connection between the introduction of podcasts and the sleep timer, the updates to the user interface (UI) during this period included design features that privileged sleep podcasts. When it comes to music, accessing the sleep timer requires navigating through three layers: selecting the current song, going into the settings menu, selecting the timer, and then setting the timer duration. For podcasts, the sleep timer is conveniently placed right on the default podcast screen, alongside other essential streaming mechanics: playback speed, skip back/forward options, play, pause, and sleep. While the term 'sleep' in this context refers to a machine's 'idling' state rather than human sleep, it highlights a popular mode of user engagement that has persisted over the years. It indicates that podcast listeners often prefer to relinquish the conscious decision to hit 'stop' and let the stream of information continue independently. These two significant developments in audio infrastructure underscore the importance of disengagement as a key mode of monetizable podcast listening.

Relinquishing control is a key feature of the service that sleep podcasts and their platforms provide. To return to the gambling analogy, Schull discusses how the removal of decision-making is fundamental to both the monetization of casinos as well as the user’s pleasure of video gambling. Casinos, much like infinite algorithmic feeds, attempt to remove design

elements that trigger an individual's decision. Rather, meticulous attention to design encourages gamblers to enter a flow state – right angles are avoided in the architectural layout of the casino as they provoke decision making, for example. The slot machine itself uses BOSE audio technology (a leader in orphic media technology, as discussed by Hagood) to lull the user in tandem with acoustic treatment which sonically isolates each machine from outside distractions (Schull 63). 'Soft curves' is the mantra across all of the design elements (lights, sound, set design) to maximize "time-on-device" (ToD), engaging users while provoking as little decision making and surprises as possible. Schull notes that the highest earning slot machines are the ones tucked away, private and cocoon-like, which maximize 'flow state' for the user and ToD for the casino.

The domestic space, with increasingly integrated media, orphic media technologies, and a habituated listener, is the 'cocoon' at hand and the site of monetization for sleep podcasts. The slot machine is a useful metaphor, but blunt, insofar that ToD for slot machines translates fairly directly to the amount of time money is being entered into the machine. In the case of streaming media, ToD does not have an easy 1:1 ratio between time spent and revenue. Rather, ToD informs what kind of monetization strategies are most effective, dictating when and how money is most effectively entered into the machine. Time duration, in part, dictates monetization style. Examples include: when, and how often, a user encounters an ad in the Tik Tok feed; for a free mobile game, pinpointing the most effective moment in gameplay before offering an in-game purchase to continue; for longer form streaming platforms like Spotify or Netflix, establishing habituation through ease of access, and then requiring a subscription to either continue the habit or gain access to an uninterrupted experience. For the sleep podcast *Nothing Much Happens*, a premium subscription removes the ads, offering an "ad-free experience of rest and gentleness" (Nicolai 0:40).

The algorithmic and parasocial duet of monetization

With these infrastructures of domestic distribution in place, podcasts can better reach their target audiences, and monetize listenership. Podcasts monetize in a variety of ways, including sponsors and advertising, subscriptions, affiliate marketing, donations, premium content, hosting events, and physical products, to name a few (Ross). For sleep media, monetization techniques tend to be centered around establishing both *parasocial* and *algorithmic* relationships. Podcasts with a long-term following like *Sleep With Me* that are centered around the personality of the podcaster tend to engage with their audience by responding to comments, reviews, and messages, fostering a sense of community and loyalty that encourages listeners to follow and share their shows on social media platforms. Therefore, crowdfunding and donations are one source of revenue that require genuine support and trust for the service offered by the podcast. A subscription to the channel's Patreon gives access to more content, as well as personalized messages and livestreams. Subscription-based models are the cornerstone of media monetization today, and for a sleep podcast like *Sleep With Me*, are generally the result of a habituated parasocial relationship.

