Central Lancashire Online Knowledge (CLoK)

Title	The Futurism of Hip Hop: Space, Electro and Science Fiction in Rap
Type	Article
URL	https://clok.uclan.ac.uk/22959/
DOI	https://doi.org/10.1515/culture-2018-0012
Date	2018
Citation	de Paor-Evans, Adam (2018) The Futurism of Hip Hop: Space, Electro and Science Fiction in Rap. Open Cultural Studies, 2 (1). pp. 122-135.
Creators	de Paor-Evans, Adam

It is advisable to refer to the publisher's version if you intend to cite from the work. https://doi.org/10.1515/culture-2018-0012

For information about Research at UCLan please go to http://www.uclan.ac.uk/research/

Research Article

Adam de Paor-Evans*

The Futurism of Hip Hop: Space, Electro and Science Fiction in Rap

Abstract: In the early 1980s, an important facet of hip hop culture developed a style of music known as electro-rap, much of which carries narratives linked to science fiction, fantasy and references to arcade games and comic books. The aim of this article is to build a critical inquiry into the cultural and socio-political presence of these ideas as drivers for the productions of electro-rap, and subsequently through artists from Newcleus to Strange U seeks to interrogate the value of science fiction from the 1980s to the 2000s, evaluating the validity of science fiction's place in the future of hip hop. Theoretically underpinned by the emerging theories associated with Afrofuturism and Paul Virilio's dromosphere and picnolepsy concepts, the article reconsiders time and spatial context as a palimpsest whereby the saturation of digitalisation becomes both accelerator and obstacle and proposes a thirdspace-dromology. In conclusion, the article repositions contemporary hip hop and unearths the realities of science fiction and closes by offering specific directions for both the future within and the future of hip hop culture and its potential impact on future society.

Keywords: dromosphere, dromology, Afrofuturism, electro-rap, thirdspace, fantasy, Newcleus, Strange U

Introduction

During the mid-1970s, the language of New York City's pioneering hip hop practitioners brought them fame amongst their peers, yet the methods of its musical production brought heavy criticism from established musicians. The origins of hip hop music are curiously contradictory and tautological at the same time. As hip hop culture founded a series of unwritten rules, the elements of hip hop music placed emphasis on style and originality, despite its apparent magpie approach in stealing complete sections of other kinds of music. The pioneering DJs of hip hop culture experimented by mixing existing records from genres as diverse as electronic synth-pop (such as Yellow Magic Orchestra) to progressive rock (such as Babe Ruth) to create the vibe of hip hop music, while the original rap emcee emerged as a host for the DJ's skills.[1] Although many pioneering emcees elected to remain as live performers and only occasionally recorded vocals (for local mixtapes or radio stations), there were others who desired the chance to release a record. By 1980, the disco-rap era had arrived, and artists who were fortunate enough to sign a record deal were usually required to layer their vocals and cuts over a backing track. This was often provided by a house band who would emulate the extended funk and disco breaks of the DJ's performance to evade direct copyright infringement,

---

[1] Emcee, or M.C. (Master of Ceremony), is the original name given to rappers. Many old school hip hop heads will favour using this term rather than rapper, as the emcee would host the party, build hype and atmosphere as well as recite rap lyrics.

---

*Corresponding author: Adam de Paor-Evans, Principal Lecturer in Cultural Theory, Faculty of Culture and Creative Industries, University of Central Lancashire, Preston PR1 7HD, E-mail: arhevans@uclan.ac.uk

a notable approach strategic of Sugar Hill Records and the empire of Peter Brown.[2] However, by 1982 there emerged another possibility to make records, which was to work with producers developing the electro sound. A surge of extraordinary electro-rap records challenged these new music genres of rap and electro, and the resulting hybrids of both forms of music affirmed hip hop's position as a broader cultural bricolage and provider of counter-narrative to the music trends of the time.

The emergence of electro-rap signifies the arrival of particular music agendas and directions for certain artists; but moreover, and what is of primary concern in this study is the impact and importance of science fiction embedded within a large number of electro-rap records produced between 1982 and 1985. Three exemplars from this period are "Jam on Revenge" by Newcleus (1983), Captain Rock's "Cosmic Blast" (1984), and "Transformer" by M.C. Craig 'G' (1985). The relationship between science fiction and electro-rap is significant as it furthers our understanding of hip hop during this period and its relationship with the shifting social and political culture of technology. Of further concern is the continuation, sustaining and increasing the value of the science fiction agenda throughout hip hop's trans-global lens, the most recent of which will be explored is "#LP4080" by Strange U (2017).

The aim of this article is to build a critical inquiry into the previously unexplored value of electro-rap and the cultural and socio-political presence of science fiction and its associated spirituality as a driver for hip hop from the electro-rap era to its prospective sounds. The work seeks to instate the impact of the electro-rap era as paramount to the evolution of hip hop and broader, future cultural concerns. This inquiry is contextually anchored in relation to Afrofuturism and the concepts therein connected to technology, art, culture, science fiction, mythology and fantasy, and is further framed by espousing and extending Paul Virilio's theories of the dromosphere (*Negative Horizon* 141) in relation to Manuel DeLanda's reevaluation of Deleuze's assemblage theory (DeLanda, 15-16). An analysis of semi-structured interviews conducted during October 2017 and December 2017 with Cozmo D of pioneering New York group Newcleus and Junior Disprol of Welsh underground group Dead Residents adds an ethnographic approach within the methodology which is crucial in revealing and affirming the hidden aspects of science fiction and its part in hip hop's history. This ethnography is crucial to the methodology as it also begins to reveal the much-underexplored relationship between hip hop and arcade gaming. Finally, the article challenges the one-dimensional perception of science fiction-based hip hop and concludes by declaring the value of spirituality, technology, and science fiction and offers specific directions and projections for the future within and the future of hip hop, and its future impact on broader culture and society.

Trans-cultural Express

Electro, as an emerging genre of dance music in its own right, was perfectly placed to provide the musical backdrop for certain emcees. In its form as dance music, electro can be traced back to Kraftwerk and Yellow Magic Orchestra (both bands produced significant work during the 1970s), and the Roland TB-303, TR-808, the TR-727 and TR-909 were the machines responsible for the revolution of electro-rap music of the 1980s.[3] The clearest evidence of consistent electro-rap crossover is present in the music of Mantronik and MC Tee (as Mantronix) and Mantronik's collaborations with Just-Ice and T-La Rock, two hard-hitting Bronx emcees, the result of which was pure imaginative hip hop music. However, before Mantronix the true electro-rap pioneers Newcleus arrived, the brainchild of Ben "Cozmo D" Cenac, and the 1983 line-up included Chilly B, Nique D, and Lady E. Although "Planet Rock" by Afrika Bambaataa and Soul Sonic Force (1982) became anthemic largely due to Arthur Baker's production techniques and the appropriation of Kraftwerk's "Trans-Europe Express," Newcleus wrote the first truly electro-rap full album. Despite the existence of decisive conflicts between Sunnyview Records and Newcleus regarding the content, mixing and post-production

---

2 Peter Brown owned and co-owned multiple record labels responsible for many disco-rap records, in particular, Golden Flamingo Records, Sound Of New York USA, Queen Constance Records and Harlem Place Records.

