Methodologies for Genre Hybridisation

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This article attempts to explore working methods for developing hybrid tendencies within electroacoustic music compositions. These working methods, such as the novel concept of reconstructive sampling, are each explored with musical examples given. The article opens by giving definitions of genre, and then explores hybridisation as a concept through ideas developed by Duff (2000), Waters (2000) and Frow (2015). While the article focuses on the musical output of the author, personal compositions are placed in a broader context through the discussion of other artists within the wider field of electronic music composition.

1. INTRODUCTION

In this article, I will outline various strategies undertaken for the hybridisation of musical discourse within electroacoustic composition. While derived from my recent practice, these strategies are placed in a wider context with regard to composers working in the field. These methodologies range from harmonic decision-making to rhythmic motif choice, melodic content and the new concept of reconstructive sampling, which hybridises traditional concepts of sampling and material construction. These strategies will be discussed, cross-referencing my own works to those of other artists within the field. My compositions Summer Anthem (2013), Russian Roulette (2013) and A Berry Bursts (2014) are key works from my own output to be discussed within this article. These works are all accessible in stereo versions online. Hybridisation is an important topic as electroacoustic composers often have a diverse array of musical backgrounds and interests. This is why hybridisation has come about: composers are trying to express their broad range of musical experience within the frame of an electroacoustic composition. Current students of electroacoustic music may be primarily classical, jazz or pop performers as well as music technologists; they all have different ways of drawing on their primary working genres to make electroacoustic music. The interaction of diverse musical ideas within a work can facilitate unique and original compositional thought.

It is useful first to look at what a *genre* actually is. John Frow, in *Genre*, defines it thus:

Genres are the frames that establish appropriate ways of reading or viewing or listening to texts. They are made up of material and formal features, a particular thematic structure, a situation of address which mobilises a set of rhetorical purposes, and a more general structure of implication. (Frow 2015: 31)

Within the genre of electronic dance music (EDM), for example, the formal features include the duration, which should be around four minutes, and the structure of the track, which will revolve around a verse-bridge-chorus format inherited from popular songs. Material features include the use of synthesisers, drum samples arranged into 4/4 patterns and diatonic harmonic sequences. The situation of address would be a large club with a sizeable high-wattage loudspeaker system. Familiarity with this genre, or 'frame', allows the listener to know what to expect musically and where the music would ideally be heard. However, with the increase in dance music's popularity, it is often now heard in what Frow's definition would call an inappropriate situation of address: in a car, on headphones, or in a supermarket. Here, the inappropriate situation has nothing to do with the music producer: the presence of their music in these situations is a byproduct of the way music is now perpetually available in the twenty-first century. Harnessing this idea would be one relatively crude method of genre hybridisation; that is, taking dance music and presenting it in a classical concert hall as music to be listened (not moved) to. The music itself has not been hybridised, just the situation. The work of Gabriel Prokofiev develops more substantially upon this situational issue by hybridising the discourse of dance and classical music.

David Duff, in *Modern Genre Theory*, defines generic hybridisation as:

The process by which two or more genres combine to form a new genre or subgenre; or by which elements of two or more genres are combined in a single work. (Duff 2000: 14)

It is this latter definition that is relevant to electroacoustic music and demonstrates hybrid tendencies – those of the composers discussed here. This definition is provided with literary works in mind, but is equally applicable to musical works. The composers considered here are not overtly focused on the idea of creating a new genre or subgenre of music in its own right.

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This would seem a bold claim: the broader genres electroacoustic or experimental music, being avantgarde in nature, already possess the capacity to include works that incorporate genre hybridisation as a key concept. The works discussed within this article can be described as electroacoustic compositions despite their clear incorporation of other generic components, such as the rock-oriented harmonies in Axe (2010). The latter definition, focusing on how elements of genres can be combined, acknowledges the capacity of a single work to demonstrate original musical thought by the merging of existing elements that are inextricably linked to certain genres. This second definition enables the artist to vary the genres hybridised within each work rather than establish a new genre around a single repeated concept of hybridity.

