

Records Reformed and Reused. Nostalgic and Ecological Concerns in Contemporary Media Art

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Abstract

In the twentieth century, records and record players were employed as the media and medium of art and music. These generative practices sought to extend the possibilities for sound production, at times ending in the destruction of both vinyl and turntable—what I call *cracked media*. This paper will revisit cracked media in the twenty-first century, inquiring into how this (re)interest in vinyl has translated into art and music. I will look to contemporary musicians and artists to contrast practices that encapsulate nostalgia with those that seek to communicate ecological and environmental concerns.

Keywords: cracked media; eco-sonic media; shellac; sound installation; vinyl.

Résumé

Au xx^e siècle, on utilisait les disques et les tourne-disques comme média et médium de l'art et de la musique. Avec ces pratiques génératives, on cherchait à étendre les possibilités de production sonore, aboutissant parfois à la destruction du vinyle et de la platine – ce que je nomme *cracked media* (des médias craquelés). Cet article reviendra sur les *cracked media* au xxi^e siècle, en s'interrogeant sur la manière dont cet intérêt (ravivé) pour le vinyle s'est traduit dans l'art et dans la musique. Je me tournerai vers des musiciens et des artistes contemporains pour opposer les pratiques qui résumant la nostalgie à celles qui cherchent à communiquer des préoccupations écologiques et environnementales.

Mots clés : *cracked media* ; gomme-laque ; installation sonore ; média écolo-sonore ; vinyle.

INTRODUCTION

In the twentieth century, records and record players were employed as the media and medium of art and music. These generative practices sought to extend the possibilities for sound production, at times ending in the destruction of both vinyl and turntable—what I call *cracked media*. Artists allowed records to be scratched and scuffed (Christian Marclay's *Record Without a Cover*, 1985), sliced and reformed discs into new compositions (Milan Knížák's *Broken Music*, 1963–), and destroyed the turntables themselves to create new instruments (Otomo Yoshihide). Much of this work occurred because the media was accessible, cheap, and commonplace. In the 1990s, however, vinyl records were superseded by compact discs, and by the 2000s digital file formats such as MP3 had become the most common form of music distribution.

Perhaps surprisingly, there has been a resurgence of vinyl and its use within music communities as a nostalgic format. This paper will revisit cracked media in the twenty-first century, inquiring into how this (re)interest in vinyl has translated into art and music. Drawing on musicologist Kyle Devine's recent research on the political ecology of music and the ecologically destructive nature of the materials of vinyl records, I will look to contemporary musicians such as Maria Chavez (USA) and Graham Dunning (UK), alongside media artists Katie Patterson (UK) and Vicky Browne (NZ), to contrast practices that encapsulate nostalgia with those that seek to communicate ecological and environmental concerns.

CRACKED, BROKEN, AND NEW

In 2000, I started working on a doctorate supervised by Douglas Kahn. This PhD project would some years later become my first monograph, *Cracked Media. The Sound of Malfunction* (2009). Critical to that publication was the idea that artists working with sonic media had approached recording and playback devices as generative tools, rather than merely as technologies for reproducing already fully formed music. In addition, many of these artists and musicians approached these media destructively. Artists initially took records and record players and forced them to malfunction before cracking, breaking, and ultimately destroying the media. At the time, I compared this to the contemporary use of newer media, specifically the practice of using pre-existing art forms to create new ones, such as remixing and various forms of cut-and-paste aesthetics. A fundamental critical understanding of this approach to creative practice is that at the centre of any destruction of media is the monetary and personal value of the media. Put simply, less valuable media is more easily destroyed.

