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## **How Internet Music is Frying Your Brain\***

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## How Internet Music is Frying Your Brain<sup>1</sup>

### Abstract

*This article argues that the production and reception of certain recent electronic musics has resonated with criticisms of the perceived degenerative effects of digital technology on culture and 'humanity' -- such as the lack of attention it promotes or the 'information overload' it causes -- in an at least partially positive way. The resulting ambivalent aesthetics, sometimes thought of as one of 'internet music,' embraces particular negative notions of digital mediation in ways that can and have been thought of as satirical, exploratory or 'accelerationist.' I examine three facets of this aesthetics: maximalism, kitsch and the uncanny valley. I also question the legitimacy of dramatising, even positively, digital media and culture as effectively 'degenerate.'*

Reality escaping me

Emotions with velocity

Log me on, sign me out

Give me something to type about

Hype tunes, low tides

Sending emails all night

Me and bae, bae and me

HDMI, USB

So speaks an eerie, deadpan, synthesised voice at the heart of the title track from Guy Akimoto's *BaeBae* EP. Surging nimbly forward at a sprightly 165bpm and twitching with stimulation and excitable syncopation, 'BaeBae' is formidably dense in vertical texture as well as horizontal rhythm. It deftly

weaves together elements from several styles of electronic music, from the stark drum machines of Jersey club to the rich harmonies of Japanese pop and video game music. Its hooks and melodies are orchestrated on thick-timbred synths, ornamented with crushes and pitch-bend, and splattered across a myriad of chopped and accelerated samples of human voices, to the accompaniment of booming kicks, gawky ersatz slap bass and fairytale bell trees that saturate the upper reaches of the frequency spectrum. Akimoto packs dizzying quantities of information and sonic change into less than three minutes in this track, released in 2013 when the producer was 19 years old and named after a slang term that had been flourishing among young internet users, referring to an object of romantic affection. As such, the synthesised voice seems to speak for an aesthetics of the sounds around it (and vice versa), infusing internet use and digital connectivity with an intense libidinal charge. The voice flirts with the listener from within a digitally mediated world and its apparently endless possibilities, flirts with digital mediation itself.

Rather than recoiling at this technologisation of that most intimate of human relationships, 'BaeBae' appears to embrace digitised love, digitised lovers, and even the automated avatars that give them voice, all with particular fervour. In doing so, it would seem to run directly counter to what Simon Frith called 'the continuing core of rock ideology... A plays to B [and bae to me] and the less technology lies between them the closer they are, the more honest their relationship and the fewer the opportunities for manipulation' (Frith 1986, pp. 266-267). And yet 'BaeBae' does much more than simply fall foul of this one particular ideology. Such is the energy with which it celebrates digital mediation that it becomes downright provocative to

that ideology, trolls it. It does so by apparently embodying the very fears many critics have of a digitally mediated world: that it replaces human intimacy with hyperactivity, hyperkitsch and hyperreality, that its sound and fury is directly proportional to its emptiness of humanism.

This article is about a positive or partially positive musical aesthetics that is framed by -- or at least resonates with -- negative responses to an emerging world of digital mediation, such as, put colloquially, that it fries the user's brain. This ambivalent aesthetics is active in certain strands of dance-related electronic music, much of which is primarily released on online platforms like Soundcloud and Bandcamp (as *BaeBae* was) and which is sometimes called 'internet music.' It is also active in a critical discourse surrounding it, much of which is also published online and which bears some exploration here, especially given the feedback loop between reception and production that the internet has tightened. This aesthetics represents a way of making and of listening to music that plays up to particular narratives about the supposedly degenerative effects of culture's mediation through the internet, smartphones and digital simulations. Thus 'internet music' is not just music on the internet, but music heard as being shaped by, symptomatic of, or straightforwardly 'about' the perceived effects of the internet, with the two often conflated. Accurately or not (as I'll get on to), it is considered to be music made by and for digitally fried brains, and it in turn fries the brains of its listeners.

So my aim here isn't simply to support claims that internet music fries your brain, or to accept the often romanticised critiques of digital mediation I will shortly be outlining as providing a backdrop for this ambivalent aesthetics.

As Frith understood, claims about the opposition between art and technology are relative, constructed and paradoxical. But 'BaeBae' and the music and responses to be discussed here amount to a dramatisation of that opposition that indulges, even cheers for the 'wrong' side, whether as if to satirise digital mediation (as in dystopian fiction), or its moral-panicking detractors (as in the shock aesthetics of punk), or simply to explore the changing nature of humanity and authenticity in a developing technological landscape with a mix of anxiety and excitement so ambiguous as to offer a Rorschach test for varying feelings about digital modernity.

