The Artist as a Subscription: Patching music as an artistic device

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This article aims to explore the concept of patched/versioned musical works as creative ecologies. It identifies how the internet's involvement in music creation and dissemination influences choices related to the release of such works. Throughout this writing, the author looks at the increasingly volatile structures surrounding recorded music in the early twenty-first century as a result of streaming platforms such as Spotify and video-based social media sites such as TikTok becoming the primary means for music consumption. It explores this volatility as a method for approaching the release of new music within dynamic musical ecosystems and looks at the growing art scene focusing on this way of working, drawing parallels between artistry and subscription-based services where content continually evolves over time.

1. OVERVIEW

A traditional work of art is more akin to a finite statement, frozen in time at the moment it was completed. With the ability to update this artwork, it is more akin to an ongoing conversation that I can continue to add new meaning to over time. (Beeple quoted in Dafoe 2021)

1.1. Explanation of concepts and terms relating to form and style

This writing is focused on the growing practice of creating semi-fixed media compositions through the use of digital patching/versioning,[1] and relates to the concepts and techniques that have been developed in order to allow for the creation of these pieces. My research addresses the increasingly volatile structures[2] surrounding recorded music in the early twenty-first century as a result of streaming becoming one of the most dominant ways in which music and media are consumed, coupled with the flexibility that digital formats offer to artists as a medium in which to create work. It explores this as a method for approaching the composition of new music.

[1] Providing ongoing updates to a work with perceived improvements or additional information added in order to allow a previously released work to evolve in a seamless way to its audience.

[2] Relating to recorded media that has undergone change after its initial publication. This can apply to any digital asset such as music, visual art or video games.

1.2. Patching

The term 'patching' used throughout this article refers to the definition more closely tied with software updates, rather than that which is rooted in digital and modular synthesis,[3] and more commonly associated with electronic music composition. Therefore the act of patching in the case of this article refers to the act of making alterations, small or large, to a work *after* it has been made available for public consumption. The use of a definition more commonly associated with software is due to the fact the discussed musical material is subjected to updates and alterations in a manner that is analogous to computer programs.

Patched musical pieces investigate the use of incompleteness and reinterpretation through digital patching as a compositional device, acting as both a musical development technique and a dialogue between artist and audience. The methods of patching music largely reflect those used in the software industry, specifically referring to the act of conceiving a piece as either a 'version' or a 'prototype' (Hu 2020):

- Versioning – providing ongoing updates to a work with perceived improvements or additional information added in order to allow a previously released work to evolve in a seamless way to its audience.
- Prototyping – testing a draft idea with an audience, gaining and making changes accordingly.

While this could be seen as a continuation of the act of composers reworking their creations, this has historically served as a way of fixing errors or presenting an entirely separate standalone version of a piece. Patching, instead, can be treated as an artistic device that will give a piece fluidity, where the original can be overwritten and developed over long periods of time. And although musicians still largely use this technique as an editorial tool (Ettelson 2016), the idea of allowing published music recordings to be altered as a form of artistic expression is something that is starting to be adopted by a number of prominent artists[4]

[3] Creating a set of parameters in order to provide a certain sound.

[4] Kanye West, Beeple, Aphex Twin (detailed in later sections).

patching artwork across multiple fields. This is also happening at the same time as the creation of new audio players that allow the listener to alter the recording in real time, albeit currently in a quite limited way (products include Teenage Engineering OB-4 Radio[5] and Kanye West's Stem Player[6]). Even if these examples do not necessarily signal a sea change in how music is made at large, they do at least offer new ways in which music can be experienced by the listener and open up new possibilities where the line between production and consumption of new music can be blurred for everyone and not just those with learned skills of using audio editing software:

> I really think that is much more how people will view art in the future, as this dynamic thing that you come down in the morning and the piece looks one way and you come home from work and the piece looks a different way and it just continues to evolve and continues to surprise and challenge. (Beeple quoted in Dafoe 2021)

This quote by prominent digital artist Beeple reflects the idea that has been a growing part of certain artists' working process over the last decade, this being that if artworks no longer need to be tied to a physical item,[7] and this can be done without the need for human performance, why should the work be a finite thing?

1.3. Post-internet, patching and memes

As I belong to a generation of artists who work primarily in digital means, the idea of constantly re-evaluating one's creations became inevitable for me once the reliance on tangible media had been taken away (with regards to recorded music). Although instances of patched music, and internet art in general, have been able to explore this method of constant re-evaluation, in the form of digital patching, largely as a result of new technologies such as streaming, the ideas follow a practice that has occurred in a very general way across the internet for decades, including the use of online software updates, periodical revisions of website content and video game patching. Music is just one of the most recent adopters of this way of working. This is not to say that periodic revision of compositions did not exist in the pre-digital era, but the advent of streaming has made this a more viable way for artists to work, by allowing the new content to be immediately accessed by an audience. This means

that the creation and development of the resulting work is strongly interrelated with the technologies people use to access it, making the internet both the medium in which the art is partly created as well as the method of dissemination, placing patched art into the tradition of what has been dubbed as 'Post Internet Art'; in other words, art inspired by the internet and the culture that stemmed from it:

> For these artists, unlike those of previous generations, the Web is just another medium, like painting or sculpture. Their artworks move fluidly between spaces, appearing sometimes on a screen, other times in a gallery. (Goldsmith 2015)

1.4. Remix vs versioning

> If postmodernism defined 1980s, remix definitely dominates 2000s, and it will probably continue to rule the next decade as well. (Manovich 2007)

While it can be viewed as a form of remixing, it is more of a method of developing musical content than an attempt at reworking an existing piece into a new one, as it is not presenting a new, standalone version of the work, but rather multiple evolutions of the same piece, or the same piece from slightly different perspectives. In this way, it is more closely related to how internet memes are created and shared, rather than traditional remixes, as the piece continuously grows and changes depending on the context (galleries, nightclub, concert halls, album release) as well as the new information (musical changes) put into it. In the essay 'Meme and Variations: How Video Mashups of John Coltrane's 'Giant Steps' Became a Thing', the author Scott B. Spencer defines these musical variation memes as 'rapidly evolving short video pieces' with 'multiple referential layers, often intended to be consumed and passed' (Spencer 2023: 223).

Furthermore, it is useful to differentiate between these types of alterations, as when attitudes and new methods of artistic expression or participation emerge in a similar vein to the remix, the distinctions between them, however subtle, may completely change how the work is made or perceived. While the term 'remixing' can be, and often is, used to refer to any reworked pre-existing cultural artefact, as stated by Manovich, throughout the course of this writing, there are several distinctions between different types of remixing that indicate the use of a different method of creation or different purpose for alteration. They are as follows:

- Remixing – the act of altering an existing piece of media into a new standalone work. Similar to Modding (defined below) but often used in reference to music, visual art and literature. In this writing it refers to work that has been changed not with the intention of creating an evolving work, but

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[5]Allows users to loop, tune and sample live radio and pre-recorded content.

[6]Allows user to isolate independent lines in the audio and remix the recording.

[7]While physical items such as computer servers are required to store the information, and phones and computers are used to play the media, the original content can still be freely disseminated across a range of devices without being actually stored on any of them.

with a view to being a creative output in its own right.

- Patching/Versioning – a set of changes made to update, improve, or fix certain aspects of a composition. These changes are often made by the original creator. Throughout this text it refers to the act of digitally making changes by overwriting the composition with a new version after the initial release allowing the work to gradually evolve over time and not necessarily in a linear way.
- Modding – the act of altering an existing piece of media, generally community led and carried out by people who are not the creators of the original material being altered. Most often associated with computer software/videos games. In this text it is used in reference to early experiments in the alteration of software as an artistic practice, as the act of alteration at this time was coming from an area (i.e., video games) in which the term was more commonly associated.

1.5. Notes on patching/versioning and a brief history

Originally, what they called 'dub' was just called version. In other words, you'd probably take out some of the instruments and some of the voice and put [the new version] on the otherside of a 45. So the dub business eventually came from that. It's just a version of the original which is done in many forms

In Jamaican musical parlance the noun 'version' was gradually transformed into a verb; that is, 'to version'. (Veal 2013)

In relation to the musical use of the term, 'versioning' originated from the tradition of Jamaican Dub music by manipulating instrumental takes of popular songs that would at times later go onto be dubbed over, hence the name of the musical genre 'dub', by other artists, while also further altering elements of the original recording using various sound effects. This has been seen as a foundational part of modern remix culture later influencing the 1970s New York City disco remix scene (Navas 2010) that helped popularise the remix throughout the rest of the world.

Outside of music, patching is typically something that is associated with computer software, and more specifically video games. This is often used as a way of addressing issues, fixing bugs that have come to the attention of the developers, and making general overall improvements to a product through software updates. However, as time moves on and people increasingly become more knowledgeable towards technology, the creative involvement of the consumer has become more prevalent among computing and gaming circles. This gave birth to the modding community, which gained popularity during the 1980s and became a way in which a product could

live on and continue to be developed even after its original creators ceased work on it. These early experiments in game modification eventually helped to develop patching as a potential form of artistic expression that allowed hackers and artists to modify software to act as cultural commentary by drawing attention to potential problems of the product or medium as a whole through subversion of the original material. An early example of this is Anne-Marie Schleiner's 'Madame Polly'; a modification of the first-person shooter game 'Marathon', which was patched in order to present new themes in the product that dealt with issues relating to gender identity (Schleiner, 2001). This eventually led Schleiner to curate the online exhibition 'Cracking the Maze', which presented an insight into the practice of artistically patching and modding video games. The exhibition contained work from a variety of artists and computer hackers that highlighted issues such as the lack of female representation and use of stereotypes in videogames. Schleiner noted that the use of patching allowed artists to infiltrate culture by making alterations to an already existing work and taking the work to places that were not originally intended. In this way it would allow for the development and evolution of a work that is authentic and accurate to the artists' own experiences, as it is changing over time as a result of external circumstances and personal development.