Beyond building and maintaining parasocial dynamics, podcasters must also focus on producing consistently, as platforms often algorithmically prioritize shows with a track record of regular updates. *SWM* releases about 3 episodes a week, currently totalling over 1100 episodes of 1-1.5 hours each. To fully benefit from the algorithms and personalized recommendation systems, producers also pay attention to their podcast metadata, including titles, descriptions, and

tags, to ensure their shows appear in relevant search results and categories. Spotify's algorithm steers users towards certain podcasts based on this metadata, in tandem with the listener's user data. In a 2022 article, BNN Bloomberg documents how such algorithmic curation has made accidental sleep media celebrities – Brandon Reed, a Walt Disney employee from Florida created three episodes of white noise to help his baby sleep, which reached 26.6 million listens in under three years, without marketing the channel (Ashley). He began to offer a \$2.99 monthly subscription to his podcast, TMSoft, quickly earning over \$10,000 in subscriptions alone. The subscription gives listeners access to additional sounds and the ability to request new sounds: he cites capturing the sound of a clacking railroad for a chiropractor's anxious patient. Alongside subscription revenue, he receives donations from people who come to rely upon his work – for themselves, their patients, or even their pets. These examples demonstrate how a combination of algorithmic and parasocial relationships allow individual podcast producers to reach their audience and sustain themselves financially.

It was fortunate timing that Reed as he launched his podcast in 2019, when Spotify had recently acquired the podcast streaming platform Anchor. This, combined with strategic partnerships and UI updates as previously discussed, greatly amplified the distribution and consumption of sleep media like his. Though fortuitous timing benefitted his podcast algorithmically, his way of interacting with his unexpected audience maintained that popularity. Regarding the possibility of including advertisements in his white noise podcast, Reed says, “it's embarrassing to say how much money I would be making” (Ashley). He justifies passing up this opportunity, claiming that he wouldn't want to disturb his listeners with “the sound of commerce”. For traditional podcasts relying on the spoken word and not so algorithmically lucky as TMSoft, the ‘sound of commerce’ is an inevitability in order to remain sustainable. The successful sleep podcasts are the ones to effectively incorporate the sound of commerce into the experience of dozing off.

Monetizing sleep via ads and sponsors

Advertisements and paid sponsorships are of the most common avenues for podcast monetization and have unique implications in the context of sleep media. The type and timing of ad and sponsorship placement is crucial for effective monetization, as guided by ToD metrics. As ToD is an indicator of the type of user engagement, such metrics for sleep media function somewhat uniquely, in terms of both timing and the forms of (in)attention engaged. When aiming to deliver an advertisement during sleep, the key lies in finding the optimal moment that can effectively engage the listener without posing a risk of disrupting their sleep and potentially interrupting their habituation to listening.

In Karen Nelson-Field's *The Attention Economy and How Media Works: Simple Truths for Marketers* (2020), Field outlines a taxonomy of attentional modes, informed by the cultural and media infrastructures of the attention economy. In a so-called age of distraction, defining the various forms of attention, and their uses, are a key consideration for advertisers – high (active), low (passive), short, long, subconscious, conscious, and so on. Depending on the desired outcome and the context of the advertisement, different forms of attention are targeted as well as the movement between these states. Nelson-Field defines subconsciousness as the ‘default state’ where we have “a broad and un-specific focus to everything around us” (73) while advertisements move that focus in the form of ‘guidance triggers’. “Top-down”, or endogenous movement, describes a conscious and goal-oriented attention that generally commands high

attention – for example, Googling something and finding a relevant ad. “Bottom up” are stimulus-driven (exogenous) movements, where some sort of sensory input inadvertently commands a low and automatic attention. Given the infrastructural context previously described wherein the listener is likely in a position of relinquished control, sleep podcast advertisements provoke exogenous movements in the context of low, or perhaps even subconscious, attentional modes.

Much attention is given to these kinds of low-attention, exogenous forms of guidance triggers within current marketing science, under the assumption that most consumers are saturated in media and that full, undivided attention is increasingly rare. As Nelson-Field plainly states, “the old definition of attention ‘taking full possession of the mind’ is best left for *The Exorcist* (Warner Bros, 1973). This hypnotic notion is just not reality” and that advertisers today must understand “how to switch from legacy measurement that only considers high attention, to measures that better reflect the reality of human attention.” (83-4) Sleep media offers market researchers a fruitful area of study, in that it reflects the default state of inattention that is symptomatic of media oversaturation. As a result, sleep media has become an important cite of innovation in marketing and advertising.