One way to understand the complexity of this aesthetics as representing more than a purely detracting irony is as an example of accelerationism. This term has recently been applied to the position, expressed within the context of progressive politics, that accelerating technological capitalism is preferable to withdrawing from it (Mackay & Avanessian eds. 2014). Simply put, it is the antithesis of Luddism. Benjamin Noys (2014) has charted the development of various accelerationisms through Marx and futurism to Deleuze and Guattari, Lyotard, cyberpunk, Kraftwerk and techno. Noys describes accelerationism as seeking to '[turn] the horror of work into the jouissance of machinic immersion... This is the immersive fantasy of work as a site of repetitive libidinal acceleration, where the bourgeois ego is drowned in the icy waters of inhuman labour' (p. 93). Accelerationist art, then, can simultaneously be sincere in its negative attitude to 'inhuman labour' and positive in its embrace of it. With speech and groove alike, 'BaeBae' gives 'the immersive fantasy of work as a site of repetitive libidinal acceleration' its synthetic voice, for whom the thought of 'sending

emails all night' inspires an erotic fantasy rather than the sense of horror it would do for many of us.

The particular narratives of the 'inhuman' effects of digital mediation reflected by this ambivalent, potentially accelerationist musical aesthetics are expressed in an extensive discourse of books and articles to have emerged in the past decade, all largely negatively describing experience, behaviour and ideology under what are taken to be new digital norms (e.g. Jackson 2008, Lanier 2010, Carr 2011, Turkle 2011, Harkaway 2012, Rosen 2012, Morozov 2013, Harris 2014, Taylor 2014). This literature describes various harmful consequences of digital technology for individuals, culture and society, and generally portrays the new digital mediations as resulting in some mismatch, a lack or excess, with respect to earlier forms of social and cultural communication. What is lacked is frequently a suitable climate for 'attention,' or else a 'human' element, both of whose preservation the writers appeal for. The excess is understood using variations on the 'information overload' concept first popularised by Alvin Toffler in his 1970 book *Future Shock*, in which levels of information exceeding our neural capacities 'interfere with our ability to "think"' (Toffler 1970, pp. 311-315). Nicolas Carr, for example, laments in *The Shallows: What the Internet is Doing to our Brains* that 'on the Internet,'

There is only the endless, mesmerizing buzz of the urban street. The stimulations of the Net, like those of the city, can be invigorating and inspiring... But they are, as well, exhausting and distracting. They can easily... overwhelm all quieter modes of thought. One of the greatest dangers we face as we automate the work of our minds, as we cede control over the flow of

our thoughts and memories to a powerful electronic system is... a slow erosion of our humanness and our humanity (Carr 2011, p. 220).

In *Hamlet's Blackberry: A Practical Philosophy for Building a Good Life in the Digital Age*, William Powers (2010) characterises digital living as one of busyness due to excessive 'connectedness' (p. 2), and identifies as its key casualty 'depth,' which 'roots us in the world, gives life substance and wholeness. Great artists, thinkers, and leaders all have an unusual capacity to be "grasped" by some idea or mission, an inner engagement that drives them to pursue a vision undaunted by obstacles' (p. 12). Powers then gives a list of figures who exemplify this image, which unsurprisingly begins with 'Ludwig van Beethoven.' Elsewhere, echoing Frith, Powers observes that 'if we've learned anything in the last decade about technology and human interaction, it's that as screen time rises, direct human-to-human interaction falls off proportionally' (p. 51). As a solution to these digital problems, Powers urges periodic 'disconnectedness,' that is, the strategy of withdrawal from new technology that accelerationism reverses, especially when it comes to music: 'old tools can be an effective way to bring the information overload of new ones under control. Today older technologies continue to ground the busy mind... Vinyl records not only *do* sound better, they're fascinating to handle and ponder' (pp. 216-217). Vinyl music and its recent resurgence, then, would be the foil to 'internet music.'

Indeed, these critiques of digital technology have directly informed music criticism. Critic Simon Reynolds references and sympathises with both Carr and Powers in writing -- at best ambivalently, at worst negatively -- about 'music on the hipster fringes' (2011a, p. 75) and for *Pitchfork* (2011b)