2. VERSIONING AND PROTOTYPING AS COMPOSITIONAL DEVELOPMENT

If you start thinking about a song or album as a piece of digital art, the idea of having multiple different versions of it is totally normal. It only feels abnormal if you're judging it based on an old, 20th-century system that we largely don't abide by anymore. (R. Michael Hendrix quoted in Hu 2020)

The three-minute pop song is basically an invention of the phonograph. (Mark Katz quoted in Smithsonian 2016)

2.1. Spotify sound, potential reasons for versioning and the impact of TikTok

Taking advantage of new technology in order to find newer ways to create art can often be a response to its limitations or a way to work around its overall shortcomings; for example, the typical duration for a pop song coming from the time limitations on early phonograph records, as mentioned by Katz in the preceding quote. In the case of streaming, the evolution of popular song is *partly* based around how the algorithms for certain services market new music to potential fans, as well as their method of paying artists and labels (The Economist 2019; Sumanac-Johnson 2019). As streaming and digital downloads have had a massive effect on how music is
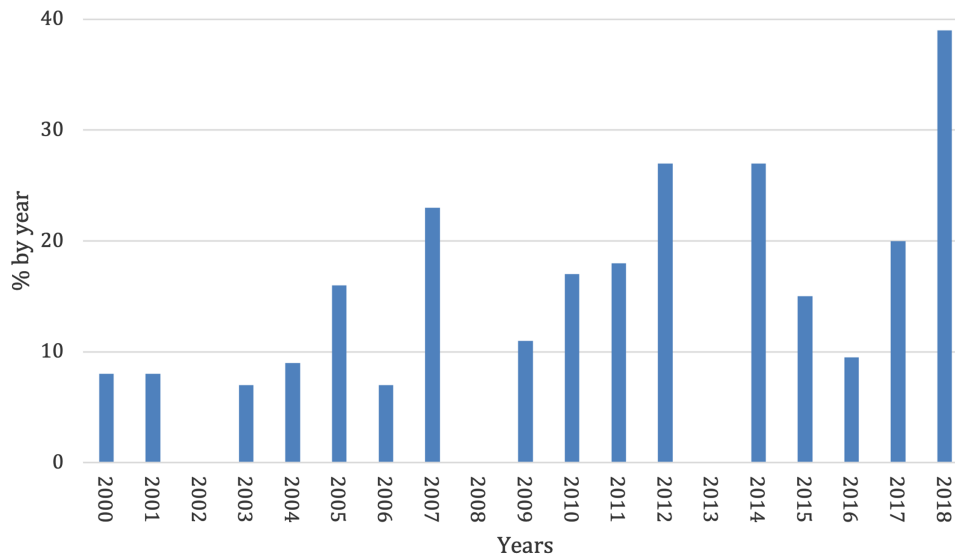
Figure 1. Billboard Number One songs that reach chorus within 15 seconds, 2000–18.

sold, marketed and consumed, the older business model for selling physical albums does not fit when it comes to making money from digital media. This is because, in the case of streaming, the purchase of a song is no longer necessary for a person to listen on demand and instead money is made per listen. For streaming services such as Spotify, one listen is counted when 30 seconds of a song is played (Hodgson 2021). This makes creating an incentive for an audience to repeatedly play the same piece of music much more of a priority. This has resulted in different attempts at restructuring songs in order to take advantage of how this newer system works (Figure 1). This includes a growing trend of opening songs with a chorus to catch the listener's attention immediately or by reducing the overall duration in order to encourage repeat plays, with a song's average length in the Billboard Top 100 decreasing by 20 seconds between 2013 and 2018 (Bonavita 2019; Morris 2019), and a growing number of songs averaging around 2 minutes or less (Kopf 2019). This reduction in duration of song introductions initially appeared during the rise of the MP3 and portable digital music players and then accelerated with the introduction of music streaming platforms (Hesmondhalgh 2022). Of course, this is not a new way to structure songs; however, new artists have admitted (Sound Field 2019) consciously doing this more often because of how Spotify and other streaming services work, as when 30 seconds of a song is all that is needed for a pay-out, it makes little sense to create a longer piece of music, *if* the reason for releasing it is primarily financially motivated.