3 It can be argued that the first electronic music was produced by Edgard Varèse in his "Poème Électronique" from 1958, a piece related to the architecture of the Philips Pavilion at the Brussels World's Fair, designed by Le Corbusier and Xenakis, to offer a pioneering virtual and multi-media experience (Mondloch, 58).

results, the album "Jam on Revenge" made a significant impact to a global audience who were captured by Newcleus' image as well as their path-breaking sound.

The debut album "Jam on Revenge" was released in 1984, when full hip hop albums by a single artist were still uncommon. Following the success of the songs "Jam on Revenge", originally released by Mayhew Records in 1983 under the artist name Newcleus Featuring Cozmo and The Jam-On Production Crew, and "Jam on It" (Sunnyview, 1984), the album embodied fantastic artwork in the style of a comic book. "Jam on Revenge" was not the first to take this visual approach—Afrika Bambaataa and Soul Sonic Force's single "Renegades of Funk" from 1983 depicts the members of the group as superheroes bursting through a brick wall (Figure 1).

Figure 1. Front cover of "Renegades of Funk" illustrated by Bob Camp. Photograph by author.

This sleeve design also nods to the comic book cover by the inclusion of its branding stamp Tommy Boy, "Issue #1 it's working!" and four miniature stamp portraits of Afrika Bambaataa, Mr. Biggs, Pow Wow and M.C. G.L.O.B.E. (Tommy Boy records, 1983) located in the top left, similar to those by Marvel/D.C. Comics. This cover was drawn by Bob Camp (Marvel Comics) with lettering by Pete Friedrich (Look Mom, Comics!), who were appointed to create that exciting, superhero stylistic visual. Returning to "Jam on Revenge," the cover design is not superhero-esque, but rather interplanetary (Figure 2). Hovering over a deserted landscape, three members of Newcleus are aboard war-torn spaceship N-37B, and whilst displaying scars of battle, they remain smiling as they jam with synthesisers, keyboards and drums. Chilly B is positioned adjacent to the spaceship, playing bass and riding some species of reptilian alien that squawks "WIKKI! WIKKI!! WIKKI!!!"[4] Three Bboys are depicted in front of the vehicle, defying gravity, in backspin, turtle and swan-dive dance freezes. A large purple planet looms in the background, in close orbit to this barren land.

---

4 "Wikki wikki wikki" is the chant from the song "Jam On Revenge", imagined to be allied aliens to the Newcleus crew.

Bob Camp and Pat Redding were the appointed artists for this cover, and with experience of drawing and inking comic book covers for Marvel Comics (and in Bob Camp's case the "Renegades of Funk" sleeve the previous year) they produced a science fiction spectacle that captivated the spirit of the sound and creative approach of Newcleus.
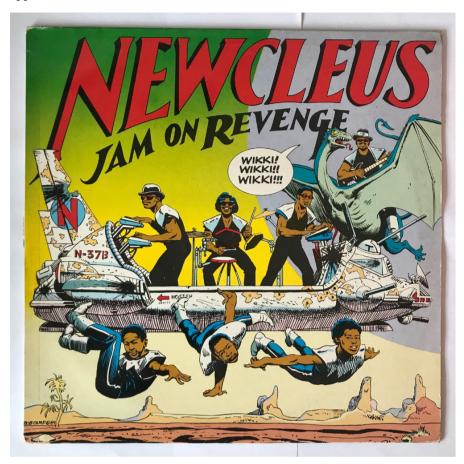

Figure 2: Front cover of "Jam on Revenge" illustrated by Bob Camp. Photograph by author.

This visual delight was not only for Newcleus' consumers and fans, as Cozmo D recalls: "I loved it; I was into comic books, I knew who Bob Camp was, he did Conan (The Barbarian) and I loved Conan. I was thrilled that an actual Marvel artist was doing our albums" (Cozmo D, i/v, Skype, 12th October 2017).

Decoding and Recoding

The two Newcleus albums "Jam on Revenge" and "Space Is the Place" (1985, sharing the same title as Sun-Ra's 1973 album) are epic adventures—a testament to the power of the music despite Newcleus having no control over the flow, arrangement or compilation of the first album's running order. "No More Runnin,'" "Destination Earth (1999)" and "Automan" appear as dub versions, with over half of the vocals and instruments cut by producer Joe Webb and mixed by Jonathan Fearing.[5] Additionally, all the songs with the exception of "Jam on It" were conceived and written as the group Positive Messenger, before their Newcleus

---

5 Dub versions of songs continue the ethos of dub reggae, which is both a practice and music whereby certain tracks are heightened, tested and experimented with or withdrawn from the mix. Originally a practice to trial sounds and their limits, dub became a staple music form following the mixing practices of King Tubby, with the first dub LP arguably accepted as "Blackboard Jungle Dub" (1981) by The Upsetters (Katz 177). The dub version then spread to other forms of Black and dance music, most notably electro, hip hop and house.

incarnation. Webb and Fearing wanted to produce a pure dance music album (which would have excluded as many vocals as possible favouring dub versions), a concept much different from that of Cozmo D, whose vision was: "to produce hip hop: music that said something and be musical." What becomes revealing here is that despite Newcleus' lack of executive control, one can still feel strong emotional connections between the songs. As Positive Messenger, Cozmo D states: "We were trying to inform the world and spiritualize the world, and that's what you're feeling in the connection between 'Automan' and 'I'm Not a Robot'" (Cozmo D, i/v, Skype, 12th October 2017).