Though it is unlikely that an average sleep podcast producer would be engaging directly with this kind of research to optimize advertisement placement, successful cases of advertising through sleep media emerge over time through trial and error. Therefore, perennial sleep podcasts to date can serve as useful points of analysis to better understand advertising monetization models in this context, cross-referenced with the contemporary attention literature coming from marketing science.

The advertising structure for *Sleep With Me* follows an idiosyncratic formula and has been consistent for years. *SWM* has cycled through many different sponsors and paid advertisers. For example, the podcast prominently featured their sponsorship with Sleepphones for some months – a combination of eye mask and headband with integrated Bluetooth headphones designed for streaming audio while sleeping (katiejo 2016). Most of the sponsors have had some relation to sleep health or wellness more generally: mattresses (Helix, Allform), water purifiers (AquaTru), as well as wellness or counselling apps (Betterhelp, Zoc Doc). Regardless of the advertiser, the ad placement occurs around the same time relative to the structure of the episode: The sponsors and patrons are briefly mentioned within the first 10 minutes of each episode, and then again more thoroughly around the 20-23 minute mark after an unusually long and peripatetic introduction where Ackerman describes, in excruciating and meandering detail, the structure of the podcast. The main body of the episode, around 40 minutes, follows this substantial introduction and mid-roll advertisement, concluding with a third and final advertisement in the last few minutes.

The relative length, loudness, and energy of the ads follow a consistent structure across episodes. Most notably, the ‘mid-roll’ ad occurring around the 20-minute mark tends to be the longest – around a couple minutes – as well as the loudest. Decibel readings remain at a consistent normalized level of amplitude, but Ackerman’s voice is slightly compressed, adding 1-2 LUFS in *perceived* loudness⁶. Though a subtle difference, fans of the podcast via message boards often complain about the ‘volume’ of these mid-roll ads, likely due to increased aural sensitivity preceding sleep. During this mid-roll, ads are built to take up a certain duration of time: for shorter advertisements like the Sleepphones ad, the identical recording is played twice back-to-back. More recently, the mid-roll ad is a longer promotion of the subscription benefits

⁶ LUFS (Loudness Unit Full Scale) is a unit of measurement used to quantify audio’s *perceived* loudness

which takes up the same window of time. For years now, the podcast has followed this consistent temporal and sonic layout, fleshed out with new content three times a week.

This advertisement formula bears interesting implications in relation to current marketing science as discussed in Nelson-Field's book, particularly around the unusual timing and subtle sonic differences of the mid-roll ad following the ambling introduction. On fan message boards, and often referenced anecdotally within the podcast itself, many users report falling asleep during this extended introduction, meaning that the mid-roll advertisement occurs for many during the hypnagogic state between wakefulness and sleep. Though a counterintuitive time to place an ad, Nelson-Field reports that across the attentional modes, "We found that the greatest uplift in sales impact occurs when a viewer moves from a pre-attentive state (non-attention) to low attention." (78) Marketing science today is particularly invested in the advertising potential of low-attention contexts, or 'incidental advertisement' as it is the norm of most advertising within the saturated attention economy today. In a large two-year study with Dentsu Aegis Network Global, advertising effectiveness was measured in a large sample size based on precise metrics including ToD (screen and sound) and eye-gaze tracking. While the Short Term Advertising Strength (STAS) is reported as proportionally greater with higher attention levels, the guidance trigger from 'subconscious' to 'low' was found to have a disproportionately greater influence on sales.

Meanwhile, the element of surprise delivered by the mid-roll ad – an irritating caveat for *SWM* listeners – is also useful in an advertising context. Nelson-Field dedicates an entire chapter to the importance of surprising the audience in affective advertising, and how to do it today – in the context of a cluttered media landscape, the way to be surprising is often to be mundane. In this chapter, Professor Jarod Horvath writes, "When a prediction fails, the brain leaps into the present moment, attention becomes highly focused, and memory networks kick into overdrive. In other words, when a prediction fails, the brain becomes primed to take in and hold onto new information." (109) Horvath cites an advertising experiment on YouTube in which 30-seconds of nothing – no sound, no image – was a surprisingly effective advertisement within an otherwise loud, high-attention seeking media context. For *SWM* listeners at night, a moment of unexpected decisiveness in an otherwise roving narrative, emphasized by 1-2 LUFs of perceived loudness, is surprising enough within this context of quiet and low attention. Hypnagogic rest is the furthest extreme of this potentially lucrative liminal state between 'subconscious' and 'low' attention, and an unexpected new frontier in advertising.