Czech performance and destruction artist Milan Knížák brutally mistreated his records. In the 1960s, he produced a series of works entitled *Broken Music*, for which he sliced up records and joined them back together in a pre-digital cut-up. His records were played by dragging the needle over the damaged discs, hitting the joins, and playing music from discrepant recordings. Critical to this practice is the value Knížák placed on the records themselves. The artist started experimenting with his records, mainly, it seems, because of financial difficulties. Knížák describes the context for

these experiments in 1963: “I bought a record player, but there was no money left to buy the records. I had just a few of them” (Knížák 2001b, email). Knížák took the few records he had and essentially played them to death, creating new music in the process:

I began sticking tapes over records, painting over them, burning them, cutting them up and gluing parts of different records back together, etc., to achieve the widest possible variety of sounds. A glued joint created a rhythmic element separating contrasting melodic phrases. (Knížák 2001a, email)

The sound of the breaks forms a regular percussive element in the composition. These creaks and bangs are heard at regular intervals and change in duration and timbre as the record is spun faster or slower. Between the ‘beats,’ the sounds originally on the records play for only a few moments: piano music, violin, and percussion. The overall sound is an ever-changing arrangement of music played as the needle scratches, bumps, and bounces toward the centre of the disc (Kelly 2009, pp. 140–148).

Two decades later, in the 1980s and 1990s, Swiss-American artist Christian Marclay wreaked havoc on vinyl records, abusing them and subsequently redefining them as art objects. He scratched, sanded, cut, drilled, snapped, melted, smashed, threw, and walked on these fragile and once-fetishized objects. Marclay began using the turntable as an instrument in 1979, only a few years before it began its descent into obsolescence. Employing the mass-produced cheap vinyl records of the time, Marclay’s critique of mass media and the consumption of music through media technologies (turntables) and objects (records) extended upon Knížák’s work by broadening the critique beyond experimentalism into popular culture. Using these mass-produced media objects, Marclay sought to rethink their role in popular culture. For example, he sold his work *Record Without a Cover* (1985) without a sleeve, and the buyer was instructed not to place it in one. As the record was played, placed in a stack of other records, or generally handled, it collected dust, scratches, and scrapes, all of which became the content of the work itself. As a result, each individual example of this album is different as every owner will treat it differently, allowing for a unique array of marks to be created on its surface.

Marclay’s *Footsteps* (1989) further explored the tension between the insistence on smoothness and cleanness in consumer cultures and the material realities of vinyl records. For this piece, he covered the floor of the Shedhalle gallery in Zurich with 3500 records and allowed the audience to walk over them, leaving dirty footprints on the surfaces of the records. These records were subsequently sold; the marks and scuffs created by gallery visitors walking over the discs became part of the record’s audio. The buyer of the *Footsteps* release thus holds a material object that has been severely damaged, the record’s surface having been scratched and scraped by the gallery audience. The record itself was produced from the sounds of footsteps and tap dancing. Thus, when played, the pops and ticks sound out over the original recording, making the listener fully aware of the medium on which the recording has been made.

A critical difference between Knížák and Marclay’s practices can be found in the value placed on the records involved. Knížák initially worked with his personal

collection, a set of objects of value to the artist. Alternatively, Marclay worked with cheap and mass-produced vinyl, objects he saw discarded in the street upon moving to the USA. The meaning of the resulting works is then different across the two approaches. For Knížák, cutting and reforming his records broke them permanently. He did not own many of these objects and did not have the funds to replace them. Marclay's work was produced during a time when vinyl was common, filling record stores with over-runs of cheaply produced objects. His work becomes a critique of consumption and the value we place on consumable and discardable objects. In addition, Marclay was working at the cusp of vinyl media being superseded by digital media, namely the compact disc format. Under this condition, Marclay's works from this time now elicit a strong sense of nostalgia, something that would not have been present at the time of their making. The 'eighties' imagery and sounds, when heard from a present-day standpoint, are bound to an era where music was on the verge of a radical change in how it was consumed.

The compact disc (CD) was initially released onto global markets in late 1982. While the needle of the phonograph reads physical traces cut into the grooves in a record, transforming those vibrations into electrical signals, CD media reads the binary inscription indented microscopically into the CD itself, translating this data into sound waves. While the cracked media of the record and record player produce sonic outcomes by the physical movement of the needle across the records and the transduction of analogue signals, artists who explored the CD employed methods by which they forced CDs to glitch due to the loss of data. Japanese composer Yasunao Tone and German electronic music group Oval covered the base of compact discs with tape and marker pen. The subsequent data loss produced their signature sounds of skipping and stuttering digital audio.