The spiritualization and science fiction agendas are strongly linked when Afrofuturism is drawn into the discussion. Scholars have defined Afrofuturism differently since the inception of the term 26 years ago by Mark Dery,[6] but all documented definitions generally attempt to locate the phenomena of Afrofuturism. Interestingly, "neither Dery's nor Nelson's definitions are explicitly directed towards the sonic" (Steinskog 5); Nelson's definition being an umbrella term, and one which encourages inquiry and debate: "Afrofuturism can broadly be defined as 'African American voices' with 'other stories to tell about culture, technology and things to come'" (9). Nelson asserts that creative practitioners "reflect the long and impressive history African diasporic culture, but also push the envelope of these traditions" (35), in order to produce visionary work that speaks to the past and the future. Here is my offering to consolidate and locate these various definitions: Afrofuturism is a contextual counter-position to mainstream western culture that reevaluates and reappropriates art and technology, within a frame that draws upon various concepts from the past in order to project a representation of the future. Afrofuturism is theoretical, practical, spiritual and metaphysical, and for me operates within an idea of time-as-palimpsest, battling against the linearity of western convention, and potentially is as much noumenon as phenomenon. In this line of thinking, the electro-rap pioneers challenged new and future narratives and technologies of the time through the spatial stories of the arcade game, the comic book, the global politics of information satellites, and Reagan's Star Wars program[7] through their own technologically advanced sonic responses.

My proposal of time-as-palimpsest responds to Jeremy Till's concept of "thick time" (95) as a point of departure. In relation to the socio-spatial, Till's thick time is a phenomenon of critical assembly, whereby future projections and experiences of the past cyclically entwine in order to comprehend the contingencies of architecture, much in the same manner as the multiplicity of Afrofuturism yet anchors the time-space and game-space of engagement with music and gaming. Time as palimpsest is also a form of cultural assemblage which requires continual revaluation depending on its components, which in turn are overlaid and tested through time, which simultaneously reveal suppressed ideas and new discoveries. Time-as-palimpsest illustrates the girth of Afrofuturism and its transcending approach to time, space and location vis-a-vis its cultural interests and explores the past, present and future simultaneously. The historical, political and social constitutions located in the past can coexist within the present through connective and creative practice, utilising and reconfiguring available technologies and techniques and also inventing new modes of practice, techniques and technology. This realm of multiplicity thickens space as well as time, and Afrofuturist projects with varying degrees of tangibility can exist through the space/time continuum in multiple locations, in imagined, real and alter-real places on earth and beyond, projected into the future with equal substance. Afrofuturism's paramount role is to theoretically anchor the cultures, experiences and practices of the Black diaspora in projecting forward into the future. To this end, it is critical to understand Afrofuturism as subaltern and avant-garde, reflective on the past, occurring in the present and projective to the future and only tenuously connected to the European futurist movement of the 1920s.

Science fiction percolates consistently through electro-rap, and the Afrofuturist agenda resonates greatly when in discussion with Cozmo D. On the subject of sci-fi, he reveals:

I've always been interested in sci-fi, that's always been my thing, I struggle sometimes whether I merged it consciously or subconsciously, sometimes I think I did, other times I think, no, it was the instruments that I had, I was doing all this music basically myself, I had originally tried to play guitar, and if I had stayed a guitarist, especially back then, I wouldn't have been able to do that stuff, but I lived in the golden era when drum machines, the (Roland TB-) 303 came of age, and

---

6 Dery first used the term in 1992, which was affirmed in Nelson, 2000, and broadened accessibly in Womack (2013).
7 For example "Ray-Gun-Omics" (1983) by Project Future, interestingly backed with "Arcade Lover."

that enabled us to make the creations that we did. I don't know if the sci-fi led me to the technology or if the technology led me to the sci-fi, because of the sounds, you know, the (Roland TB-) 303 doesn't sound like drums. I tend to think that the technology had as much to do with it as my love of sci-fi (Cozmo D, i/v, Skype, 12th October 2017).

This interrelationship between artist, music technology and science fiction from Cozmo D's experience is crucial to discuss, for here an unexplored creative methodology may reside. The presence of material sonic objects such as the drum machine and the synthesizer was increasing, and the rising materialism of hand-held, bodily gadgets and gaming devices (The Tomytronic 3D released in 1982, for example) cultivated a science fictional world which tangibly existed within the space of the factual world, often blurring the boundaries between. This was a perfect context for the Afrofuturist approach to electro and hip hop. A critical interpretation of DeLanda's decoding-recoding of Deleuze's assemblage theory mobilises this exploration. DeLanda attests that a network of assemblage acknowledges a distinction between material and expressive components and qualities of stability and shift (29-31). This I will extend and suggest that any network of assemblage containing material and expressive components might contain live components in the form of beings. The artist-composer (being), of electro-rap controls but also responds to the components of technology, the synthesiser, the mixing board, and other hardware. In the same sphere, the stories and narratives of science fiction influence the artist, and triangulated with technology, the artist produces the music, positioned in the cultural context of sci-fi, and audible art form that presents an alternate realism from the use of synthetic sounds of the drum machine offers an alternate realism operating within the realms of both fantasy and reality. The resulting product, as an audible recording, becomes a complete reification of this creative process and confirms a new form of practice was developed, one of decoding sound and recoding music.

Fantasy, Reality, Sound and Music

The notion of fantasy as reality is an idea presented by Parliament in their 1977 single "Fantasy is Reality." The song exposes the fallacy of American life: the American dream is not a tangible or reachable reality for many American citizens, and conventional American rhetoric attempts to erase African-Americans of their history and heritage. To combat this fallacy, one needs to remind oneself of the realities of life, which must constantly be reframed and reiterated (emphasised as the critical four-line verse is repeated eight times) drawing upon the wise words of the protagonist's Granddaddy. This offers some clues to the critical relationship between reality, fantasy and science fiction but additionally the crucial idea that in order to project the future and frame the present, the past requires interrogation. George Clinton's Parliament-Funkadelic is the first set of musicians that Cozmo D cites when discussing musical influences:

On the futuristic thing, my biggest influence was probably George Clinton, Parliament and Funkadelic. I was a funk nut, so anything from Herbie (Hancock) to Jimmy Castor, George Duke, Stevie Wonder, anything on a funk-synth edge, I was into, and musically those are my main influences. Now if you want to talk sound-wise, the future sounds of the music, then you have to talk about Giorgio Moroder, Jean-Michel Jarre, Kraftwerk, Gary Numan, and that end (Cozmo D, i/v, Skype, 12th October 2017).