Another possible way to increase income from a music release is through the act of versioning, as it allows artists to essentially sell the 'same' song multiple times, or in the case of streaming, giving people more incentive to return to listen to the latest updates of a song although working this way would be more profitable for an artist with a large fanbase. This also allows for the possibility of extra publicity for the same release, as new updates may receive renewed attention or new reviews from publications. Over time the economic and artistic reasons will most likely meld into one, when the act of creating a compelling work in a state of ongoing artistic development is something that will be expected for a musical project. This is also something that may be encouraged for financial reasons in order to continue to bring in revenue with each update, while collecting fan feedback along the way. This is already happening in other art and entertainment industries, an example being 'Rockstar' and 'Grand Theft Auto V', a game released in 2013 that is still receiving updates eight years later, with player numbers and sales remaining relatively high (Figures 2 and 3). Similarly the game 'No Man's Sky', which has been receiving significant patch updates since 2016, has had spikes in player activity relating to the release of many of the updates (Figure 4). And despite its limited testing within music, it has also showed some success there too, with Kanye West's patched album *The Life of Pablo* becoming the first album to go platinum solely through streaming (Yoo 2017). As the CEO of Spotify, Daniel Ek, put it, in response to how musicians are to make a living from such low royalty payments, 'You can't record music once every three to four years and think that's going to be enough' (Dredge 2020). If the streaming companies continue to take this attitude, then aside from simply creating new music from scratch, it makes sense to
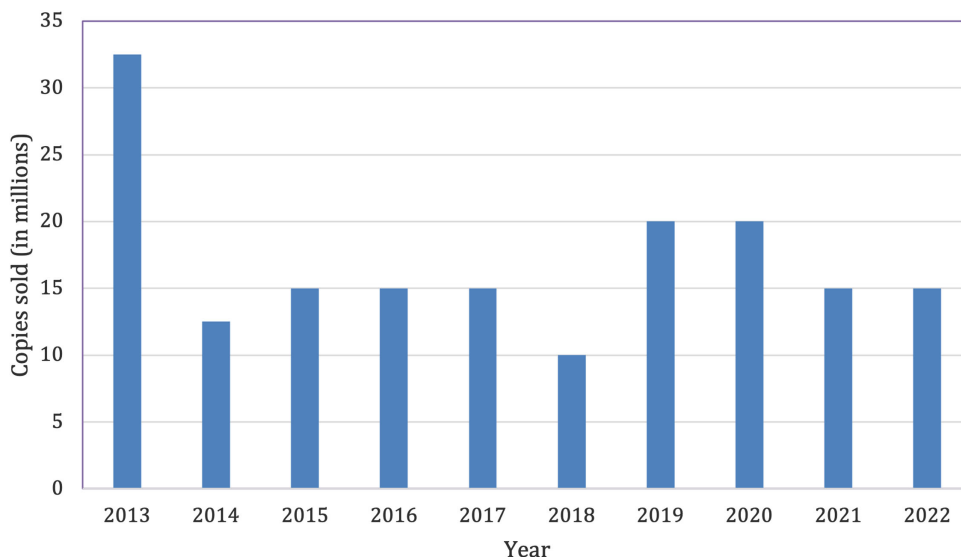
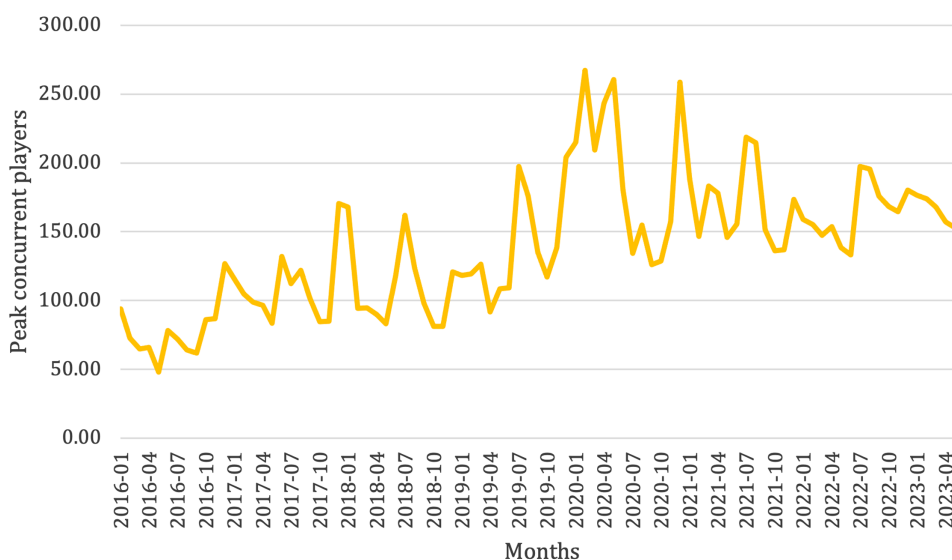**Figure 2.** Annual unit sales of 'Grand Theft Auto V' worldwide.

Figure 3. Monthly number of peak players of 'Grand Theft Auto' on Steam worldwide, 2016–23.

continue the patching/versioning of older songs for a period in order to maximise returns. None of this is to say that the main reason for creating versioned works will be to generate money, but just one possible reason why people or labels may adopt this way of working, as there are already examples of artist's doing this for solely artistic reasons, such as the previously mentioned Kanye West (discussed more in section 2.3).

Another possible implementation could echo the act of releasing edited versions of older books, such as the works of Roald Dahl or Enid Blyton, where certain phrases or words that were deemed inappropriate were changed or removed. This could be an extension on

the more commonly censored works that cover up explicit language, except with more intermittent changes to censorship depending on how society views certain content at any specific time.