Waters, in 'Beyond the Acousmatic: Hybrid Tendencies in Electroacoustic Music', states:

Cultural shifts examined share the sense of a relativisation of certain things which were perhaps previously regarded as absolutes; of boundaries which have broken down – between media, between disciplines, between knowledgesystems, between styles and genres, between so-called serious and popular arts. A process of hybridisation is at work. This inevitably leads many of our concerns to be about the nature of reuse and recontextualisation: about taking something associated with one genre, one historical time-frame, one culture and putting it in another. (Waters 2000: 57)

It is this breaking down of cultural boundaries and recontextualisation of musical materials that is crucial to the understanding of hybridised musical works. My own recent composition, Summer Anthem, sees the relocation of dance music materials, generally understood as belonging in the 'popular arts' domain outlined by Waters, and is placed within the multichannel format of an acousmatic composition, a genre generally considered more avant-garde in its outlook. Musical materials designed for placement in popular music are reorganised and warped to find a new home in an experimental medium. All the works discussed recontextualise materials that would be more naturally situated in cultural spheres distant to that of electroacoustic music: pop, hip-hop and folk being notable if basic examples. The work of composers discussed here, as well as my own, thus uses hybridity to reduce the perceived cultural distance between electroacoustic composition and other musical genres. Waters outlines this cultural isolation in the aforementioned article:

Until recently, electroacoustic composers have been less interested in the social and cultural than the acoustic construction of their music. This concern with acousmatics and the phenomenology of sound has resulted in some wonderful, if obsessively self-referential pieces of music, but it has potentially impoverished the aesthetic development of the genre and stifled some aspects of a serious investigation of the application of electronic and digital means to music. (Waters 2000: 56)

Works discussed within this article surpass what is outlined above - the material focus of acousmatic culture (Waters 2000: 56), and instead engage with what Waters terms *sampling culture* (Waters 2000: 57), which focuses on the context of sound as being of primary importance. The musical works composed by Perkins, Adkins and Climent highlight the varied musical spheres in which composers operate and genres that they may listen to, rather than being self-referential. The musical language that these composers employ makes use of hybridisation techniques that may prevent the works from being seen as traditionally acousmatic. As highlighted in the above quotation, the acousmatic genre sees sound as material, whereas hybridised compositions acknowledge the importance of context for all musical materials, from harmony and melody to texture and timbre.

The writings of composer and theorist Tom Shave (2008) on the subject of communicative contract analysis are useful when discussing genre hybridisation, and expand upon the ideas of Frow with regard to genre. His theory puts forward the idea that popular music has a set of rules, or contracts, that it must abide by in order to be validated within the popular music genre. This includes *line-ups*; that is, for example, a rock band containing a vocalist, guitarist, bassist and drummer abides by the genre's conventions. Including an oboist in this line-up immediately suggests a pop-classical hybrid outfit, even before a note is played, due to the inextricable link between the oboe and Western classical music and its practically nonexistent presence within the pop music domain. Shave also mentions time signatures: anything other than 3/4 or 4/4 would be outside the contract. Drum patterns, chord progressions and vocal hooks are all presented as contracts needing to be fulfilled in a track so that it fits neatly into its genre. Electronic dance music, for example, also abides by this: the glossy¹ production, syncopations, synthesisers and electronic drum sounds in Cascada's Everytime We Touch (2004) are all part of the contract for a conventional track within this genre. Shave's musical output reworked pop music from his own band Cats in the Alley² into the acousmatic domain by taking certain contracts of the pop music he had made, for example the sung vocals, processing them using electroacoustic techniques and re-inserting them into (for example) a four-minute track in their new form. My work A Berry Bursts would develop this idea by remixing pop band Twin Hidden's

¹Glossy' production is an informal turn of phrase used in the popular music industry to describe productions that use software to give a track an unnatural cleanness. These include heavy auto-tuning of vocals, extreme over-dubbing and harmonisation of parts, as well as boosted high- and low-end frequencies. ²Keele-based group, now defunct.

song of the same name into an ambient electroacoustic composition.