The advertising potential of the inattentive pre-sleep state within a saturated attention economy has gained the interest of advertisers in recent years. In a study with the American Marketing Association New York's 2021 Future of Marketing, 77% of some 400 marketers from firms across the US reported the intention to deploy 'dream-tech' for advertising (Stickgold, Robert, et al). This trend has developed quickly following recent developments in neuroscience around 'targeted dream incubation', or TDI (Horowitz et al 2020). Using sleep-wearable technology, TDI demonstrated how pre-sleep prompts were consistently incorporated into participants' dreams. While TDI and related approaches aim to understand the brain's processes behind dream experiences and enhance sleep quality, companies have quickly shown interest in utilizing dream engineering for product placement and influencing consumers' waking behaviors.

Sleep podcasts, operating at the unique intersection between sleep, information, and sound, are uniquely positioned to carry out these innovations. According to one study, playing audio recordings of product names during sleep, as opposed to wakefulness, has the potential to influence snack preferences towards either M&Ms or Skittles. Sleep researchers Horowitz,

Stickgold, and Zadra surmise: “One can easily imagine a musician collaborating with the manufacturer of Skittles to offer an hour-long nap soundtrack that incubates psychedelic candy dreams” (Stickgold et al). As both neuroscience and advertising research move this direction, it would stand to reason that the late-night timeslot for advertisers – particularly within a medium where it is most likely the listener intends to sleep – will increase in value.

In sum, the incorporation of advertising into our sleep and dreams is a growing phenomenon. Advertisers are actively exploring ways to manipulate dream content for product placement and harness the vulnerabilities of hypnagogic rest. While dream incubation has historical roots in therapeutic and spiritual practices (Nielsen), recent advancements in technology and sleep science are enabling more reliable implementation of these techniques. The exploitation of sleep and dreams for commercial gain raises the same kinds of concerns about privacy and consent present elsewhere in the evolution of the attention economy, and in addition, the potential manipulation of vulnerable states of consciousness. As the advertising potential of sleep podcasts continue to evolve, it is crucial to carefully consider the broader implications and ethical considerations surrounding the over-exertion of the media day by advertisers. In the next section, I consider how the over-exertion of the attention economy strains sleep media producers as well.

Parasocial anxiety and the limits of attention extraction

While both inattention and dream incubation hold much promise for advertisers, the current research in this area is still in its infancy and somewhat limited in capturing the intricate complexities of how sleep podcasts are actually experienced for the listeners. Advertising, despite its revenue potential, has a tenuous relationship with both the sleep podcast hosts and the listeners in their potential to disrupt the parasocial relationship of trust, essential to the proper functioning of such a podcast genre.

On the FAQ page of the *SWM* website, Ackerman answers the commonly asked questions via audio recordings uploaded to Soundcloud, showcasing his distinctive meandering style, albeit with a noticeable effort to provide coherent and informative responses. In his answer to the question, “What do you do with the Patreon money? How are all the costs to make a podcast covered if it is FREE?”, he explains how he under-estimated the costs of sustaining the podcast and overestimated how much he would rely on advertising. “I think my anxiety and fear around sustaining the podcast and money has kind of been transferred over to listeners,” (Meet Scooter 0:28) he claims, which can be corroborated with the kind of complaints found on fan sites and the *SWM* sub-Reddit, usually around the style, tone, and placement of the ads described above.

This motivated Ackerman to shift the business practice from a monetary-based goal to a community-based one. On Patreon, money-based goals used to be the default (and only) format for raising money. After some petitioning from Patreon users, a community-based goal was implemented, directed to securing and maintaining a fixed number of subscribers. This reframing meant a more stable form of income for Ackerman. He says, “the cost of distributing the podcast and the cost of administrating it and managing it, those go up with every new listener. So as a listenership grows [...] our costs go up, like, exponentially, and other than Patreon we don't have a predictable source of revenue.” (6:44 – 7:06) Reasons he cites for the ‘exponential’ growth in expenses include the administrative expenses that come with managing a particularly vast archive of previous episodes, and the administration involved with marketing and distributing