respectively. Paraphrasing Carr, Reynolds asserts that 'the datascape' causes 'attention-deficit disorder': 'Our attention is dispersed, tantalised, teased... Carr's "shallows" refer to the experiential thin-ness of music or literature consumed in this multitasking fashion, the fainter imprint it leaves on our minds and hearts' (2011a, p. 73). There is suspicion of the datascape among musicians, too: Geoffrey Baker (2015) has observed that in Buenos Aires cumbia, 'middle-class alternative musicians and audiences were drawing somewhat away from digital cumbia towards neo-folklore and retro cumbia, showing diminishing fascination with the computer,' he writes (p. 176), identifying this shift with 'post-digitalism.' Though 'technologically savvy,' post-digitalism is 'nevertheless... [underpinned by] anxieties... about dehumanisation, inundation, excessive accumulation, disposability and risks to artistic creativity' (p. 182). In fact, these anxieties are expressed through an apparent embrace of digital excess. Baker observes the 'ambivalent' perspectives of middle-class cumbia artists as encapsulated by the title of an album by DJ Villa Diamante: *Empacho Digital*: '*Empacho* means excess, overdose or indigestion. Villa Diamante saw new technology as overloading and consuming people, and his three-CD set of mash-ups was designed to provoke an experience of digital indigestion in the listener' (p. 180).

Whether the information mediated by digital technology amounts to 'excess,' 'overload,' 'indigestion' or brain-frying, or, conversely, a lack of humanity, is of course relative to the experience and expectations of the user in question. Digital technologies are hardly the first to be received as crossing a threshold of 'dehumanisation' and are unlikely to be the last. Whether one gets indigestion or not depends on the size of the stomach, which in turn

depends on long-term diet. Anyone used to handling information digitally, or not more used to an earlier media especially, is probably less likely to experience such an overload. If there is a critical description to be made about digital mediation, it is more likely to lie in, for example, Georgina Born's 'Music, Digitisation, Mediation' research project, with which Baker's 2015 study is involved, than in the extreme language and high romanticism of Carr and Powers. Nevertheless, these narratives of digital degeneration persist among musicians and music critics, even if ambivalent, accelerated, or if only to poke sarcastic fun at those who take them seriously.

This aesthetics of digital degeneration can be described as having three facets, each of them resonating in a particular way with ideas about excesses or lacks resulting from digital mediation (relative to earlier media). Frequently, as in 'BaeBae,' they will all manifest simultaneously and indivisibly. They are maximalism, or excess of complexity and referentiality, kitsch, or an impoverishment of culture caused by populism, decreased attention spans or commercialism, and uncanny representations of humanity.

### **'Texture-saturated overload': Digital Maximalism**

The term 'digital maximalism' was put forward by Reynolds in a 2011 *Pitchfork* article entitled 'Maximal Nation' as both an aesthetic consequence and a reproduction of digital experience. Writing on Rustie's album *Glass Swords*, he notes that 'there's a hell of a lot of inputs here, in terms of influences and sources, and a hell of a lot of outputs, in terms of density, scale, structural convolution, and sheer majesty. Shove "digital" in front of "maximalism" and you've got a phrase that captures what has emerged as the

dominant current in electronic music over the last year or two' (2011b). Reynolds finds that the term was also used by Powers in *Hamlet's Blackberry*, where it names the (somewhat straw) pro-digital philosophy that '(1) connecting via screens is good and (2) the more you connect, the better... the goal is maximum screen time' (Powers 2010, p. 4). As in accelerationism, Reynolds sees digital maximalism as the opposite strategy to Powers's suggestion of periodic disconnection: 'The alternative to such realms of seclusion and info-sensory deprivation is to plunge deeper into digitalism, learn to surf... the data-tsunami.' Looking back from 2015, critic Meaghan Garvey now treats 'digital maximalism' as designating a particular style, and suggests that it 'reflected the limitless sources material and everything-at-onceness of the internet' (Garvey 2015).

Digital maximalism lives up to its name in both sonic form and referential content: Reynolds observes that it 'doesn't just affect the vividness and hyperactivity of the music, it also expands the range of sources it draws on... you can find properties of post-everything omnivorousness, structural convolution, and texture-saturated overload.' Exemplifying digital maximalism's ambivalent aesthetics, he writes that 'Digital technology makes the artistic self at once hollow (buffeted by torrential, every-which-way flows of influence) and omnipotent (capable of moulding sound and melding styles at will). Having access to so many resources and being able to manipulate them so extensively lends itself to a certain grandiosity.' Reynolds also points to critic and Keysound label co-manager Martin Clark, who had made similar observations of Rustie and dubstep producer Joker in 2008, explicitly drawing a connection between the music and digital experience: '[Rustie] overload[s]

the mid-range with bleeps and riffs heading in disparate directions, like a metaphor for living in intense digital excess... Wonky melodies cram [Joker's] mid-range, like a sensory overload of engaging with instant messaging, gaming, texting, the internet and TV simultaneously' (Clark 2008).