The shift from analogue to digital sonic media prefigured the expansion of the internet into the domestic environment along with the development of the MP3 technology, which quickly became the format of choice in the early 2000s. While CD media remained physical and relied heavily on plastic, it seemed that MP3s were leading the way toward immaterial media. The MP3 codec (1992) allowed music to be digitally stored as relatively small files that could be easily shared over the internet. This removed the need for physical media and for record and CD cases.

A critical development for the MP3 format was the launch of Apple's iTunes Music Store in 2001 and subsequently streaming music platforms such as Spotify in 2006. These stores forgo the sale of physical recorded media: rather than sell records, they sell music files in the case of iTunes and access to streamed music files in the case of Spotify. Both these approaches share a reliance on seemingly intangible digital music files. The hardware required to play the music files, such as computers and smartphones, are certainly not immaterial, but the difference is in the individual record object. A media player can store tens of thousands of songs, and in the case of smartphones, the device can be placed into the user's pocket. With Spotify, music is no longer stored on the user's device but instead in the cloud, from which users stream music. The person streaming does not own the music they listen to, seemingly completing the concept of the immateriality of digital music.

The MP3 bypassed the need for the physical objects of sonic media. However, as sound studies scholar Jonathan Sterne attests, “Digital data have a materiality even though they are not available to unaided senses. A digital song takes up space on the platter of a hard drive or in the channel of a DSL connection” (Sterne 2012, p. 194). While it might seem that data transferred over a network is not materially based, the ecology of the internet is entirely reliant on physical materials.

Kyle Devine also turns his attention to music streaming and the extension of music’s materials raised by Sterne. Devine emphatically states, “The material dimensions and pollution factors of the online world [...] are controversial and almost incalculable metrics” (Devine 2019, p. 135). While it might seem reasonable to think about streaming media as immaterial, it requires turning a blind eye to the costs of running streaming services, including hardware (headphones, mobile phones, laptops), technological infrastructures (broadband networks, data storage centres), energy requirements (electrical power generation, coal mining) and human labour (shift workers in manufacturing warehouses, software engineers, record producers). The materials of streaming services might look quite different from vinyl records or CDs, but nevertheless, streaming music is very much based on materials, and there is a very high environmental cost to contemporary systems for the consumption of music.

In recent years, a cluster of media artists have grappled with the issues of the material nature of cloud storage and its energy-hungry processes, all the while faced with a lack of access to information about the centres. Data centres are notoriously secretive, rarely allowing visitors and only releasing sanitised images.¹ Media artist Kynan Tan for *Polymorphism (Data Centre Simulation)* (2015) explored “the conflicting relationships that we have with data and algorithmic processes. There is a tendency to reduce computational activity to an abstract quantity without considering the multiple relations computation enters into, including physical and material spaces” (Tan [n.d.]). The work consists of a 3D animation of an imagined data centre based on the small amount of information Tan could garner together. *Polymorphism* can be viewed on the streaming service Vimeo; thus, it is stored in the same data centres it imagines and critiques. The work makes tangible the imagined intangible nature of cloud storage.

THE RETURN TO VINYL

Vinyl, perhaps surprisingly, has returned as an object of desire. The renewed interest in vinyl has caused an unprecedented demand for records in this century. Recently, Billie Eilish’s second album, *Happier Than Ever* (2021), sold 73,000 vinyl LPs in one week. In the same year, Adele’s *30* caused an industry-wide delay in vinyl manufacturing after processing an order of 500,000 copies.

There are numerous reasons for a return to vinyl. For Andrew Mall, “the importance of material traces in an increasingly digital world, a belief in vinyl’s superior sound,

1 See [Google Data Centers \[n.d.\]](#).

a desire to support artists monetarily, and the materiality of fandoms” are all critical reasons for vinyl’s revival and continued commercial growth ([Mall 2021](#), p. 76). While Mall focuses on the material aspect of records, Arno van der Hoeven writes about the growth of nostalgia within the popular music industry. He understands popular music nostalgia “as a longing for the past that is evoked through popular music’s production and consumption or representations of its history and heritage” (van der Hoeven 2018, p. 238). The nostalgia around vinyl records is located within the records themselves rather than the content. The reasons for this are two-fold. Firstly, the music being consumed is predominantly new; the albums mentioned above are new releases, so there is no nostalgia for the music itself. Secondly, the majority of consumers for the new albums were not alive when records were the primary recording media. Therefore, they do not have a personal nostalgia for the media. Minju Han and George E. Newman label this understanding “communal nostalgia,” explaining it as “preferences for things that are associated with the past at a cultural or societal level but were not directly part of one’s personal history” ([Han and Newman 2022](#), p. 8).