To separate the idea of sound from the idea of music is a fascinating way to frame influences and forms, a critical part of a creative process in itself. The funk sounds of the artists Cozmo D cites are globally renowned and have themselves reinvented their sound and image in response to their own practice and outputs and broader culture. With Parliament, Funkadelic, and other related projects Brides of Funkenstein, The P-Funk All Stars, The Parliaments and solo releases, George Clinton has produced over forty albums and interestingly, "Dog Talk" by K-9 Korp featuring Pretty C (one of Clinton's alter egos) featured on the inaugural compilation "Street Sounds Electro 1" (1983). Clinton also flirted with electro further on his 1986 album "R&B Skeletons in the Closet." George Clinton's various audio reincarnations are also echoed within his visual presentation and of particular relevance here "Mothership Connection," "The Clones of Dr. Funkenstein," and "Funkentelechy Vs. The Placebo Syndrome" all express visual representations of space-age science fiction on the album artworks; UFOs, cryogenic cloning, and energy fields radiate out

from beings in their multitude. Science fiction also features heavily on many of Clinton's other productions, but it is within these three that the space-age is exemplified.

Herbie Hancock also experienced longevity and an extensive discography, and with an excess of seventy albums, repositioned his sound by self-reflection and the embracing of cultural moments, music movements, and technology. It was Hancock's consummate albums "Head Hunters" (1973), "Thrust" (1974) and "Man-Child" (1975), loaded with deep, complex jazz-funk rhythms that influenced the music of Newcleus in a broader sense, and akin to the Parliament albums, the cover designs are adorned with man-machines, psychedelically coloured spaceships and alien landscapes. The Afrofuturist visual narratives extend into his adopting of cutting-edge music technology in "Future Shock," his first electronic jazz album, which introduces a diversion in sound from his usual arrangements. This album ideologically encapsulated the space age, which he revisited on "Sound System" (1984) and "Perfect Machine" (1987), incorporating electronic instruments such as the infamous DMX and other synthesizers and emulators, as well as crossing over into the hip hop world by recruiting turntablist Grandmixer D.St., a pioneering move which, under his judgement as a jazz great, illustrated to audiences that the turntable was indeed an instrument, and the DJ a musician. Stevie Wonder, Jimmy Castor and George Duke all positioned themselves within various cultural frameworks throughout their careers, and, have all released records that had been drawn upon as part of the hip hop soundscape since the mid-1970s by DJ Kool Herc, Grandmaster Flowers, and Grandmaster Flash. It is no surprise these artists fall into Cozmo D's pool of influences, and as a maker of electro-rap, he insists "I'm a Bboy, we are hip hop" (Cozmo D, i/v, Skype, 12th October 2017). This emphasises the value of electro within hip hop culture, as all too often the significance of electronic music in the formative years of the hip hop canon is relegated to a position of less value than its funk counterparts.

Turning attention to Newcleus' sound influence, Giorgio Moroder, Jean-Michel Jarre, Kraftwerk, and Gary Numan were all hugely successful artists, and all championed the technological music innovations of the time, employing a vast range of drumulators, synthesisers and in the case of Kraftwerk, some custom-built electronic instruments. It is the sounds created that forged the influence rather than the music and the discourse between sound, music and artist that informed the futuristic sci-fi outputs of Newcleus: "with me it was a merger of two things, it was a merger of sound and music, where the music was funk and jazz, and the sounds were synths, progressive, electrical sounds really set me off" (Cozmo D, i/v, Skype, 12th October 2017). Again, this is an important revelation; not only for the sound versus music dialectic which is interesting in itself but in how this dialectic shifted from a musical and cultural juxtaposition to frame a new paradigm for electro-rap.

Interplanetary Funk

In "Destination Earth (1999)" the lyrics describe Earth as the "place of my birth," but as the narrative develops the listener discovers without love there is nothing worth staying on Earth for, so the protagonist decides to take a trip to another space and time in a quest to find love, reminiscent in part of Edward Taylor's hero's journey (Segal et al. 4). The romantic notions of the space-time traveler willfully navigating the cosmos at high speed are in abundance in electro rap, exemplified in much lyrical content, often driven by vocoder sound bites and space age effects (rocket thrusts, hyperspace, lasers), and these narratives and additional atmospherics feature strongly in the work of Captain Rock. NIA Records released six singles by Captain Rock between 1982 and 1986, the first four of particular interest to this article. "Cosmic Glide" (1982), "The Return of Captain Rock" (1983), "Captain Rock to the Future Shock" (1984) and "Cosmic Blast" (1984), all produced by the Aleem Brothers, are clearly located along the terrain of the space-age traveller. In each of these songs, Captain Rock presents an alternative take to the traditional brag-rap formed around conventional sci-fi tropes,[8] the most recurring trope he exploits is one of the protagonist alien, sent to earth in order to bring enlightenment to the planet's citizens. This is not purely a narrative about a man from outer space or the future landing on Earth though; as the stories entrenched within these songs reveal

---

8 The brag-rap concept was created during the early disco-rap era, and is the cornerstone of rap content, particularly in the battle or freestyle context.

more about Earth and Earth's perception of otherness than about the alien protagonist, time travel and otherworldliness. Considering the quantum physics of time travel (and employing the anecdote of the time-travelling art critic), Deutsch and Lockwood maintain:

> Time travel appears to allow knowledge to flow from the future to the past and back, in a self-consistent loop, without anyone or anything ever having to grapple with the corresponding problems. What is philosophically objectionable here is not that knowledge-bearing artefacts are carried into the past- it is the 'free lunch' element. The knowledge required to invent the artefacts must not be supplied by the artefact themselves (377).