'Overload,' along with synonyms such as 'saturated' and 'bombarded,' is the key descriptor in the reception of digitally maximalist music. But it is not always regarded positively -- Reynolds's *Retromania* (2011b) was published at around the same time as 'Maximal Nation' and was less enthusiastic: 'Musicians glutted with influences and inputs almost inevitably make clotted music: rich and potent on some levels, but ultimately fatiguing and bewildering for most listeners' (p. 75). He calls *Butter*, an album by Hudson Mohawke, 'prog rock updated for the Pro Tools era, a CGI-like nightmare of garish and overworked sound' (p. 76) and Flying Lotus's album *Cosmogramma* 'hip-hop jazz for the ADD generation' (p. 76), quoting critic Colin McKean on the latter - - 'a sprawling, post-Web 2.0 cacophony... like hurtling through the digital darkness of Spotify with everything blaring at once' (McKean 2010) -- and describing the music as 'made by and for nervous systems moulded by online culture... drifting, distracted, assembling itself according to an additive logic of audio greed.' Referring to *The Shallows*, he asserts that '*Cosmogramma* reflects the dispersed, fractured sensibility of digital modernity' and surmises that 'truly experiencing music in any kind of intimate depth means reconciling oneself to the reality of finitude' (pp. 76-78).

Whether read positively or negatively, the accounts given by Reynolds, Clark, McKean and others make a relative degree of sense. *Glass Swords* can certainly be regarded as information rich, with its thick, wide textures:

melodies spanning extremes of high and low frequencies and regularly layered at octaves. Their timbres, from software synths, are complex both in terms of overtone structure and envelope, and dozens of different ones are encountered not just across the album as a whole but in each individual track, giving an impression of multicolour. Rapid runs of notes and hits are found throughout, rhythms are regularly syncopated bar-long and beyond, and the drops are bombastic. *Butter* is by Hudson Mohawke, then part of the same Glaswegian electronic dance scene as Rustie. Though released earlier, it's even weirder, restlessly leaping from one texture to the next, its reference points even more finely diced in the digital blender, its exuberance evacuating any coolness in the name of surreal goofiness. Its title speaks to post-digitalism's gastronomic fears of fattening, clotting and indigestion and its cover uses loud typefaces and epic imagery such as one might find in a kitschy gift shop in the Rockies -- eagles flying majestically against the full moon as giant reptiles look on -- yet all rendered in riot of bright pastel colours and photoshopped enhancements.

Flying Lotus's *Cosmogramma* comes from a different stylistic context to *Glass Swords* and *Butter* (that subcategory of hip hop known as 'beats') and its timbres are very different too, actually carrying strongly analogue connotations through its sampling of vinyl crackle and acoustic instruments from jazz recordings. Yet it too presents a complex, information-rich listening environment, not just because many different kinds of samples are used throughout, but because they lie up-tempo, they shift rapidly and unexpectedly, and their rhythmic synchrony is loose, both within and between

samples. As if in sympathy with this maximalism, *Cosmogramma's* title refers to enormity, even totality.

But do these albums really cross a threshold of excess and pass into an information 'overload'? No more than any number of pre-digital musics that were seen and appreciated as thrillingly rich and decadent. Moreover, as if in answer to this, a subsequent generation of artists, among them Guy Akimoto, took the style even further. Where *Glass Swords*, *Butter* and *Cosmogramma* were 'internet music' only inasmuch as they were heard to be affected by internet use -- they had what are now called 'physical' releases on conventional labels -- labels and collectives that were formed since those albums, such as PC Music, Activia Benz, JACK and Manicure Records have been primarily based online, releasing mp3s and streaming audio, and have increased the speed and complexity still further, as if to imply that the 'overload' hasn't yet been reached.

### **'Glossy, giddy, sparkly and shallow': Kitsch**

Another album cited as an example of digital maximalism in Reynolds's 'Maximal Nation' was James Ferraro's *Far Side Virtual*. This album, whose digital credentials were flaunted on a cover featuring an iPad and a screen-grab of the Street View of Google Maps, became *Wire* magazine's album of the year in 2011, a move that surprised the magazine's staff and readers so much that a blogpost was published by the editor-in-chief to explain the voting process that led to the decision. He wrote of the album's 'deadpan appropriation of late capitalist-era corporate mood Muzak... the kind of background noise your Second Life avatar might screen out as it moves

through a simulacrum of the 21st century mediascape' (Herrington 2011). *Far Side Virtual* indulges tacky, disposable and digitally simulated muzakal idioms to the point of curiously energetic pastiche, and the results are both sublimely ridiculous and ridiculously sublime.