What Shave does not discuss is that many of these contracts are spectrally bound; it is not simply that a guitarist must play in a pop band for it to be pop music, but he must play on the correct sort of guitar in the lowest register of the instrument³ with an appropriate tone. The musical ideas within a pop or dance track must be heard within the register of the frequency spectrum and with an appropriate spectral density for the contract to be in order. EDM has a similar implicit contract regarding the spectral register that harmonic material must appear in; synthesiser parts are generally contained within a low-middle register (e.g. around C3) in order to achieve the full-fat sound that is desired in this medium. Furthermore, the synthesiser sound in question is likely to receive *octave doubling* in the production process for melodic materials,⁴ expanding the synthesiser part into the upper and lower registers surrounding it. This results in the musical line occupying a greater spectral bandwidth; this spectral width is, as stated, part of the contract for this idea. In Summer Anthem, I would deconstruct this genre contract by presenting Eurodance cadences on the mandolin, an instrument with very limited spectral bandwidth. Mixing technique is spatially as well as spectrally contracted; the more separate all the parts are in the mix, the better.

It is crucial to emphasise that these strategies present in my recent works are developed from my work as a composer and performer of many styles of music. As well as my firm grounding in the practice of electroacoustic composition, I continue to play double bass in symphony orchestras, the nyckelharpa in Scandinavian folk sessions and the guitar in a klezmer setting. I have also previously played guitar in pop groups and occasionally produce dance music. In spite of this broad musical existence, it must also be noted that the works of my own that I discuss with regard to these strategies are still electroacoustic compositions. This is situational; the works are produced for concert performance in a setting with a loudspeaker orchestra of a high technical standard. At no point were these works intended for club performance, although it would not be out of the question to present them in these places. Their rooting in the electroacoustic genre is also structural: each work takes a conventional beginning-middle-end format, articulating a period of time, and is presented in a duration expected of an electroacoustic work. Hybrid tendencies evident in these works could thus also be framed as *polystylism* (Emmerson 2007), in that materials from other musical practices are imported into the electroacoustic music

domain. The works and methodologies discussed in this article are not an attempt to found a new genre in its own right, but to provide a development on the standard discourse of electroacoustic music through polystylistic behaviour. The reasoning for attempting to bring in materials from other styles is varied. First, it is nostalgic, in that a work may be echoing musical ideas from music that I have past experience with, for example Summer Anthem attempts to reflect on a personal attachment to the early 2000s work of Cascada. Second, it is a desire to forge a more voice within the electroacoustic domain, attempting to draw on musical experiences that others within the field may not have. Third, it is also to question the value system of music by integrating styles that are not high-art in their nature. The relative perceived restriction of the acousmatic domain in focusing on abstracted materials is also something I was trying to circumvent through these concepts. Composers have been engaging with polystylistic strategies long before this point in time, the work of Javier Alvarez and recent compositions of Monty Adkins being notable examples. My works are polystylistic based on the assumption that acousmatic music is situational rather than material-oriented, and evolving along with a new generation who are exposed to a wide variety of musical styles through listening or performance. If the view is taken that acousmatic music must have a high level of abstraction and gestural discourse to be considered a work within the genre, then the notion of the post-acousmatic is validated and my works would fall under that category and they would be attempting to build on post-acousmatic discourse. The continued description of the works of Alvarez, Ramsey, Ratcliffe and others as acousmatic rather than post-acousmatic suggest that the new terminology may not be necessary.

2. HARMONY

Genre hybridisation occurs through harmonic means when harmonic discourse stylistically linked to a disparate genre is appropriated into the electroacoustic domain. Composers within the field have produced works that engage with this concept: Adkins, in electronic works such as *Remnant* (2011) and *Residual Forms* (2014), has used gradually evolving diatonic harmonies that are more associated with ambient electronica. In Adrian Moore's work *Junky* (1996), which the composer describes as 'electroacoustic ambient',⁵ a first inversion minor chord is heard throughout much of the work. Chris Hobbs's 2014 work *No Holds Barred (All Bars Held)* makes use of jazz harmony – a mixture of major 7th and 9th and

³For rhythm guitar parts.