"The Return of Captain Rock," "Captain Rock to the Future Shock," and "Cosmic Blast" all allude to time travel, not purely through lyrics, but through a synergy with the sonics of the songs. In the semi-structured verses of "The Return of Captain Rock,"[9] the listener is informed that The Captain, as the nuclear starchild (with a nod to Clinton), is undertaking a lifelong mission to "rock you on down to the beat," but not until he has namechecked Earth-based states Carolina, St. Louis, Florida, Boston, Philadelphia, Atlanta, Detroit, and New York as nodes for hip hop activity. These concepts are expanded upon in "Captain Rock to the Future Shock" where a single narrative describes The Captain's dipship and its ability to travel to Venus, Mars and Pluto, before explaining how he came to be on Earth, landing in fact, in a San Franciscan disco which he effortlessly rocks once he has reassured the clubbers there is no need to be alarmed. This story arrogates the formative part in the Superman story where Kal-El is sent from Krypton to Earth, whereas "The Return of Captain Rock" adopts James T. Kirk's introductory "final frontier" speech from Star Trek, and these moments generate interesting juxtapositions within the human domain and broader popular culture of the period. At the same time, one is reminded of Sun Ra's spaceship in the 1974 film "Space Is the Place," and Stüttgen comments: "Interestingly, the spaceship seems to be driven by sound. In another scene, we can see Sun Ra playing keyboards inside the ship as if his improvisatory sound practice were the central way of navigating it" (134). "Sun Ra's space music flies far beyond space pop to become tone science" (Youngquist 177), and probing the music of Captain Rock further, on "Cosmic Blast" the soundscapes gather complexity with multilayered vocals, high pitched vocoders and bass heavy, reverberating drum patterns full, organic intensity strike similarities with Sun Ra's ship; the music of Captain Rock and the sounds of the dipship become inseparable. The continuing narrative extends as Captain Rock introduces the Cosmic Crew, and in particular, his DJ hailing from the Planet Galaxy. "Cosmic Blast" involves the most complex rhythm arrangement and extensive rap of his records, in addition to the rich percussion, the song is laden with multilayered scratches from DJ Darryl D and Richie Rich's beatboxing, which propelled the notion of the electro-rap record into the realm of true hip hop. Whilst the songs promote the notion of time travel, the representations of the journey and the experience carried by Captain Rock brings discourse to earth, rather than an embodied knowledge, or a "free lunch." The nomadic, emotional and spiritual chronicles of Captain Rock and Newcleus preceded a superfluity of character-based electro rap records, two of particular note are "Transformer" by M.C. Craig 'G' and Kid Frost's "Terminator" (1985). These records are important markers in this discussion as they signify a shift from what I would define as the artist-as-character to the character-as-metaphor, and the beginning of themed records which were positioned alongside the artist's other outputs, but not wholly consumed them.

The Lens of Artist-as-Character, Character-as-Metaphor

The artist-as-character scenario occurs when artists locate themselves within the terrain of the imagined. Typically, in electro-rap, this is the science fiction or fantasy context, and the artist devises a persona, usually

---

9 The lyrics for "The Return of Captain Rock" were attributed to Dr. Jeckyll and Mr. Hyde, prestigious hip hop artists of the time who, although embarked less on in the domain of alien sci-fi, re-examined and reframed the characters from Robert Louis Stevenson's 1886 sci-fi exemplary novella 'Strange Case of Dr Jekyll and Mr Hyde'. Captain Rock was originally Dr. Jeckyll and Mr. Hyde's DJ before landing a record deal as Captain Rock via auditions held by the Aleem brothers. Although the science-fiction angle was Aleem's idea, it is interesting to note that Captain Rock's previous crew included a member called "MC Starchild," hinting to the character created by George Clinton.

as the key protagonist, but also as protagonist-antagonist (which may include alter egos and nemeses). This terrain may consume a whole album, series of releases or an entire career, such as the variable cases or Newcleus and Captain Rock discussed above. One further exemplar of the artist-as-character is Michael Jonzun's Jonzun Crew, and their debut album "Lost in Space" (1983), a six-track production which launches with the popping "We Are The Jonzun Crew," synth-heavy and loaded with mischievous, unnerving vocoder which reiterates throughout the song and constantly reminding the listener that they are here to rock, and they hail from "Planet 2." The next three songs "Space Is the Place" (akin to Newcleus, reimagining the title from Sun-Ra), "Electro Boogie Encounter" and "Ground Control," continue in a similar style, before "Space Cowboy" draws upon western myths associated with cowboy tales, but here, in the domain of space, the protagonist space cowboy "from the crew Jonzun" raps about laser guns as he travels through galaxies. This appropriated narrative is also reframed musically, again delivered over a synth-electro framework, but is also populated with echoing fiddle hooks, shrieks of "Howdy!" yodelling, and "yippee-i-aye" call and response phrases, drawing on early jazz motifs. This song is the album's most descriptive, before it closes with "Pack Jam" (also relating to the arcade game, discussed in the next section), which returns to the minimal vocoder vocal, repeating throughout "P-A-C-K, J-A-M," with warnings to "look out for the OVC," who we learn is The Outer-space Visual Communicator.[10] The artist-as-character also exists within unique singles, "The Knights of The Turntables" (1985) by The Dynamic Duo featuring Shaquan, presents a complete story (framed in the third person) of the battling knights where cuts, scratches and moonwalking are battle practices, delivered over tough electro beats. Although more mythology than sci-fi, this fantastical account contributed to the emerging discussion about the power of the tools and practices of hip hop. The narratives in these songs speculate, and through their hypotheses embody attributes of epistemology. De Smedt and De Cruz suggest that: "Speculative fiction combines the advantages of near-future and distant-future prospection: It retains the details from the former and the creativity found in the latter" (61).

In "Transformer,"[11] M.C. Craig "G" frames the character-as-metaphor directly within the first-person brag-rap, positioned in relation to Transformers most obviously in the chorus.[12] A mimicked vocoder drop of Generation 1's Transformer commercial slogan is preceded by Craig "G"- boasting about winning battles, metaphorically stating "when it gets cold I will get warmer," and changing the cut and the beat as if he were a Transformer. Kid Frost's "Terminator" (1985) follows a similar approach;[13] and claims to be "the power generator," the "beat exterminator," and "the emcee terminator" amid dreamy synth chords and vocoder.[14] These lyrics slide the artists into a temporary realm which occupies both the fantasy of the imagined metaphorical situation and the realism of the cultural practices of hip hop. These records as emergent cultural productions of hip hop clearly linked three phenomena: the origins of the brag-rap from the former disco-rap era, the futuristic soundscapes of electro, and the Afrofuturist narratives of space, sci-fi and fantasy. Furthermore, these amalgams anchor these phenomena within the broader scope of popular cultural consumerism.

Arcades, Videogames and the Thirdspace-Dromosphere

At the close of the 1970s, the beginning of the golden age of arcade games offered a new, exciting form of entertainment and a break from the real space of everyday life. Players assume the role of a key character in the game, absorbed within not only the spatio-visual but also the sonics as the game progresses. Summers states that: "The video game is necessarily a technological medium" (15), and that musically "opening

10 The single release of this song is titled "Pack Jam (look out for the OVC)", yet on the album, it is simply named "Pack Jam."
11 It is interesting to note that Marley Marl produced "Transformer," and also worked on "Cosmic Blast" and "Captain Rock To The Future Shock."
12 The Transformer action figures were first launched in 1984 and experienced incredible success, being the highest selling toy in the United States for Christmas 1984.
13 Produced by The Alien Wizard (David Storrs) of The Glass Family, who additionally produced electro-rap with Ice-T (Reckless, 1984), and the fantastic mythological collage "Itchiban Scratch" (1984) for Chris "The Glove" Taylor.
14 The sci-fi movie *The Terminator* was released in 1984 and grossed a global box office figure of $78.3 million (http://www.boxofficemojo.com/movies/?id=terminator.htm retrieved 20.12.17).