Critiques of the effects of late capitalism's technologies, corporatism and commercialism on music often describe what they see as its aesthetically impoverished products, whether variously 'commodity music,' 'mainstream music,' 'pop music' or 'kitsch.' The latter term, connoting gaudy yet superficial sentiment, is most appropriate here, and digital technology has been seen to promote kitsch or reduce otherwise valuable culture to kitsch in specific ways. It is argued to favour populist cultural proliferation at the expense of expertise (Morozov 2013, pp. 178-180), with Evgeny Morozov claiming that if Adorno and Horkheimer were writing *The Dialectic of Enlightenment* today, they would have replaced 'the "culture industry" with the "meme industry"' (p. 157). It also promotes kitsch due to the information-overloaded user's decreased ability to cope with time-consuming, 'human' and 'deep' art, hence Carr's 'shallows' -- Carr quotes Tyler Cowen's assertion that 'when access to information is easy, we tend to favour the short, the sweet and the bitty' (Carr 2011, p. 94). Astra Taylor's concern for the impoverishment of culture by digital technology rests on her critique of its economic model and commercial mediation: 'networked technologies... make commercialism less visible and more pervasive... The pressure to be quick, to appeal to the broadest possible public, to be sensational, to seek easy celebrity, to be attractive to corporate sponsors - these forces multiply online... Originality and depth eat away at profits online' (Taylor 2011, p. 7). As she puts it in her book's conclusion, and

echoing Frith's description of technological mediation, 'instead of eliminating middlemen and enabling peer-to-peer relationships, it has empowered an influential and practically omnipresent crop of mediators... instead of decommodifying art and culture, every communication has become an advertising opportunity' (pp 231, 232).

Whether positively or negatively, *Far Side Virtual* would seem to enthusiastically agree with all of the above conceptions of digital culture, indeed, it makes them its conceptual focus, bringing this normally 'screened out' music into the arena of attentive listening. Many other musicians exploring kitsch are explicit about their digital connectedness: take the name of PC Music, founded in 2013 and run entirely through Soundcloud and dedicated websites before a compilation was released more conventionally in 2015, its cover depicting a mass of wires plugged into PC sockets. It was reviewed negatively by Britt Brown in *Wire* magazine, who gave a quintessential account of its kitsch characteristics: 'glossy, giddy, sparkly and shallow. The tracks gleam with the shiny, high definition futurism of maximalist K-pop and shopping mall rave muzak... Despite the intricate production design, emotionally the songs feel intentionally trite and devoid of personality, like music made by avatars in a video game' (Brown 2015). These, however, are precisely the qualities that make PC Music appealing to other critics, like Aimee Cliff, who rated QT's 'Hey QT' ten out of ten: 'It's all the super slick dance-pop tropes and anthemic choruses... accelerated by the digital age' (Cliff et al 2014).

PC Music acts play up to perceptions of pop's kitsch gaudiness, campness and themes of romantic love, and do so within a digital frame.

Hannah Diamond, one of the collective's most pop-oriented acts, sings that 'I've saved you as a picture on my phone' in 'Attachment,' and confesses in the chorus of 'Hi':

I don't wanna be alone in my bedroom

Writing messages

On the internet

Waiting to say

Hi

In the video for the song, Diamond appears in computer-screen windows, blowing kisses amongst clouds of pop-up messages. The video for 'Hey QT' goes further, depicting the eponymous pop star in a futuristic glass box whose walls are touchscreen interfaces through which she presumably connects with the 'boy' her lyrics flirt with, even as it isolates her from her surroundings and makes her appear trapped and on display -- an image that echoes Michael Harris's (2014) and Sherry Turkle's (2011) particular critiques of digital life (especially with the latter bearing the title *Alone Together*). QT's name is emblematic of the cute aesthetics of PC Music, with child-like and accelerated sentiments embodied sonically in pitched-up, almost helium-breathing voices.

Both Ferraro's *Far Side Virtual* and PC Music were referred to as 'muzak,' which is also the focus of vaporwave, a genre developed and disseminated online since the early 2010s. Lying somewhere between production and DJing, vaporwave samples late-twentieth-century pop and muzak, typically with a smooth, adult-contemporary flavour, and loops them extensively, often pitching and slowing them down to enhance an effect of