⁴This technique is demonstrated at 00:57–01:37 in Cascada's *Everytime We Touch* (2006), at 01:24–01:54 in *One More Night* (2006) and throughout Alice DeeJay's *Back In My Life* (2000).

⁵Adrian Moore (1996), *Junky Programme Notes*, on *Traces* (2000), Empreintes Digitales, Canada.

dominant 13th chords played on the guitar provide the piece's harmonic basis. Russian Roulette and Summer Anthem seek to appropriate harmonic features from popular music into electroacoustic composition. In *Russian Roulette*, this is demonstrated through the key change that occurs at 02:24; all material is shifted a semitone down. This key change is featured as I have found its use in popular music interesting - it is most commonly heard in electronic dance music, and is particularly associated with the Eurovision Contest; examples of this technique in action include Fly on The Wings of Love (2000) by the Olsen Brothers and Fångad Av En Stormvind (1991) performed by Carola. It is also prevalent in other styles, such as in Amaranth (2007) by Finnish symphonic metal group Nightwish. This key change is often heard as an ascending figure, and often utilised for the final instance of the chorus at the end of the song, in which the entire song's harmonic material would shift from, for example, E major to F major or F sharp major. Use of this technique is prevalent to the degree where it is considered a cliché within these styles. Instead of an ascending figure at the end of a song, I have used a descending semitone key change at a relatively early stage of Russian Roulette, thus hinting at these styles in the work by employing this technique without exactly replicating it. The ending of this work is also a direct reference to this Eurodance cliché: the final two minutes of the work consists of a single plucked guitar figure, which is shifted down a semitone twice in relatively quick succession. This figure, presented in Russian Roulette from 09:53 to 11:40 descends a semitone twice (at 10:07 and 11:04), exaggerates the reference. However, this key shift at the end of a song is normally entwined with a driving, uplifting chorus. My work presents an ironic jab at this relationship: the guitar plays a relatively sombre, arpeggiated figure that is more suited to an instrumental folk track. This musical refrain behaves as the emotional antithesis to the sort of chorus that would be heard at the end of a pop track, and thus fits better with the descending key shift.

The chord progressions used in dance tracks are often subservient to the contract of major and minor tonalities, particularly chord sequences consisting of chords I, III, IV, V and VI of the Ionian mode in a given track. For example, a progression of Am–Em–F-G-C can be heard at 01:16 in Ian Van Dahl's *Castles in The Sky* (2000). Cascada's *Everytime We Touch* (2005) presents an interrupted cadence in the chorus. This chord progression (chords IV, V, VI) is the most crucial; it is a simple yet very common base for many tracks across a wide range of popular music genres. These progressions, by default, have become *stock* – no one owns them, and producers of dance music do not demonstrate their mastery of the genre by using them. It is accepted that a mixture of these

chords will occur in some form. This extended interrupted cadence forms the basis of Summer Anthem, where the chords A minor, G major and F major are heard at irregular intervals during the first minute, thus obeying the harmonic rule of dance music while not accentuating the genre's rhythmical qualities. Underneath this more rapid section, a single time-stretched chord is heard. This chord was constructed to emulate the relatively static harmonic behaviour of Normandeau's Anadliad (2010) and Taylor Deupree's Northern (2006), thus replacing the harmonic support that dance music would provide through a bass-line with an unwavering ambient chord. Thus, the section at 03:29 sees dance music and ambient harmonies superimposed on top of each other; the rapid cadential phrasing is perceived as a layer above the static chord, enabling the long chord to be heard as a bass-line that does not function in the way dance music would need it to in a harmonic sense.

Common harmonies in electronic dance music are second inversion major and minor chords, or a root position chord with the third and fifth swapped around, leaving the third at the top and creating the crucial interval of a tenth. These chords have either the interval of a fourth or fifth at the bottom, creating a more robust texture as opposed to a regular root position chord. From the mandolin recordings for *Summer Anthem*, I picked out the chords I played in the aforementioned inversions. These chords thus mimic the harmonic features of dance music, and are not heard on the mandolin in its more traditional settings.