three episodes a week for a growing audience (which, he claims at the time of his response, is an unusually prolific roll-out for an independent podcast in the top 200). Ackerman claims that sustaining the podcast counterintuitively meant setting a cap on the number of monthly subscribing Patrons (in this case, 4000, or roughly 5% of the audience), rather than focusing on profit growth. By *limiting* growth he is able to maintain the quality of the product in order for a certain percentage of listeners to be willing to subscribe, and therefore keep the project financially sustainable. For *SWM* to survive in the attention economy, it must be anxiety-free, non-disruptive, and maintain a parasocial semblance of trust in the host required to sleep to it. Now, in lieu of advertising a third-party product, the mid-roll ad currently suggests a Patreon subscription.

Thinking back to TMsoft's accidental gold rush, when asked about adding advertisements alongside the subscription model currently in place for his podcast, Brandon Reed says, "It's embarrassing to say how much money I would be making." (Carman) In light of the kinds of compromises *SWM* had to make around limiting growth, it is uncertain, even unlikely, that Reed's statement would end up being true - taken out of context, his listenership metrics, ToD and potential ad placement revenue may point in the direction of profit growth. However, in the listening context of a white noise podcast - in which the goal is to mitigate all aural information within the podcast and for the listener - a listener's tolerance to ad placement would be about as low as it gets. As we see in the marketing research outlined by Nelson-Field and exemplified in the *Sleep With Me* podcast, the mechanics of an effective advertisement and their limitations are uniquely formed to the aural and psychological needs of the listener - in this case, a listener trying to fall asleep. The kinds of limitations encountered in sleep podcast advertising adds new texture to Crary's claim that "Sleep is an uncompromising interruption of the theft of time from us by capitalism." (10) The ability for a sleep podcast to sustain itself economically is in its ability to respect this compromise between financial gain and the biological act of sleeping. Both TMsoft and *Sleep With Me* respectively demonstrate the limits of the infinite growth model of capitalism, in how attempts at that growth can be heard by the consumer, be it in the form of overly disruptive ads or an anxious bedtime storyteller. The audibility of capitalism, in this case, is disruptive and would ultimately lead to the communal (and consequently, algorithmic) rejection of these podcasts, until they are tailored to suit the sleeping body.

This observation leaves aside forms of media that are repurposed as sleep aids, like old sitcoms, or even the nostalgic white noise some find in the presence of cable television commercials. However, for genres like the sleep podcast which are deliberately designed and consumed as a media prophylactic for insomnia, the ways in which they fail for producers and consumers resonate the complex and evolving limit in which the attention economy can operate. If a sleep podcast doesn't function for the listener, or isn't able to sustain its own production, the reason for failure acts as an index for the shifting outer boundary of how far an attention economy can extend the media day. This blurred limit adds new dimension to the dichotomy between 'sleep' and 'awake' implied in Crary's statement. The threshold between inattention and sleep serves as a showcase for both the advertising potential of manipulating dreams as well as the limitations of extracting attention on the other, whether through auditory disruptions or the anxiety-induced insomnia caused by neoliberal pressures.

This constantly shifting and blurred boundary between monetized attention and sleep raises sustainability concerns for individual podcasts and the attention economy as a whole. In a conversation with the Centre for Humane Technology, economist Kate Raworth relates her economic model of sustainability to the CHT's work around attention extraction (Harris and

Raskin). When the fundamental measurement of success is one of growth, rather than sustainability, economies run up against material limits – be it environmental limits, or the physical capacity of individuals to stay awake – and will collapse if they don't adapt in the long term. Of course, independent media producers must see short-term gain to innovate new media prophylactics, but to sustain long-term will come up against the need for reform. Raworth calls for a shift from a “growth-addicted economy” to a “growth-agnostic economy.” In her book, she emphasizes the need for an economy that promotes human well-being, regardless of its growth, stating, “We have an economy that needs to grow, whether or not it makes us thrive. We need an economy that makes us thrive, whether or not it grows” (Raworth 301). Her proposed ‘doughnut’ economic model presents an alternative to the conventional notion of ‘infinite growth,’ primarily focusing on metrics like GDP growth, and instead emphasizes a more comprehensive and contextually aware concept of sustainability.