tranquillised sluggishness. A major aesthetic dimension to vaporwave is its associated artwork and the surrounding text (frequently all in unsubtle capitals), which bring vaporwave's imagined contexts to life through references to the worlds of shopping, business and late twentieth-century digital technology, recalling the early days of personal computers and internet connectivity. This techno-corporate exoticism is regularly taken further into hi-tech orientalism with the use of East Asian characters and images. Artist names include INTERNET CLUB, Luxury Elite, SunCoast Web Series, VECTOR GRAPHICS, PrismCorp Virtual Enterprises, 회사AUTO and 情報デスクVIRTUAL; album titles include *MODERN BUSINESS COLLECTION*, *WEBINAR*, *REDEFINING THE WORKPLACE*, *FOCUS LIFE* 永遠に愛して, *ストリート知性* dream.boxx, *Welcome to Crystal Valley Mall*, *Computer Death*, track titles include 'TIPS AND TRICKS FOR THE NEW WEB MARKETER,' 'NEW MILLENNIUM CONCEPTS,' 'Clear Skies Through The Mall Skylight' and 'オンライン UPLOAD;' and label names include Fortune 500, Dream Catalogue, Virtual Disk Systems and Business Casual. As a result of this paratext, each vaporwave release, normally little more than a zip file or a free download from Bandcamp or Soundcloud, is presented as if it were an upbeat and almost propagandistic aid to technocapitalist living. Part of vaporwave's appeal, however, lies in the way it apparently fails to achieve this goal, not only because of its archaism, but also because its misdirected mood is awkward to the point of eeriness.

**'Deviances from the human norm': the uncanny inhuman**

The concept of 'the uncanny valley' was invoked by a musician working under the name New Dreams Ltd., who described it as the effect she was trying to achieve (Harper 2012). Derived from a Japanese paper on the aesthetics of robotics (Mori [1970] 2012), and referring to the shape it makes on a graph, the uncanny valley posits that the more anthropomorphic an artificial entity or character appears, the more positive the reaction to it from humans will be, until a point at which the resemblance eerie in its subtle disjunction from human norms, eliciting negative reactions. In her book relating the concept to computer games and animation, Angel Tinwell writes that 'any deviances from the human norm in sound and motion will alert the viewer to a sense of strangeness in that character.' (Tinwell 2015, p. 29). Tinwell attributes this to a lack of empathy perceived in such entities, because 'being human is characterized by the ability to understand the cognitive and emotive processes of others and show tenderness, compassion and sympathy toward them' (p. 100), leaving these entities with a lack of 'warmth' and 'emotional contagion' (p. 129) and even the viewer with an impression that the entity is 'attempting to deceive' them (p. 161).

Tinwell is describing rather than critiquing the problems of digital mediation, but her account easily relates to anxieties about the detrimental effects of contemporary digital mediation on authentic human artistic expression, not least in using the word routinely used to convey the superiority of analogue music technologies: 'warmth.' The uncanny valley could apply to an avatar that imperfectly represents or hides its human controller, or even an artificial intelligence posing as a human, such as an algorithm or a spam bot. This in turn can lie in metaphorical parallel with the

perceived degeneration of culture by commerce and pop, a conflation often made by the musicians and their critics: PC Music makes 'totally fukt pop music that some, like us, have associated with the uncanny valley' (Joyce 2015). Writing on *Far Side Virtual*, Reynolds found that 'Ferraro's heightened deployment of this ersatz [timbral] palette -- so close to "the real thing," yet falling fatally short -- creates a creepy feeling of unlife that is similar to animatronics' (Reynolds 2011b).

Describing an experiment conducted to test the uncanny valley, Tinwell notes that the voice can be an important site for its effects: 'speech that was judged to be of the wrong pitch and intonation and monotone speech, without intonation and expressivity, were also factors that increased the uncanny for a character' (Tinwell 2015, p. 55). Whether it involves voices or not, the pitching-up of PC Music and the pitching-down of vaporwave has this effect. Speech synthesisers like those used in 'BaeBae' are often used too -- one addresses the listener in *Far Side Virtual's* 'Global Lunch,' as if to aid in their digitally mediated consumption of culture: 'Sir, would you like to receive *The New Yorker* directly on your iPad?'

One of the artists most commonly associated with the uncanny valley is Oneohtrix Point Never, not just because like Ferraro, many of his synthesiser timbres imperfectly imitate acoustic instruments (Soapboxcritic 2013), but because he frequently employs cut-up samples of human voices, often programming them to synthesiser keys (a technique also used by associated electronic artists such as Fatima Al Qadiri, Holly Herndon, Visionist and Karalis Coverdale). As one critic put it, perfectly expressing an ambivalent aesthetics: 'the sampled choir, a defining instrument of the album, is the most

accessible entry point to this album but eventually becomes the most alienating. I have not heard something so deeply nestled in the uncanny valley in a long while, nor as purely fun' (Devlin 2013). The uncanny effect of the digital manipulation of this most 'human' of timbres is particularly evident in tracks like the aptly named 'Still Life' on 2013's *R Plus Seven*, where voices are heard in a wide array of rhythmic and timbral configurations that could not have emanated from an unaided human performer. The effect of repitching the human voice is that its subtle formant structures do not adjust accordingly or naturalistically, resulting in vowel sounds that suggest unusually shaped throats and bodies. This effect is particularly emphasised in the monophonic sequences of 'Still Life' such as at around 1:29, where several such voices are repitched in succession and the synthesiser's soundbank jarringly switches to new samples above or below certain keys. This small-scale uncanniness is complimented by a large-scale uncanniness of formal logic in the track as a whole, which feels unpredictable yet ominously purposeful, carefully repeating and switching between textures that do not relate in the conventional tonal or structural ways as if composed by a non-human intelligence.