A Berry Bursts also has a strong harmonic focus, but here the work's harmony leans more towards ambient styles demonstrated by Brian Eno in *Music for Airports* (1974). The chords from the original song that feature in my work are not changed in terms of their harmonic content, revolving around major and minor chords within one key. The harmony within this work demonstrates hybrid tendencies as it lifts a chord sequence that is congruent with the pop domain and places it into an electroacoustic work. The ambient focus of *A Berry Bursts* is reflected in the harmonic pacing in the work; the changing of chords happens very slowly across the piece. The original song, however, sees rapid chord changes that are fully congruent with the harmonic discourse of a pop song.

3. SPECTRAL DISLOCATION

Spectral dislocation revolves around the idea of placing musical information inextricably linked with one genre in a spectral register that is incongruent with the original genre. For example, the chord sequences within an EDM track should ideally be placed within a mid-range frequency bracket, so as to add spectral fullness to the work without overlapping with the bass-line or vocal part. In Summer Anthem, the aim of this technique was to represent the musical interest EDM affords in my own work; spectral dislocation is an attempt to put an individual artistic stamp on the stock chord progressions heard in the genre by presenting them in a spectrally dislocated fashion on the mandolin. Given the contract of having an interrupted cadence presented on a synthesiser in the low-mid register within dance music, presenting this material on the mandolin is antithetical. The mandolin has a very high pitch register, and the narrowest range of any string instrument commonly seen in Western music; it is incapable of getting within several octaves of where the harmonic materials are heard in dance tracks such as Tiësto's I Will Be Here (2009). As a consequence of this pitch register, as well as being a plucked and fretted instrument, the mandolin possesses a very narrow spectral band, polarising it from the rich textures of stock Eurodance synthesiser sounds. This makes it the most extreme spectral dislocation device on which to present dance music cadences.

Spectral dislocation also has the effect of enabling the material at 03:29, which is essentially harmonic and rhythmical in nature, to be classed as a 'hook'. Hooks are defined as:

The foundation of commercial songwriting, particularly hit-single writing, which varies in length from the repetition of one note or a series of notes ... [to] a lyric phrase, full lines, or an entire verse. The hook is 'what you're selling'. Though a hook can be something as insubstantial as a 'sound' (such as da doo ron ron), it ideally should contain one or more of the following: (a) a driving, danceable rhythm; (b) a melody that stays in people's minds; (c) a lyric that furthers the dramatic action, or defines a person or place. (Kasha and Hirschhorn 1979: 28–9, cited in Burns 1987: 1)

The capacity to deliver hooks validates the vocal presence in the genre of EDM, and is what the mandolin also succeeds at replicating within Summer Anthem: because the harmonic material between 02:24 and 05:05 is so high in pitch register, it now doubles as a hook according to the melodically based definition (b) as proposed by Kasha and Hirschhorn above. Harmonic material within dance tracks is not normally high enough in pitch to be perceivable according to definition (b), but could be labelled as a hook according to definition (a). The mandolin, through the spectral dislocation of dance music materials, has effectively condensed the harmonic and melodic material of EDM into one musical line on one instrument, distilling the genre's essence into a single musical passage and allowing the musical idea at 03:29 to be classed as a hook according to both definitions (a) and (b) outlined above.

4. DURATIONAL EXPANSION

Durational expansion is the increase in the length of time that a musical idea takes to unfold (microexpansion) or the total length of time a work takes to unfold (macro-expansion) in comparison to genres, or musical materials within them, that possess more rigid durational frames. This can be used to develop extended musical ideas in an electroacoustic work that may be unsuitable for the idea's original genre. Works using this technique include Climent's Nancrillex (2013), which expands *drop* sections of a dubstep track across a duration that is more congruent with a contemporary electroacoustic work, and Perkins's Axe (2010), which explores rock and techno genres through the inclusion of guitar riffs and four-to-the-floor sections across a 15-minute work. Durational expansion is employed in my work A Berry Bursts, which employs this tactic on a micro and macro level. The work takes a pop song as its basis; it is a remix of Twin Hidden's song of the same name. Pop songs are contractually bound (Shave 2008) to be between three and four minutes in length. Remixes of pop songs in house or techno styles are also likely to be around this duration. My own work develops the song's materials over an eight-and-a-half minute work. This is twice as long as a remix would be expected to be, thus hybridising the materials of a pop track with the duration of an electroacoustic work. This expansion was employed in order to undertake more detailed micro-level compositional decisions; I wanted to be able to develop ideas at a much slower rate than the original song. Summer Anthem also demonstrates this method: it explores dance music harmonies at varying points over a 20-minute work. These harmonic materials would normally be restricted to being presented over a three or four minute track. The electroacoustic genre does not have a durational requirement, enabling the specified composer to explore ideas of harmonic, rhythmic or textural interest over a longer or shorter time period.