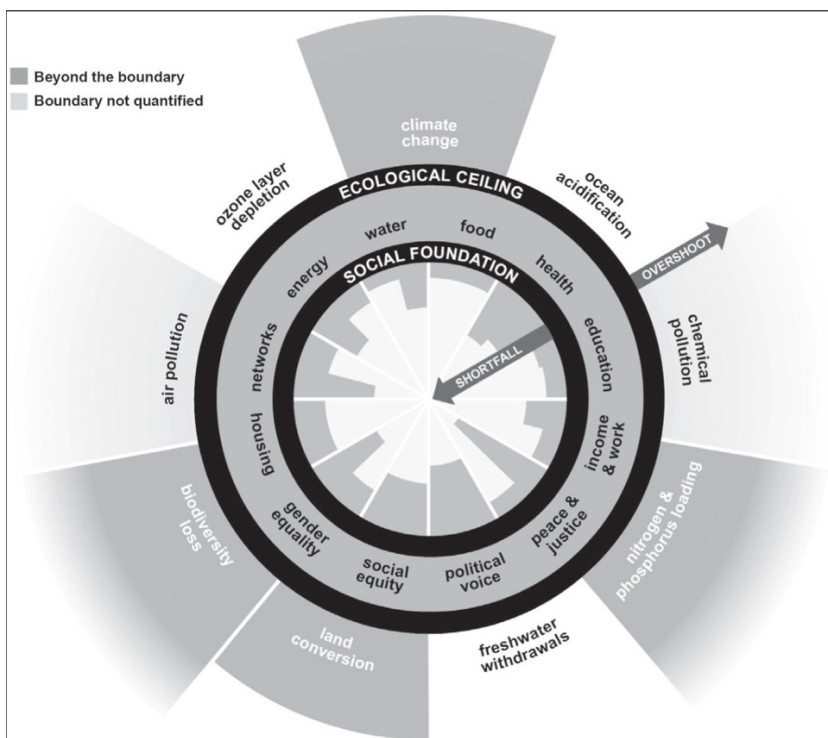


Figure 6. ‘Doughnut economics’ model. Raworth writes: “Transgressing both sides of the Doughnut’s boundaries. The dark wedges below the social foundation show the proportion of people worldwide falling short on life’s basics. The dark wedges radiating beyond the ecological ceiling show the overshoot of planetary boundaries.” (67)

The limits of the attention economy are similarly reflected in this model. The rhetoric and metrics used around economic success, Raworth proposes, has led to the overshooting of planetary boundaries in the name of economic growth. Similarly, Harris suggests a departure from using "engagement" metrics, such as time-on-device (ToD) as a central measurement of economic success in digital economies. Like how the relentless pursuit of infinite GDP growth surpasses the physical limitations of our planetary resources, as depicted in Raworth’s diagram, Harris argues that focusing solely on "engagement metrics" results in exceeding the boundaries of a healthy digital economy (Harris and Raskin 41:35). This overextension leads to the corrosive effects of addiction, polarization, declining attention spans, deteriorating mental health,

and, in this case, insomnia. Raworth's scalable model reminds us that sustainability practices are not only applicable at a global level but also to microeconomies and the independent producers that operate within it.

Sleep With Me, at least according to the account presented by Ackerman on his website, represents a model that has become growth-agnostic via trial and error over the course of its 8 years of existence. *SWM* seems to function 'within the doughnut' of the attention economy – sustaining the creators of innovative new media while not over-extracting the audience (in this case exemplified by the listeners' ability to sleep, and stop listening, to the podcast). In order to sustain this kind of project, growth must be capped in order to sustain income, not over-extract listenership, nor over-exert the host – and the podcast remains popular to this day. Spoken-word podcasts like *Sleep With Me* may have a distinct advantage in the attention economy's power dynamics, potentially enabling both innovative and insidious advertising techniques. However, for such media prophylactics to endure in this economic model, they must ultimately respect the uncompromising nature of sleep's interruption of the media day.

Chapter 6: Conclusion

In this thesis I have investigated how the sound of information is situated in the broader media trend of ‘background noise’, as exemplified by the sleep podcast genre. Treated as a complex assemblage of articulations, I mapped the sleep podcast as a constellation formed by its cultural, technological, and economic influences.