sequences are of high priority for the game producers and are allocated significant audio budgets in order to provide musical spectacles that seek to encourage the player's engagement with the game" (17). The sonics of arcade games are critical to the seduction of the players as they become absorbed within the game-space. Almost exclusively space-time navigation is critical within the domain of the game, and through the spatial practice of gaming—seemingly virtual—new territories are experienced and new identities simulated by the gamer. During the electro-rap era Pac-Man, Q*Bert, Defender, Phoenix and Scramble were present in most game arcades in the western world. As well as Jonzun Crew's "Pack Jam," Sid Wallace & Friends made "King Pac," whilst The Packman released the sinister "I'm The Packman (eat everything I can)" (1983), and two years later, "Video Games" (1985) by Seduction explored human relationships within the concept of gaming, and 19ᵗʰ Fleet's "Star Raid" (1985), prophesized that "man will no longer play videogames for fun." This topic continued sporadically, from DJ Jazzy Jeff & The Fresh Prince's "Human Video Game" (1988) to "Smash Robot Vs. Pacman Ghost" (2008) by Dead Residents. On discussing the latter, Dead Residents member Junior Disprol explains: "The song is basically back and forth jousting and tourney style shit kicking," and continues by averring the value of the video game:

> As 1970s kids, we grew up on hand held arcade games like Frogger, Space Invaders, LCD games and Tomytronic before getting the Amstrad CPC464 and rinsing R-Type, 1942, Operation Wolf and Chuckie Egg. We don't play, and I live to hear the tape loading data scream of my adversaries. During my most culturally absorbent teenage years, hip hop was playing on the 3D Super Woofer while I kicked arse on Yie Ar Kung Fu (Junior Disprol, i/v, Facetime, 20ᵗʰ December 2017).

Indeed, within my own practice the videogame metaphors appear almost by osmosis: "Losing lives on the street, like you're playing Frogger, I pack; my pac-a-mac, to keep dry in this grizzly weather, plebs donning pleather, plastic cover lovers," and: "Defending- tors and shores in these Astro Wars, where were the potentates to proffer applause? You Scramble- to get together I invade lazily" ("Not a Love Song," Specifik and Project Cee, 2017). The cultural significance of the videogame within hip hop requires a broader and extensive study for the future as many electro-rap lovers equally became fascinated with videogames, as Disprol recalls:

> My folks used to have a little chalet when I was young at Lavernock Point near Penarth. There was a table top Galaxians at the clubhouse, and I was fine on there with a handful of 10p's and a coke (Junior Disprol, i/v, Facetime, 20ᵗʰ December 2017).

The transitions between real space and game-space require the player to operate within and between two space-speeds, and at this point, I will introduce the idea of the dromosphere, a theory devised by Virilio which in my view shares critical explorations of the spaces of technology with Afrofuturism. In spatial terms, the dromosphere is a physical sphere where speed of evolution and technological advances place humanity at risk, and the related concept of picnolepsy is the perceived speed and immediacy of the world within which one is at a particular moment. Virilio describes the archaic dromosphere as a collection of walls, gates and other boundaries acting as obstacles to confront speed, where at these points a slowing down occurs (*Speed and Politics,* 29, 31). When nomads (whose primary concern was safeguarding plateaued space) engage with these situations, an acute change or morphing of a mind-speed takes place (Deleuze and Guattari, 158). As humans attempt to absorb the thickness of information contained in the contemporary digital city, real time continues as efforts are made to make sense of urban scale digitised advertisements, virtual imagery, lights, sounds, alerts and other digital structures intended to catch attention. Unlike the arguments in Mitchell's *City of Bits* which presents the digital city as a comprehensively complete assemblage, pulled together in technological unity as "digitally mediated environments" (5), in the physical-material-invisible dromosphere, obstacles become voids and spaces become solid. In combat with the hand-held digital device, this information sporadically deconstructs the conventional rhythm of the city. This is an intriguing and complex space-time concept, but what if the experience of the videogame and electro-rap are introduced to this dynamic?

To address this question, the discussion must return to the artist-character-context triad, drawing further upon Afrofuturist thought. At this point, it is critical to affirm that the artist, character and context

exist very much independently and in reality, despite their presentation as imagined effigies and places. In other words, the projected narratives embedded within the electro-rap records previously discussed are real in the sense that they are hugely significant in terms of broader society, and this requires explanation. Rollefson explores this idea within the work of ex-Ultramagnetic MCs member Kool Keith (100-101). Assuming a myriad of pseudonyms and characters and by appropriating the polarised images associated with the cultural normalising in fantasy and sci-fi, Kool Keith presents the absurdities of life, its western rhetoric and unbalanced dialectics, in particular within media representations. Culturally, Black diasporic traditions span the technologies associated with science and art, and variably devise interdisciplinary methods of creative practice. This synthesis of approaches becomes richer as it draws more intellectually and laterally from its own sources and those of other cultures. It is crucial to understand the role of Afrofuturism not as simply a method of appropriation for the production of sci-fi, fantasy or mythological adventure, thus generating diversion from a point of concern; but as both theory and practice that supports interrogation of the state of existence across time, certainly in shaping the future, and also in ensuring the past is reified appropriately and the present is critiqued rigorously. This, in turn, provides an opportunity for a close reading of the habitus and its associated distinctions within the Black diaspora and its relationship to appropriated white histories. I refer particularly to Bourdieu's concept of habitus, whereby:

> It is the relationship between the two capacities which define the habitus, the capacity to produce classifiable practices and works, and the capacity to differentiate and appreciate these practices and products (taste) that the represented social world, i.e., the space of life-styles, is constituted (166).

The habitus of the Afrofuturist is this and more; in addition to Bourdieu's "two capacities"—the nature of that which is "classifiable" and the consideration of "taste"—the Afrofuturist's practice is able to develop with distinction a recoded habitus based on experience, context and decoding. In the case of the artist-character-context triad, it is the guise of the practitioner stepping into an assemblage of otherness that presents the opportunities for furthering the habitus inquiry.

Returning to the question concerning the dromosphere of the videogame, consider the space of the scrolling spacescape in Scramble or Defender. During the game, players project an imagined persona into the spaceship, perceive the other spaceships as the enemy, and act and react to shoot them first and achieve the goals set through each phase. Enemy ships, as well as various other hazards and obstacles (doodlebug ships, terrain-launching rockets, and in particular hyper-space-enabled ships), flash across the screen to intentionally cause distraction during the journey through these spacescapes. A double-dromospheric experience ensues, in part virtual within the digital space of the game, but also in part spatial in the physical-material world. The player is at once striving to cope with these digital diversions which inherently shift the speed of the game space, and simultaneously engagement with the games console itself diverts the player from the pace of the physical-material world. At certain points, this double-dromospheric encounter requires the player to invent strategies for handling these extra-phenomenological experiences.