I posit that there is another type of nostalgia perceivable within recent approaches to vinyl use within sonic media art that can be found in a longing for the experimentalism of the 1960s. Experimental approaches to art and music were rife in the 1960s as artists produced works from newly formed processes and practices. Artists who were part of the Fluxus movement, for example, questioned expectations of what music could be. Yoko Ono, La Monte Young, Mieko Shiomi, and Dick Higgins, to name but a few, produced performances that were filled with optimism for experimental practices and their potential. From a present-day perspective, there is nostalgia for a time when genuine newness was possible and artists could create original works from the developing experimentalism of the period.

The practices that emerged from this experimental ethos have been mined by a cluster of contemporary practitioners, displaying nostalgia for a time when music and its experimental outcomes were not freely available in both creation and production, when millions of tracks were not available for instant listening via streaming services and, more specifically, when physical media in the form of records could be a source for new processes and practices. A contemporary example of the nostalgic approach is found in the performances of abstract turntablist Maria Chavez, who employs techniques that originate in the cracked media of Knížák and the DJing of Marclay. Her performances involve the misuse and abuse of vinyl records paired with prepared turntables, which court the accident in the unpredictability of her setup. In a typical performance, Chavez plays a single turntable with a mixing desk to one side. She often snaps vinyl records into pieces before stacking them on top of each other on the turntable’s platter. As the platter revolves, the needle picks up and plays fractions of records as it is dragged over multiple vinyl fragments. As the records are played, a noisy inexact mix is formed, the polar opposite of a digital mix where pristine sound sources are locked together. Even using the same vinyl shards, every performance will be dramatically different as the tone arm is dropped at inexact points on the record grooves, and the shards are positioned differently.

Chavez describes her approach as follows:

I developed the term “the beauty of destruction” in order to make sense of why I was allowing my practice to ruin expensive styli and records for the sake of performance ... But I saw the destruction happening to my equipment as opportunities for more sound development. (Chavez 2012, p. 15)

Chavez hears the unwanted or unexpected sounds as expanding the range of possible sounds available to her; no longer is she controlled by the intended music locked into the record grooves or the verisimilitude required in the playback of recordings.



Figure 1: Maria Chavez, in performance. Courtesy of the artist. Image: Karl Otto.

In addition to performing, Chavez also runs workshops in which she guides participants on how to perform damaged records and turntables. The students are shown numerous methods to prepare their records, from placing foreign objects onto the surface to Chavez’s technique of snapping the vinyl into shards and stacking the discrepant pieces onto the turntable platter. Her workshops illustrate that there is not only a desire for the innovative practices of musicians such as Chavez but also an interest in learning to make performances in this style.²

Nostalgia is found in Chavez’s process, which looks back to the experimental turntablism of the 1980s. At that time, the approach was formed around the emerging DJ culture, which courted virtuosity in the deft handling of vinyl and the perfect timing of beat mixing. Conversely, artists like Marclay developed DJ sets around the crack and the unknown, processes designed to break with the conventions of dance music DJing of the time.

2 See, for example, [LUFF.TV 2015](https://www.luff.tv/2015).



Figure 2: Graham Dunning live performance with 'Mechanical Techno' machine at The Albany, Deptford, London in October 2016. Courtesy of the artist. Image: Andy Worthington.