As the origins for this analysis, Mack Hagood’s book *Hush: Media and Sonic Self-Control* was an important revelation for me. *Hush* seemed to capture the essence of how listening to media feels today – functional, ubiquitous, and strangely necessary. I intuitively understood the concept of ‘orphy media’, even though the examples he used to demonstrate the concept, like hearing aids or nature soundscapes on vinyl, didn’t hold much relevance to my daily experience. As orphy media in essence, these technologies are ‘empty’ of content but aim to remediate affect. Meanwhile, I found that his account of how these technologies are used resonated much more broadly in how ‘non-empty’ media formats are engaged with today. As a media format that foregrounds language, sleep podcasts do not fit within Hagood’s category, and yet serve similar functions, introducing the notion that any media can be made into an orphy media if practiced as such.

Thinking back to my first feverish encounter with *Sleep With Me* outlined in the introduction, I know now that the confusion I felt was not, in fact, a fever dream, but rather the unique feeling of an orphy media practice being imposed on me. Ackerman’s unfinished sentences, stammering, and charm draws you in and yet feels impossible not to cognitively place in the background. This kind of disorientation serves as a welcome antidote to the insomnia-inducing compulsions driven by media consumption in the attention economy. Sleep podcasts allow users to maintain the connectedness that the attention economy compels of us, while encouraging the disengagement required for the body to sleep.

Orphy media practices like the one encouraged in *SWM* can be useful tools against the potential harms of abusive economic structures. As a media prophylactic, forms of background noise and background media like sleep podcasts innovate new ways to disrupt practices of attention extraction. On the other hand, they further the consumer expectation put forth by the experience economy that anything – even sleep – can be commodified as a heightened ‘experience’. This tension can be identified in a podcast like *SWM*. While the point of such a podcast is to not pay attention to it, it does require being heard as often as possible to sustain itself financially. Producers of media prophylactics must still operate within the economic framings they help users resist and are incentivized to have their productions heard as widely as possible.

Particularly in sleep media, this gives advertisers and media producers new opportunities for profit. This may come in the form of encouraged habituation, or new innovations in marketing that capitalize explicitly on states of low-attention or hypnagogic rest. Sleep media such as white noise or ambient music have shown great profit potential but are limited in how they can incorporate advertising. Meanwhile, language-based sleep media like the podcast are particularly well situated to experiment with advertising during hypnagogic states.

Such advertising opportunities are bound to increase within the current trajectory of the attention economy. The technologies of the attention economy shape how media consumers layer media into their lives, developing new capacities to multitask. Emerging research shows that media consumers cognitively adapt to new technological arrangements, even if the attentional modalities seem to conflict (reading while watching television, for example). This environment

facilitates increased capacities for turning media into orphic media practices, wherein the ‘content’ of the media can be backgrounded.

The business practices and technological innovations of companies like Spotify actively encourage this kind of environment. By laying out a ubiquitous media infrastructure in which audio media can be engaged with continuously, any activity (even sleep) becomes an opportunity for consumption and monetization. Audio media stratifies the media day into attentional layers, augmenting otherwise banal day-to-day experiences for media users as well as multiplying opportunities of monetization for media producers. The emerging standard for media ubiquity, in tandem with increased capacities for orphic listening, makes the sound of information and sleep compatible.

The media trends and associated listening practices embedded in the sleep podcast are situated in a much longer narrative – past and future – though the individual articulations that make up the assemblage will not last. Spotify and *Sleep With Me*, like the iPod and the Mp3 before them, will soon be out of date. With this being said, there is a great deal of research to be done around sleep media and orphic media practices. This includes the monetization strategies and psychoacoustic techniques deployed by leading apps in the health and wellness industries such as Calm and Headspace. Perhaps more significantly, there is much anthropological research to be done around orphic media trends, focusing on what kind of media people are using to fall asleep, regardless of the original design intent of the media. Sleep podcasts exemplify a listening practice that can be identified across a vast landscape of media formats that are not overtly sleep-related. Rather, any media can become sleep media if reappropriated as such, using the same techniques and technologies that constellate the sleep podcast. This is both the danger and creative potential of an orphic media practice: the evolving ability to turn anything into music.

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