Layering the above analysis of the videogame further into the narratives, sounds and music embedded within electro-rap, a thirdspace-dromology is revealed. This is an incredibly powerful combined condition, which I will define as follows: The firstspace dromosphere is the physical-material space which humans navigate, defend and attack (to greater or lesser degrees of intensity) throughout everyday life (as described above). The secondspace dromosphere is then that of the creative process of producing a piece of electro-rap, whereby the strategic manoeuvers are slower, as experimentation and discourse occur between the artist and the hardware/software. Adding the dynamic of writing, rehearsing and recording raps, this assemblage of production will momentarily result in dromospheric experiences within the space of the production line. If, in the case of Newcleus for example, inspiration for songs is sourced from two explicit cultural and distinct categories 1) sound (Giorgio Moroder, et. al.), and, 2) music (George Clinton, et. al.), the resulting music of Newcleus has developed through a negotiation of sound and music, where sound is obstacle and music is travel. The thirdspace-dromosphere then occurs within the playing of the song itself, during which the listener sympathetically imagines the artist, character and context as a sonic-visual experience. This thirdspace-dromosphere also takes a departure from Henri Lefebvre's spatial triad, whereby lived space is

an ephemeral negotiation through spatiality (38-39). Added complexity occurs in songs where narratives are based on videogames, science fiction, fantasy and mythology, which in turn contain and reveal their own dromological experiences, often recounting tales of encounter, battle, conflict, pilgrimage, love and spirituality. The resulting experience is one of great multiplicity and poses a series of opportunities to critique broader society and advance thinking and action.

I Wanna Live on Mars

Through the embracing of Sun-Ra, Herbie Hancock, and Parliament-Funkadelic, the Afrofuturist agenda has been present in hip hop culture since its embryonic years and continued to be explored through the lens of artist-as-character and character-as-metaphor.[15] "In Stereo" (1998) by RZA as Bobby Digital, Deltron 3030's self-titled album (2000), "This Is What You Made Me" (2003) by The RAMM:ΣLL:ZΣΣ, and Czarface's "Every Hero Needs A Villain" (2015) are four exemplary long players that execute certain Afrofuturist approaches since the arrival of the hip hop album as a standard artist's output.[16] Deltron 3030[17] is such a concept album reminiscent of "Jam on Revenge" in the sense that it is delivered as observer-participant imagined ethnographic study. On "Turbulence (Remix)," Deltron Zero describes life in the year 3030, where the superrich consider themselves the "pure breed," ordinary humans experience turbulence and murder on the streets, and Deltron Zero exclaims "Fuck Earth, I wanna live on Mars!" in order to break away from dumb complicit society. The main songs are arranged around eight skits, the most unnerving of which is the melancholic, lazy tones of "The News (A Wholly Owned Subsidary of Microsoft Inc.)." The album is a paragon of Afrofuturist thought, and whilst the concept of social commentary within science fiction is of course not new, Deltron 3030 communicate resistance and reveal the invisible. The album relocates hip hop practice into the realm of communicology and aims to "understand human discourse and interaction as embodied practices that situate people within their worlds" (Deluiis and Lohr, 167), at a time when the internet was gathering momentum and increased global usage from 3.6% of the world's population to 5.8% during the year the album was released- an increase of over 100 million people.[18]

London-based Strange U capture the thirdspace-dromology within their 2017 album "#LP4080" which was eagerly anticipated (particularly by European audiences) following the reverberations of "EP #2040" (2014) and single "Dolph Lundgren" (2014). "#LP4080" casts a culturally wide net and references to swingbeat outfit Jodeci, nuclear power, spinning planets, gravitation, unknown specimens, Run-DMC, the future, face lifts, gamma rays, brain activation, sanatoriums, pyramids, and 8-bit splices, are all apparent within the opening song "Terminator Funk." These points of reference are layers within King Kashmere's raps with rigour and cynicism, which collectively address the broader societal problems of economic disparity and cultural complacency. On the sleeve, each song is represented by a hybrid figure; there is a black bear riding a motorcycle down the side of a lamb chop and various other montaged effigies including parts of reptiles, pigs, Kermit the Frog and Freddie Krueger. Hints to the illuminati, pyramids and the global banking system are signified, as are critical markers in the western and pre-western world such as nuclear bombs and ancient carvings. These visuals compliment the complex set of narratives within the lyrics, and audibly the music, adventurous, yet with space and silence, a component strongly relates to the electro-rap era some thirty years previous. Where Newcleus embraced the new material technology of the drum machine and developed the romance of the science fiction narrative, Strange U similarly represent

---

15 However, between the late 1980s and the late 1990s when sampled funk and breaks provided the backbone of rap music, science fiction narratives all but vanished from mainstream hip hop, returning after the demise of Wu-Tang Clan with RZA's reinvention as Bobby Digital.

16 Full electro-rap albums were few, and due to a range of social, cultural and economic circumstances the majority of electro-rap records were released as one-off projects or a series of singles, but from the late 1980s, albums became expected as the genre of rap music began to take its place as a major player in the global music industry.

17 Deltron 3030 is a supergroup consisting of producer Dan The Automator and Del Tha Funky Homosapien, who portrays the role of Deltron Zero.

18 http://www.internetworldstats.com/emarketing.htm and http://www.internetlivestats.com/internet-users/ (both retrieved 14.12.17).

and critique a contemporary future loaded with overdoses of nostalgia, techno-cultural motifs and instant gratification. Strange U's distillation of cultural components, decoding and recoding is a process that has led to its shifting the paradigm of hip hop in the UK and beyond.