As Tinwell notes, diagnoses of uncanniness, like digital indigestion, are relative to the experience of the perceiver. What's more, she finds it purposefully deployed to thrill an audience in zombie video games, and a similar thrill can be found in Oneohtrix Point Never's music. The problem with such an aestheticisation of uncanniness is that it can understand and objectify such representations as primitive, degenerate, and a regression from humanity where they might be better thought of as manifestations of human difference. Jon Rafman's video for 'Still Life' seemed to do the former, using

(without permission) an array of digital imagery found on sexual fetishist websites to instil, in combination with the unnerving sounds, a sense of horror about digital cultures that disguised an exoticising freak show as unflinching social documentary.

### **Conclusion: an 'amplified version of me'**

Dick Hebdige wrote that 1970s punks 'were *dramatising* what had come to be called "Britain's decline"... it was fitting that the punks should present themselves as "degenerates"' (Hebdige 2003, p. 87). The music discussed here can and has been seen in a similar way, translated to the context of the growth of digital mediation in the early twentieth-century. Indeed, it can and has been seen as 'accelerating' it. But is it fair to identify this music, even positively, as 'degenerate?' Is internet music really frying your brain? Or if not, is it fair to dramatise it as doing so?

Playing up to narratives of digital degeneracy, as a critic, a musician or a listener, even positively and knowingly, assumes a reduction from and failure to reproduce established, often retroactively constructed norms of form and content (maximalism), taste (kitsch) and human communion (the uncanny valley) on the part of others. Last year I was part of a public panel discussion on voices in digital contexts featuring Hannah Diamond. As I explained, grimacing, to the audience, that I found her chopped-up vocal in the song 'Keri Baby' to be fun and fascinating but also uncanny and creepy, Diamond chimed in with a sarcastic 'thanks.' In certain passages of the song, the words are recorded separately and then strung together into a new, unconventional flow. Hearing this as appealingly or didactically fearful is ultimately still to

assume it to be an expression of negativity and falsehood. As Diamond herself says of her music, 'even if it is a slightly amplified version of me and the things I'm interesting in, it's not falsified' (in Cragg 2016). Whether maximalist, kitsch or uncanny, these techniques could just as well be described as engaging constructively with changing forms of human expression, in the process expanding conceptions of human identity rather than undermining what are essentially reactionary notions of it.

Finally, of course, there is no such thing as an 'internet music' with a particular set of characteristics, however they're aestheticised. To imply such would be about as absurd as claiming that sheet music has a certain personality or that CD music has a certain twang. This is not to say that medium can never be heard as shaping message in locatable ways -- this article has attempted to show that this has happened and has created meanings for digital musicking. But in this case it has happened in a narrow fashion. Messages shape perceptions of medium in turn, and even a superficial browsing of Bandcamp or Soundcloud -- fitting, since Carr and Reynolds would claim that all internet browsing is superficial -- reveals that 'internet music' is broad and diverse in its aesthetics, and that it is far from clear that digital technology represents a decline in musical culture or humanity. On the contrary, that might not be your brain being fried, but the quickening and diversification of humanity's collective nervous system.

## **Notes**

<sup>1</sup> This is not just a title, it's a headline, particularly one leading an online article: reductive, sensationalist, clickbait. In both its net-optimised style and the position it takes on 'internet music,' it's intended to evoke much of the online music-critical discourse this article draws on

and in which this author has been embroiled - magazines such as The FADER, Dummy, Noisey, Thump and Dazed Digital - including its (and the author's) ambivalent, even hypocritical stance.

## **Bibliography**

Baker, G. 2015. "Digital Indigestion": cumbia, class and a post-digital ethos in Buenos Aires,' *Popular Music*, 34/2, pp. 175-196.