In relation to video-sharing platforms, while the allowed duration for content is always changing, the incentive is still to have a large reach and keep audiences engaged, which might not necessarily be positively affected by creating longer content. As of February 2022, TikTok has updated its maximum video length to 10 minutes, having first been 15 seconds when the app was introduced. And while 10-minute videos are now allowed, the safer option would
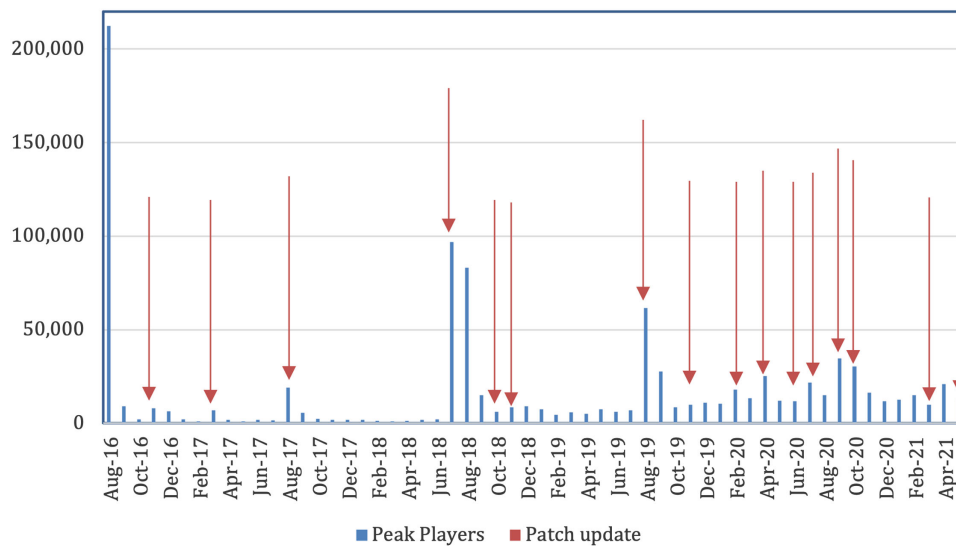
Figure 4. (Colour online) The amount of active players in the game 'No Man's Sky' in relation to when significant patches were made to the game.

be to stick with shorter content, as it makes the chance of someone making it through the entire video more likely and therefore more likely to be recommended to others by the platform's algorithm. The average user click-through rate documented for TikTok shows that an audience will generally switch content if not engaged within the first 3 seconds (TikTok 2023). This creates an incentive for moving anything eye/ear catching directly to the beginning in order to maintain someone's attention for a longer period of time.

Although there are a number of possibilities why this way of working may accelerate, the reason for its popularity and possibly the most important factor of all is the role in which sound plays across much of short-form video sharing platforms such as TikTok and YouTube Shorts. On these apps, sound is used as a foundation on which alterations may be built through the creation of memes or duets from the original content, leading to seemingly endless variations on content outside of the original creator's control (Radovanović 2022). These unprecedented freedoms offered to the audience, coupled with the relative ease to create and publish music, are key factors in the rise of versioned and patched work.

2.2. Digital folk tradition

> Today's audience isn't listening at all – it's participating. (Gibson 2005)

While Gibson's quote may currently be a bit of a generalisation, as large amounts of music audiences do remain as passive listeners, the opportunity for users to actively participate is unprecedented, and while it still mostly remains an open opportunity, not something

which is actively happening at large, the idea of audiences having a more participatory role in published content is likely to continue happening on a much larger scale, based on the rate on the continued growth of the 'prosumer', combining consumer and participatory cultures:

> This is a culture in which the roles of media producer and consumer are no longer distinct categories as they interact in multivalent ways. These platforms allow audiences to actively engage with the media they consume, through liking, sharing and commenting. Some consumers take this active role further by imitating and/or remediating texts through the creation of viral videos and internet memes. (Goodman 2021: 2)

While the common presence of definitive recordings of an artist's work is something that has existed for roughly a century, the evolution of recorded media to a new fluid medium through platforms such as TikTok has resulted in the return to a practice that predates this, as it has led to the creation of a new kind of folk tradition that is experienced digitally. It is 'folk' in the sense that it is music and art that is passed along social circles to be reinterpreted by different people through the use of dance, sound and other artforms. It is a more fully realised form of what has been called the 'New Folk Process' (Egenes 2012), which was referencing the remix culture in early 2010s.[8] While the idea of the New Folk Process was referring to how music is treated in the digital age, the ease at which the general public could take part in this process was,

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[8]The name itself being adapted from Charles Seeger's idea of 'folk process', noting how music in the public domain is altered into new versions as time passes.

at the time of that writing, nowhere near as close to what it is now, as the most dominant apps used today are built on the premise of allowing users to manipulate pre-existing media into something new. This is similar to Jacque Attali's prediction of a future economic model for music he names 'Post-Repeating', in which everyone takes part in the act of creating, where a composition 'becomes a starting point, rather than being an end product':

> [P]roduction melds with consumption, and violence is not channelled into an object, but invested in the act of doing, a substitute for the stockpiling of labour that simulates sacrifice. Each production-consumption (composition) entity can call its program into question at any moment; production is not foreseeable before its conclusion. It becomes a starting point, rather than being an end product; and time is lived time, not only in exchange and usage, but also in production itself. The bulk of commodity production then shifts to the production of tools allowing people to create the conditions for taking pleasure in the act of composing. (Attali 1985: 144–5)

This does not only apply to music, as social media platforms are full of multiple versions of various artforms such as the use of stories/tales that are passed through the internet, for the most part orally, before evolving into multiple different products. An example being something like the Slender Man 'Creepypasta',[9] which began as an urban legend on the internet before evolving into new stories, video games and other artistic interpretations.