Conclusions and Speculations: Futurism and the Future

In addressing the aims of this article, the position of electro-rap as cultural significant to the development of hip hop and broader societal concerns has been clearly demonstrated, and as a previously unexplored terrain has also led to the development of five future avenues for further study: the artist-character-context-triad, artist-as-character, character-as-metaphor, videogame and electro-rap, and thirdspace-dromology. Whilst these are interlinked to varying degrees, I believe each of these concepts deserves further research to affirm their position as theories in their own right- particularly as we exist now on the cusp of post-cyborgism. The futurists of hip hop need to inform science and society through these five future avenues. Annas suggests that "the new genetically engineered 'superior' human, will almost certainly come to represent 'the other'" (255), which can only ensue conflict and larger societal separation. The role of futurist hip hop artists must be to contribute to these debates by extending their criticality through heightened explorations of artist-character-context-triad, artist-as-character, and character-as-metaphor. The possibilities within these five future avenues can be developed within the palimpsest of time but focusing on the thirdspace-dromosphere, for me the most crucial of these. This is urgent not least because in the contemporary-future world the state of hip hop is under question: in the US and the UK, the recent rise of mumble rap and grime respectively has led to conflict with the hip hop fraternity, and not wholly at the fault of any genre's movement, and I am convinced this is due to hip hop's fragmenting over the past decade. On the one hand, perhaps hip hop should leave the mumble and grime rappers to explore their own world; on the other hand, it is disturbing that a majority of mumble and grime artists lack substance and depth in their lyrics and music and form no critique of the world around them. The avenues outlined above can offer a particular level of sophistication to the future of rap, and the power of science fiction (and its associated notions of fantasy, spirituality and mythology) as a driver for cultural exploration are crucial and far from one-dimensional or elementary social commentary. Science fiction allows for a deeper inquiry, production and reading of hip hop. If we as the hip hop community are to enter a form of cultural combat, then our battles need to be chosen with the negative facets of broader society and not within the hip hop world. Furthermore, we must equip ourselves with battle weapons that are culturally tested and not only based on skill and technique. By becoming comrades that understand, critique and challenge future dromologies, we may find we have more in common with the European Futurists than we first envisioned.

This formative study into electro-rap provides the platform for making visible these histories; deepening these theories and empowering the next hip hop generation to control their future and attesting that science fiction is not simply a diversion from but confronts and challenges the realities of everyday life. What began to be powerful in the electro-rap era was the production of a richer social commentary fused with new audio technologies, and this rigour is required once again for the future. The 34-year trajectory that has taken us from Newcleus' path-breaking "Jam on Revenge" to Strange U's "#LP4080" has been too sluggish. To contextualise this point, in 1983 the Internet Activities Board (IAB) was created, and The University of Wisconsin created the Domain Name System (DNS), and statistics as of June 2017 record 3,885 million users globally (over half the world's population). Current hip hop is uploaded to various internet platforms and hosts well past the point of saturation, but how does it infiltrate, what is its purpose? What does the post-global and post-human hip hop world look like? The opportunities that my five future avenues offer are also not restricted to hip hop culture. As the world gathers technology-driven speed and holistic complexity, it is ever important that the hip hop community of tomorrow can engage in and sustain a critical position that challenges the expansive socio-technological trajectories of the future.

I advocate further academic interrogation into science fiction's relationship with hip hop culture and call for hip hop scholars to explore the five future avenues outlined above. I believe that the new knowledge gained from such work can position a facet of hip hop studies firmly on the international socio-technological

stage in both academia and practice. Newcleus appropriated Dorothy Gale's famous recurring line "There's no place like home" (*The Wizard of Oz*, 1939) upon their hero's return and the future of hip hop may well look like home; but home needs to be transparent, representative, active and ambitious, for all inhabitants in the post-cyborg world.

Works Cited

Annas, George J. "The Man on the Moon." *Science Fiction and Philosophy: From Time Travel to Superintelligenc*e. Edited by Susan Schneider, Wiley Blackwell, 2016, pp. 245-259.

Bourdieu, Pierre. *Distinction: A Social Critique of the Judgement of Taste*. Routledge, 2010.

De Smedt, Johan and Helen De Cruz. "The Epistemic Value of Speculative Fiction." *Philosophy and Science Fiction, Midwest Studies in Philosophy, Volume No. XXXIX*. Edited by Peter A. French and Howard K. Wettstein, Wiley Periodicals Inc., 2015, pp. 58-77.

DeLanda, Manuel. *A New Philosophy of Society*. Bloomsbury, 2013.

Deleuze, Giles and Félix Guattari. *A Thousand Plateaus*. Continuum, 2004.

Deluiis, David and Jeff Lohr. "Rewriting the Narrative: Communicology and the Speculative Discourse of Afrofuturism." *Afrofuturism 2.0: The Rise of Astro-Blackness,* edited by Reynaldo Anderson and Charles E. Jones, Lexington Books, 2016, pp. 167-184.

Deutsch, David and Michael Lockwood. "The Quantum Physics of Time Travel." *Science Fiction and Philosophy: From Time Travel to Superintelligenc*e. Edited by Susan Schneider, Wiley Blackwell, 2016, pp. 370-383.

Katz, David. *The Genius of Lee "Scratch" Perry: People Funny Boy*. Payback Press, 2000.

Lefebvre, Henri. *The Production of Space*. Blackwell Publishing, 1991.

Mitchell, William J. *City of Bits: Space, Place, and the Infobahn*. MIT Press, 1995.

Mondloch, Katie. "A Symphony of Sensations in the Spectator: Le Corbusier's Poème Électronique and the Historicization of New Media Arts." *Leonardo,* vol. 37, no. 1, 2004, pp. 57-61.

Nelson, Alondra. "Introduction: Future Texts." Social Text vol. 71, no. 20 (2), 2002, pp. 1-15.

Rollefson, J. Griffith. "The 'Robot Voodoo Power' Thesis: Afrofuturism and Anti-anti-essentialism from Sun Ra to Kool Keith." *Black Music Research Journal,* vol. 28, no. 1, 2008, pp. 83-109.

Segal, Robert, et al. *In Quest of the Hero*. Princeton University Press, 1990.

Steinskog, Erik. *Afrofuturism and Black Sound Studies: Culture, Technology, and   Things to Come (Palgrave Studies in Sound)*. Palgrave Macmillan, 2018.

Stüttgen, Tim. *In a Qu*A*re Time and Place: Post Slavery Temporalities,   Blaxploitation, and Sun Ra's Afrofuturism between Intersectionality and Heterogeneity*. b_books: Berlin, 2014.

Summers, Tim. *Understanding Video Game Music*. Cambridge University Press, 2016.

Till, Jeremy. "Thick Time." *Intersections,* edited by Iain Borden and Jane Rendell, Routledge, 2000, pp. 156-83.

Virilio, Paul. *Negative Horizon*. Continuum Impacts, 2008.

---. *Speed and Politics*. Semiotext(e) Foreign Agents, MIT Press, 2006.

Womack, Ytasha L. *Afrofuturism: The World of Black Sci-fi and Fantasy Culture*. Lawrence Hill Books, 2013.

Youngquist, Paul. *A Pure Solar World: Sun Ra and the Birth of Afrofuturism*. University of Texas Press. 2016.