Carr, N. 2011. *The Shallows: What the Internet is Doing to our Brains* (London, Atlantic)

Cliff, A et al. 2014. "'The dancefloor version of a BuzzFeed list': QT, Skream and Marquis Hawkes reviewed in the FACT Singles Club,' *Fact*, <http://www.factmag.com/2014/09/01/the-dancefloor-version-of-a-buzzfeed-list-qt-skream-and-marquis-hawkes-reviewed-in-the-fact-singles-club/2/> (accessed December 14, 2015)

Clark, M. 2008. Grime / Dubstep column, April 30, *Pitchfork* <http://pitchfork.com/features/grime-dubstep/6840-grime-dubstep/> (accessed December 14, 2015)

Cragg, M. 2016. 'Hannah Diamond is Real,' *The FADER*, <http://www.thefader.com/2016/02/29/hannah-diamond-interview> (accessed May 1, 2016)

Devlin, A. 2013. Review of *R Plus Seven*, by Oneohtrix Point Never, *Brainwashed*, [http://brainwashed.com/index.php?option=com\\_content&view=article&id=9825](http://brainwashed.com/index.php?option=com_content&view=article&id=9825) (accessed December 14, 2015)

Frith, S. 1986. 'Art Versus Technology: The Strange Case of Popular Music,' *Media, Culture and Society* 8/3, pp. 263-279.

- Garvey, M. 2015. 'PC Music, Hipster Runoff and the Year of the Internet Hangover,' *Pitchfork*, <http://pitchfork.com/thepitch/773-pc-music-hipster-runoff-and-the-year-of-the-internet-hangover/> (accessed December 14, 2015)
- Hebdige, D. (1979) 2003. *Subculture: The Meaning of Style* (London, Routledge)
- Herrington, T. 2011. 'Suffering Through Suffrage: Compiling The Wire's Rewind Charts.' *The Wire* blog, [http://www.thewire.co.uk/in-writing/thewire/20831/suffering-through-suffrage\\_compiling-the-wire\\_s-rewind-charts](http://www.thewire.co.uk/in-writing/thewire/20831/suffering-through-suffrage_compiling-the-wire_s-rewind-charts) (accessed April 30, 2016).
- Harris, M. 2014. *The End of Absence: Reclaiming What We've Lost in a World of Constant Connection* (New York, Current)
- Harkaway, N. 2012. *The Blind Giant: Being Human in a Digital World*. London: John Murray
- Harper, A. 2012. 'Comment: Vaporwave and the pop art of the virtual plaza,' *Dummy*, <http://www.dummymag.com/features/adam-harper-vaporwave> (accessed December 14, 2015)
- Jackson, M. 2008. *Distracted: The Erosion of Attention and the Coming Dark Age* (New York, Prometheus)
- Mackay, R. and Avanesian, A. (eds.). 2014. *#Accelerate: The Accelerationist Reader* (Falmouth, Urbanomic)
- McKean, C. 2010. Review of *Cosmogramma*, by Flying Lotus. *The Quietus*, <http://thequietus.com/articles/04312-flying-lotus-cosmogramma-album-review> (accessed December 14, 2015)

- Mori, M. (1970) 2012. 'The uncanny valley' (trans. K. F. MacDorman and N. Kageki), *IEEE Robotics and Automation*, 19/2, pp. 98-100
- Morozov, E. 2013. *To Save Everything, Click Here: Technology, Solutionism and the Urge to Fix Problems That Don't Exist* (London, Allen Lane)
- Noys, B. 2014. *Malign Velocities: Accelerationism and Capitalism* (Winchester, Zero)
- Reynolds, S. 2011a. *Retromania: Pop Culture's Addiction to its Own Past* (London, Faber and Faber)
- Reynolds, S. 2011b. 'Maximal Nation,' *Pitchfork*,  
<http://pitchfork.com/features/articles/8721-maximal-nation/> (accessed December 14, 2015)
- Rosen, L. 2012. *iDisorder: Understanding Our Obsession With Technology and Overcoming Its Hold on Us* (New York, Palgrave MacMillan)
- Soapboxcritic. 2013. 'Wanderings in the Deep Web: The World of Oneohtrix Point Never's R Plus 7,' *Staggering Wallpaper* blog,  
<https://staggeringwallpaper.wordpress.com/2013/12/07/wanderings-in-the-deep-web-the-world-of-oneohtrix-point-nevers-r-plus-7/> (accessed December 14, 2015)
- Taylor, A. 2014. *The People's Platform: Taking Back Power and Culture in the Digital Age* (London, Fourth Estate)
- Tinwell, A. 2015. *The Uncanny Valley in Games and Animation* (Boca Raton, CRC Press)
- Toffler, A. 1970. *Future Shock*. London: The Bodley Head
- Turkle, S. 2011. *Alone Together: Why We Expect More From Technology and Less From Each Other* (New York: Basic)