Once something is uploaded to the internet, or even stored digitally, it is no longer just the original media anymore. For the masses of active users,[10] physical media is to digital media what ceramics is to clay.[11] As William Gibson would later point out following the aforementioned quote, the term 'audience' does not even really apply in the traditional sense any more, when it comes to *active users* of digital media and remix culture. There is no 'audience': everyone is free to participate at any time in any way they feel fit. The original artist is essentially supplying the 'audience' with a customisable product that they can use in whatever way they like, in a similar way to how a computer game is a definitive product that allows its users to interact with it in countless ways. As a site such as YouTube allows users to upload music whether or not they own the rights to it, this circulation of variations is made extremely simple for anyone to carry out, as Sylvain Martet has noted, sites such as this 'benefit from the propensity of

listeners to circulate music beyond the control of artists' (Martet 2016: 169)

This idea of an online folk tradition has developed organically and while some actively identify themselves as belonging to a certain tradition or subculture, the presence of a new folk tradition does not require its members to consciously identify themselves as belonging to that tradition, as the ideas and material associated with the scenes spread regardless.

2.3. Versioning distinctions

The act of versioning generally takes on two forms:

1. Creating a constantly changing piece of music that is more representative of how media on the internet is experienced.
2. Creating multiple structural changes to fit inside different contexts that call for different time durations and serve different functions.

The following three prominent artists have used patching as a way of presenting altered versions of their work after official release to the public. Although the methods differ somewhat from the ones presented in this article, as only one (Chali XCX) follow Attali's concept of the prosumer, as the audience were influencing the final product, they do follow similar approaches in the sense that they are taking advantage of streaming technologies in order to release music in a new way, either to fix errors or to reflect a different time in the artist's life by providing an evolving 'story' through patching.

The following are examples of some artists working in different genres who have applied the use of patching through streaming technology in different ways and for different reasons.

2.3.1. 'Retconning',[12] versioning albums and *Aphex Twin*

Beginning in 2017, electronic musician Richard D. James (aka Aphex Twin) launched a website that offered streaming of his previous music releases. The music featured gradually changing track lists consisting of the original album, with previously unreleased versions and new compositions periodically appearing alongside them. These additions were applied to almost all of his previous releases, up to and including his most recent as of October 2023, 'Blackbox Life Recorder 21f/in a room7 F760'. This allowed for a different view to be taken on albums that were over 20 years old and offered more insight into the composers practices at the time, as well as seeing the editorial decisions he makes with his compositions in the present. The changes were not influenced by audience

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[9]A horror-related legend that both originated and became shared around the internet.

[10]Users who actively engage in content through comments, edits and general participation.

[11]This is in reference to the public's accessibility for alteration.

[12]Revise retrospectively.

Table 1. Retconning, Aphex Twin

Type of Patching	Patched Works	Description
Periodic update of material The alterations consist of the addition of extra compositions, rather than the evolution of existing compositions	All previous releases on Warp Records	The album track list itself evolved over time rather than the individual compositions. While, it is the least participatory of any of the patched works discussed in this article, it gave a new perspective on the work by adding previously unheard material to old releases people had become familiar with.

Table 2. An evolving work and Kanye West

Type of Patching	Patched Works	Description
Presenting the compositions as constantly evolving pieces Linear presentation of patches	Life of Pablo Donda	This album has been treated as a fluid medium in which the music was altered after release. This touched Attali's idea of post-repeating and music remaining unfinished, with the composition being a starting point rather than the end. It also relates to the idea of the 'new folk process' as the song 'Wolves' was taken and turned into a meme in which it went through multiple iterations, mainly through adding visuals, to represent different ideas.

participation, but rather exclusive tracks for that specific site. This way of approaching modification of previously released material acted as a window in the working methods of the musician at a particular time in his career and offered a different perspective on the release by showing the previously unheard experiments that led to the final product (Table 1).

2.3.2. An evolving work and Kanye West

In recent years (beginning in 2016), Kanye West is perhaps the most high-profile artist to use patching on his musical output. West called this a 'living, breathing, creative expression' (Doyle 2016). This quote was in reference to the fact that the album continued to undergo changes even after its official release. West may not have been the first person to patch music digitally as an artistic or editorial device, but his wide reaching influence drew attention to the practice and was the main example being used in the press when the term 'patching' was being discussed as a method for working on musical updates rather than its usual association with computer software. In terms of the previously mentioned 'New Folk Process' and the role of the prosumer, segments from the album, such as the introduction to the song 'Wolves', were isolated and used as meme templates in which people other than the artist would create visual content to correspond with the 'tradition' or meaning of each meme (e.g., the repeated use of an image of someone floating in the air to the song 'Wolves' (Table 2).

2.3.3. Prototyping and Charli XCX

In 2020, the pop musician Charli XCX created an album as a semi-collaborative process between her and her fans for her album *how i'm feeling now*, uploading demos or unfinished sections from songs before release as well as making stems for each song available for the audience to remix. This particular method of uploading updates online relies on making the material available before release and the creative process a public spectacle, from uploading pictures of lyric sheets to the final recorded product. This is largely dependent on having a substantial enough following to yield results and also doubles as a kind of marketing strategy, as there is no confirmation as to which, if any, suggested ideas were included in the finished work (Table 3).