Similarly, minimal sound maker and DJ Graham Dunning's practice begins with vinyl destruction and is likewise closely associated with a communal nostalgia for the experimentalism of the 1960s. Dunning starts with modified and destroyed LPs, carving records into sections and reforming them. In a video introducing his practice, he names this 'sampling', which is somewhat akin to digital sampling, where sound sections are edited to form accessible clips of music to be employed by the DJ. As well as playing vinyl, Dunning builds upon and extends his turntables so that they become triggers for electronic devices and a mechanical means to produce timed sounds. This work is directly influenced by Nam June Paik's *Random Access (Schallplatten-Schaschlik)* (1963), an early example of an extended turntable, for which multiple vinyl records were stacked and played with an extended tonearm. Dunning produces what he calls 'mechanical techno' from the assemblage of cowbells and contact mics triggered by repeating turntable rotations. However, in this instance techno is not exactly the output of the vinyl records mixed by the DJ; instead, sounds are triggered by the extended turntable. The grooves no longer hold the content of the music—they are not recordings at all.³

ECO-SONIC MEDIA

A material return comes with material consequences. Thinking about vinyl records, Kyle Devine argues that "the so-called revival of this format [vinyl records] entrenches the political ecologies of plastic and petroleum that emerged during the second half of music's twentieth century" (Devine 2019, p. 166). Similarly, Jacob Smith, in his book *Eco-Sonic Media*, states:

3 See [Dunning 2015](#).

It is time to reopen the books on the failed experiments, outmoded techniques, and “also-rans” of media history, not out of a fascination with the quirky marginalia of the past, but because the media culture that became dominant... are complicit in a material culture that has caused so much environmental damage. (Smith 2015, p. 1)

Eco-media studies has become a fully-fledged field of study in the last decade.⁴ A central concern in the area is the media’s role in environmental damage and climate change (Cubitt 2005, 2016). At its core is the realisation that “media are, and have been for a long time, intimate environmental participants” (Maxwell and Miller 2012, p. 9). Given media’s broad role in the continuing environmental crisis, contemporary critique must be alert to media’s ecology and the implications for the environment and climate change.

Along with being aware of media’s ecology, some scholars have been engaged in discovering potential eco-medial histories. Smith argues that “early twentieth-century phonography can be understood as an eco-sonic medium” as the record industry “relied on the labour of the lac insect” (Smith 2015, p. 6). According to Smith, eco-media scholars look to address how media technologies and culture are implicated in the ecological crisis (*ibid.*, p. 1) and by extension, eco-sonic media specifically relates to how sound media, in the form of recording and playback technologies and cultures, are placed within our current environmental concerns. Smith goes as far as to write: “the technological networks of previous eras gain new relevance as models for more eco-friendly systems of media communication” (*ibid.*, p. 4); a position I dispute below.

Perhaps a touching point here is theories of insects as media, such as the insect robots of Rodney Brooks (Parikka 2010, pp. xi–xii) and, for Smith, the records formed from the resin produced by the lac bug. But unlike Jussi Parikka’s concept of *insect media*, which encapsulates a fascination with simple life forms and insect thinking within media, Smith’s *green media* is entirely situated on the surface. This green media, based as it is on the sticky substance secreted twice a year by the lac beetles, does not so much describe “a transposition between insects (and other simple forms of life) and media technologies” (*ibid.*, p. xiii); instead, for Smith, the hand turned gramophone that played shellac records at 78 rpm was eco-sonic in its disconnection from the electrical grid and its sustainable substrate based on non-human labour.

However, we know from Devine’s far-reaching discussion of shellac records that they were hardly an ecologically sustainable media, given that “it took innumerable beetles about a year to produce a single kilogram of the substance [shellac]” (Devine 2019, p. 59). At its peak, four million kilograms of shellac were being used for record production every year. The reading of shellac simply as an eco-sonic media requires ignoring the many other materials, chemicals, and products that go into producing shellac records. This includes toxic pesticides, the death of trees due to insect infection, the requirement for limestone further requiring large volumes of water, and the unregulated work conditions of over 30,000 labourers (*ibid.*, pp. 59–63). Furthermore, the pressing plants became massive industrial factories, consuming

4 See for instance, Rust, Monani and Cubitt 2015.

60,000 tons of coal annually and 60 million litres of water per day (Devine 2019, p. 69). To think about shellac records being an eco-sonic media, there must be a thorough understanding of the full ecology of the material, a material far from ‘eco’.

While shellac is potentially a sustainable material, the industries that formed around it were not. Devine ends his chapter on shellac by arguing that we should not contemplate a return to shellac under the banner of green media (*ibid.*, pp. 79–80). This line of argument is moot as numerous factors impede such an endeavour, not least because shellac’s sound quality does not meet present-day expectations. Regarding media art and potential eco-sonic media, I turn here not to historical industrial processes but to media art’s ability to be speculative.

SPECULATIVE ECO-SONIC MEDIA ART

Katie Paterson’s *Langjökull, Snæfellsjökull, Solheimajökull* (2007) is a sonic media artwork that draws on the ability of recording media to displace time and space. The work was produced from recordings of three glaciers in Iceland: Langjökull, Snæfellsjökull, and Solheimajökull. These recordings were then pressed into three records, made of ice, each of which was produced using the meltwater from the corresponding glacier. These ice discs were then played simultaneously on three turntables until they melted completely.



Figure 3: Katie Paterson, *Langjökull, Snæfellsjökull, Solheimajökull* (2007). Film still © Katie Paterson.

As the ice melted, the recording gradually lost its original fidelity until it reached the point where the turntable platter was exposed, forcing the sonic media to play itself. In an instance of what artist and theorist Will Schrimshaw terms “the geophonographic” (Schrimshaw 2017, p. 171), Paterson’s work points us to the melting glacier—neither present nor even in the form it was at the time of recording—which exposes the rock beneath the ice formations. Here climate change has caused exposure of solid land under thousands of years of ice. Likewise, the turntable’s platter is not meant to be exposed to the stylus’s needle, which is drawn over its rough surface

after the ice has melted. The record's own sonic media melts to the point where it no longer performs a field recording but plays its materiality. The sonic media simultaneously sounds the ice loss in recorded form and the reality of climate change.

Before media theorists started to think about insect media in the form of shellac records, petro-capitalism and vinyl LPs, the environmental impact of the cloud, and coal's implicit relationship to media, artist Vicky Browne was already making eco-sonic media. Browne's reoccurring trope of producing unexpected sounds from unlikely materials is often formed in sonic media. Recordings of bird songs are lathe cut into copper discs, whose soft, malleable surfaces easily take on their sonic vibrations and are just as easily worn down to grooves of metallic rasp. Damaged and degraded magnetic tape is repurposed as a wig-like structure; no longer reliant on a tape player, the strips of tape live a second life as rustling plastic. A turntable atop a rocking chair-like device tries to play a Kraftwerk LP; the needle rocks on and off the record, jumps, skips, and slides. A spinning wheel spins the Australian classic "Down Under," the phonograph formed from a needle and a paper cone. There's nostalgia in these works: familiar records play, and there is the constant reminder of outmoded technologies, such as cassette tape, compact discs, and cheap thin vinyl.



Figure 4: Vicky Browne, *Dead Wood* (2006). Courtesy of the artist.

Many of the materials that form Browne's 'records' are neither shellac nor vinyl. Instead, she makes records from coins, copper, glue, and repurposed CDs. Browne takes these objects and creates unexpected-sounding outcomes for them. In doing so, she makes the known and expected sound of the object unknown and unexpected. For example, she has made records from sticks (*Dead Wood*, 2006) and fashioned a gramophone out of a large tree stump (*Gramophone*, 2013). For *Gramophone*, Browne dug up a tree stump from a forest that had been clear-felled and cut a disc from the top of the stump. This disc formed a 'record' played with a metal spike connected to a bronze horn. The sound produced is quite a shock as the rasping metal on wood creates a brutal sound, loud, grating and nasty. The amplified noise generated from

the rasping of the spike on wood sonifies the violence of clear-felling in a tangible manner that leads the viewer to consider the history of the tree trunk and of timber in general. Nature is not pristine, and the burnt remains of the clear-felled tree stump produce a sound that is neither clean nor transparent. The sound that they generate is untamed noise.