3. EVOLUTION OF MUSIC COMPOSITION IN THE STREAMING ERA

> There is little doubt that at least a part of the changing anatomy of a pop song is due to the economics. In order for a stream to count towards a song's placement on the chart and for the performer and publisher/label to receive royalties, at least the first 30 seconds of the song must be played, which explains why reeling in the listener is more important now than ever. (Sumanac-Johnson 2019)

In closing, the use of the internet as a tool for creation and dissemination of media has led to the development of new artistic practices and ways of presenting ideas. One key aspect driving this way

Table 3. Prototyping and Charli XCX

Type of Patching	Patched Works	Description
Presenting prototypes and development of compositions throughout the writing process. This Pieces remain unchanged after release	how im feeling now	The album featured work that was influenced by the audience's input, and relates to Attali's thoughts on a new economic model for music where the act of doing is part of the product and where production meets consumption.

working is the attention economy, a concept deeply connected to the landscape of digital art and internet in general (Abidin 2021). In relation to compositions that largely adhere to structures that are favoured by major streaming sites, the main area affected by this remains that of pop music, referring to the definition of music that has been released mainly for the reasons of commerciality and/or financial gain that has been aimed at a wide audience. However, while not all music has been directly affected by the dominance of streaming platforms, it is clear that the importance these platforms have when it comes to gaining a greater amount of exposure plays a major role in how some artists approach music if their desire is to distribute their art to a wider audience, whether for financial gain or to get their message out to many: 'Sometimes you'll be working on an idea and you kill it before it even becomes a real idea just because you're like, "Oh, this isn't going to fit into anything, any playlist"' (Sound Field 2019). In terms of pop music, the impact of streaming and social media has most likely had the greatest effect on how they are structured in relation to aspects such as shortened introductions (down from an average of 20 seconds to 5 seconds in the last three decades[13]) (Léveillé Gauvin 2018), with a rise in number one songs featuring the chorus within the first 15 seconds since the year 2000 (The Economist 2019), and a shortening of overall song duration. As indicated by the study 'Drawing Listener Attention in Popular Music: Testing Five Musical Features Arising From the Theory of Attention Economy' (Léveillé Gauvin 2018), this is largely thought to be in relation to the fact that major streaming service Spotify does not pay artists unless their song has been listened to for at least 30 seconds. However, other factors such as the initial short video duration found on sites such as TikTok, could also encourage more immediacy when presenting new music.

When connecting these practices to the wider landscape, the shift towards a more fluid structure for digital music reflects similar attitudes in other artistic fields including film and video games. The act

of versioning works is something that continues to grow as an emerging trend (Grayson 2018; Švelch 2019; Rogers 2023a, 2023b), alongside finite works that do not change over time; however, it is possible (Švelch 2019) that it will become much more commonplace in the near future, mirroring developments in other creative fields.

[13]Based on a study of Top 10 singles since the mid-1980s.

REFERENCES

Abidin, C. 2021. Mapping Internet Celebrity on TikTok: Exploring Attention Economies and Visibility Labours. *Cultural Science Journal* **12**(1): 77–103.

Attali, J. 1985. *Noise: The Political Economy of Music*, Vol. **16**. Manchester: Manchester University Press.

Bonavita, C. 2019. Songs are Getting Shorter - and Who is to Blame? UWIRE Text. https://thestute.com/2019/02/04/songs-are-getting-shorter-and-who-is-to-blame/ (accessed 1 October 2022).

Dafoe, T. 2021. Beeple Will Return to Christie's Next Month, This Time with an Actual, Physical Artwork (That Is Also an NFT). *Artnet News*. https://news.artnet.com/market/beeple-returns-to-christies-with-artwork-part-nft-part-physical-sculpture-2027295 (accessed 20 May 2022).

Doyle, W. 2016. Kanye West is Updating His Album Live – An Exciting Prospect for Art. *Guardian*. www.theguardian.com/music/musicblog/2016/mar/18/kanye-west-album-the-life-of-pablo-william-doyle-east-india-youth (accessed 10 October 2020).

Dredge, S. 2020. Spotify CEO Talks Covid-19, Artist Incomes and Podcasting (interview). *Musically*. https://musically.com/2020/07/30/spotify-ceo-talks-covid-19-artist-incomes-and-podcasting-interview/ (accessed 10 November 2022).

Egenes, J. 2012. Remix Culture and the New Folk Process. In Dan Bendrups and Graeme Downes (eds.) *Dunedin Soundings Place and Performance*. Dunedin, New Zealand: Otago University Press, 78.

Ettelson, R. 2016. No Country for Old (Rap) Men: The Art of the Patched Rap Album. *Acclaim*. https://acclaimmag.com/music/no-country-for-old-rap-men-the-art-of-the-patched-rap-album/ (accessed 10 March 2022).

Gibson, W. 2005. God's little toys. *Wired* 13(7). www.wired.com/2005/07/gibson-3/ (accessed 10 November 2022).

Goldsmith, K. 2015. Post-Internet Poetry Comes of Age. *New Yorker*. www.newyorker.com/books/page-turner/post-internet-poetry-comes-of-age (accessed 24 November 2022).

Goodman, B. 2021. Amateur Content Creation as Compositional Practice: Viral Videos and Internet Memes in Online Participatory Culture. In *Sonic Scope: New Approaches to Audiovisual Culture*. Goldsmiths University of London, 2–40.

Grayson, N. 2018. Albums Are Getting Patches Now. https://kotaku.com/albums-are-getting-patches-now-1827376874 (accessed 28 November 2021).

Hesmondhalgh, D. 2022. Streaming's Effects on Music Culture: Old Anxieties and New Simplifications. *Cultural Sociology* **16**(1), 3–24.

Hodgson, T. 2021. Spotify and the Democratisation of Music. *Popular Music* **40**(1), 1–17.

Hu, C. 2020. 'The Life of Pablo' Reinvented the Album As We Know It. Why Has No One Followed Suit? *Complex*. www.complex.com/pigeons-and-planes/2020/02/album-changes-kanye-west-prototyping (accessed 25 March 2020).

Kopf, D. 2019. The Economics of Streaming is Making Songs Shorter. *Quartz*, 17 January. https://qz.com/1519823/is-spotify-making-songs-shorter (accessed 2 December 2023).

Léveillé Gauvin, H. (2018). Drawing Listener Attention in Popular Music: Testing Five Musical Features Arising from the Theory of Attention Economy. *Musicae Scientiae*, **22**(3), 291–304.

Manovich, L. 2007. What Comes after Remix? http://remixtheory.net/?p=169 (accessed 3 January 2023).

Martet, S. 2016. The Circulation of User-Appropriated Music Content on YouTube. In H. Rogers, J. Freitas and J. F. Porfírio (eds.), *YouTube and Music: Online Culture and Everyday Life*. New York: Bloomsbury Academic, 169–96.

Morris, C. 2019. Songs Are Getting Shorter. Blame the Economics of Streaming Music. *Fortune*. https://fortune.com/2019/01/17/shorter-songs-spotify/ (accessed 1 September 2021).

Navas, E. 2010. Regressive and Reflexive Mashups in Sampling Culture. In S. Sonvilla-Weiss (eds.) *Mashup Cultures*. Vienna: Springer, 157–77. https://doi.org/10.1007/978-3-7091-0096-7_10.

Radovanović, B. S. 2022. TikTok and Sound: Changing the Ways of Creating, Promoting, Distributing and Listening to Music. *INSAM Journal of Contemporary Music, Art and Technology* **9**, 51–73.

Rogers, H., Freitas, J. and Porfírio, J. F. (eds.) 2023a. *Remediating Sound: Repeatable Culture, YouTube and Music*. New York: Bloomsbury Publishing USA.

Rogers, H., Freitas, J. and Porfírio, J. F. 2023b. *YouTube and Music: Online Culture and Everyday Life*. London: Bloomsbury Academic.

Schleiner, A. M. 2001 Does Lara Croft Wear Fake Polygons? Gender and gender-Role Subversion in Computer Adventure Games. *Leonardo Music Journal* **34**(3), 221–6.

Smithsonian. (2016) How the Phonograph Changed Music Forever. www.smithsonianmag.com/arts-culture/phonograph-changed-music-forever-180957677/#:~:text=%E2%80%9CThe%20three%2Dminute%20pop%20song,phonograph%20had%20terrible%20sound%20fidelity (accessed 5 February 2022).

Spencer, S. B. 2023. Meme and Variations: How Video Mashups of John Coltrane's Giant Steps Became a Thing. *Remediating Sound: Repeatable Culture, YouTube and Music*. New York: Bloomsbury Publishing USA, 223.

Sumanac-Johnson, D. 2019. Don't Bore Us, Get to the Chorus? How Streaming is Changing Songs. *CBC*, 9 February. www.cbc.ca/news/entertainment/streaming-songs-changes-1.5002748 (accessed 25 April 2019).

Švelch, J. 2019. Resisting the Perpetual Update: Struggles against Protocological Power in Video Games. *New Media & Society* **21**(7), 1594–612. https://doi.org/10.1177/1461444819828987.

The Economist. 2019. The Economics of Streaming is Changing Pop Songs. www.economist.com/finance-and-economics/2019/10/05/the-economics-of-streaming-is-changing-popsongs?fsrc=scn%2Ftw%2Fte%2Fbl%2Fed%2Ftheeconomicsofstreamingischangingpopsongsdontstopmenow (accessed 24 April 2022).

TikTok (2023). Creative Tips to Drive Performance. www.tiktok.com/business/library/Auction_Ads_Creative_Tips.pdf?ref=buffer.com (accessed 20 June 2023).

Yoo, N. 2017. Kanye's Life of Pablo Becomes First Streaming-Only Album to Go Platinum. *Pitchfork*. https://pitchfork.com/news/67861-kanyes-life-of-pablo-becomes-first-streaming-only-album-to-go-platinum/ (accessed 28 November 2021).

VIDEOGRAPHY

Sound Field. 2019. What is the Spotify Sound? *YouTube*. https://youtu.be/hnfTaqGFW8M (accessed 20 June 2020).