Vicky Browne's *Cosmic Noise* (2018) harks back to a simpler time when the belief in a cosmic eternity that included humans was still viable. The installation suggests an astronomical explosion, a big bang, that leads us to the celestial notion that life exists throughout the universe, held within space dust, meteoroids, and far-flung planets. But noise on a cosmic scale vastly differs from the small sounds heard within Browne's installations. We come to know Browne's materials through their sound, her objects producing unexpected sounding outcomes. In doing so, the known and expected sound of the object becomes unknown and unexpected. On entering the gallery, the Murray Art Museum Albury in Australia, we hear *Cosmic Noise* before we can see it. What we hear is an orchestration of small, barely audible noises. We can listen to the sonic whole or further enter into the installation and focus on specific and often minute sounds, each element with its vibrating micro-ecology.



Figure 5: Vicky Browne, *Cosmic Noise* (2018). Installation for *Material Sound* at Plimsoll Gallery, Hobart 2021. Courtesy of the artist. Image: Remi Chauvin.

Cosmic vibrations became popularised within mainstream culture through the Beach Boys' song "Good Vibrations" (1966), a hit inspired by the flower power movement of Southern California. Browne's installation is filled with these good vibrations, yet within its nostalgia is the persistent knowledge that our planet is in crisis and that the matter surrounding us is at the heart of this crisis. Browne's work thus investigates our assumptions about media technology and where it has come from. By producing works that employ materials from nature, wood and living plants, she questions the presumption that media is by necessity transparent and without a history in the natural world.

Nostalgic and ecological concerns in contemporary media art are not exclusive. Browne's practice can also be understood through the lens of nostalgia. Her works include elements of nostalgia, such as the exhibition *I Want to Be at Home and Feeling Right* (2004) at Performance Space in Sydney, which included a copy of Led Zeppelin's *IV* that had been produced by applying glue to the original surface of the vinyl LP. This created a copy of the album that played in reverse, referencing the alleged practice of hiding messages on a record called "backmasking" that can only be heard by back spinning the album (Kelly 2009, p. 182). Her constant referencing of gramophones displays nostalgia as the memories of past sonic media are rethought as eco-sonic assemblages.



Video excerpt 1: Vicky Browne, Cosmic Noise (2018). Documentation from 'Material Sound', MAMA Albury 2019. Courtesy of the artist.

Dunning too joins the two threads of nostalgia and the ecological. Elodie A. Roy recounts a work produced by Dunning that used shellac records discovered in 2010 while he was on residency at the Rea Garden in Birmingham, a former storage facility for gramophone records. She states the reuse's purpose was: "Dunning was not content to simply exhibit the shellac shards. He tried to reassemble and play the records back, in the hope of hearing what waste might sound like" (Roy 2021, p. 220). Dunning, who intended to perform a "pseudo-archaeological investigation on the site" (Dunning 2010), used the materials he dug up to create compositions and press the recordings on dubplates, later released as *Three Artefacts* (2011). The records are noisy artefacts that recount a bygone era and speculate on what we might learn by listening to waste. In listening to these sounds, we are made aware of a history of waste in the form of discarded sonic media, as the recordings themselves are given life as newly pressed vinyl.

CONCLUSION

The material practices discussed in this article offer a critique of the recent return to vinyl. This return can be understood through the lens of nostalgia as younger consumers turn to the physical media. In the 1960s and the 1980s, artists allowed the media to be ruined. They misused, manipulated, cracked, and broke records to form new instruments for producing art and music. It might have been expected that as users left vinyl behind and new technologies replaced records, there would come a time when records would no longer be considered of interest. Unexpectedly, vinyl records have returned and are again highly valued by a new generation of consumers. Joining these consumers are media artists who have found value in returning to experimental practices from the twentieth century. While one approach is shaped by nostalgia, a second is based on the eco-sonic, a speculative approach that draws our attention to the ecology of vinyl media.

Media art does not have to provide practical answers to burning questions. Eco-sonic practices are speculative and are thus free to develop solutions that are neither immediately translatable to the industry nor at all practical. These works do not provide a map for the commercial return of shellac or vinyl. The eco-sonic can be seen in the media art of Katie Paterson and Vicky Browne, but as a speculative form. It is here that media art provides visions of the future of sonic media.

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