Pop songs, such as the Twin Hidden track I chose to remix, contain many ideas that pass quickly, and may be difficult to pick out due to layering. Chord progressions are a good example: several different chords are used in a short sequence, and are often heard underneath a vocal. The pre-chorus section of the original A Berry Bursts embodies this issue. Within my work, I used durational expansion to expose the chord progression, allowing one single chord to be presented over the opening minute and a half of my composition. It is not until this point that a second chord enters, which takes up a further minute of the piece. The expanded duration of my work has allowed me to present the chords from the pre-chorus on their own, uninterrupted by other musical materials. This section was in turn facilitated by micro-level durational expansion. The entirety of the harmonic content in my

version revolves around chords from the original that have been stretched to a point where they are perceivable as a drone rather than a chord within a progression. This further helps the work to take on ambient characteristics. The melodic material within the work is also enhanced through durational expansion; the glockenspiel melody, originally eight seconds in duration within the Twin Hidden song, is looped and then subjected to granular synthesis to create an extended textural component that implies the melodic structure of the original part. The technique employed here to expand the duration of this material firmly places this material within the electroacoustic domain.

Russian Roulette also demonstrates durational expansion through its continued presentation of three singular ideas over long timespans. The opening idea of the work is presented repeatedly over the first four minutes, with only a key change for musical development. The middle section sees the continual granulation of a Schubert sample, and the final third of the work consists of the continuing deterioration of a five-second folk guitar loop. The work, which is 12 minutes in duration, thus focuses around three ideas which all occupy approximately four minutes each. It could be stated that the work behaves as a sort of miniature EP that blends three distinct ideas together within one composition. Each of these ideas fills a more 'pop' duration in its own right, but the subtle musical developments within each section do not allow these sections to behave as *tracks*.

Summer Anthem further demonstrates durational expansion on a micro level at varying points within the work. At 10:30, an interrupted cadence is heard; exactly the same chord materials are used as in the section of the work beginning at 03:32. However, each chord at this point has been time-stretched using Audiosculpt so that each chord is now 600 times longer than its duration in the opening section of the work. This section utilises electroacoustic processes to transform a Eurodance chord sequence that would sit comfortably in a track by Cascada into a four-minute passage of music that sounds as if it is borrowing harmonic strategies from Negative Snow (2012) by Taylor Deupree. This work by Deupree was a key influence on the construction of this section of music. Additionally, at 03:32, underneath the rapidly moving cadential phrases presented by short mandolin chords, there is one extended duration major chord that sounds throughout this early section. This long chord was designed to emulate the diatonic harmonic stasis of Deupree's Northern (2006), and is used in lieu of all other materials that would normally be heard under the more rapid chord sequences that are perceived above it, such as kick drum, bass-line or snare drum. This strategy thus uses ambient music discourse as a replacement for the more rapid musical figures that would normally be heard under dance music cadences.

5. MELODY

Melodic materials are used as a strategy for the development of hybridity in the works *Summer Anthem*, *Russian Roulette* and *A Berry Bursts*. The use of melodic materials within electroacoustic music is prominent in the works of Alvarez (*Edge Dance*, 1987), Adkins (*Memory Box*, 2011; *Ode*, 2011) and Paul Dolden (*Entropic Twilights*, 1997–2002). The notion of incorporating melody as a key element of an electroacoustic work sees a reassessment of primary parameters for exploration from Smalley's spectromorphological theory (Smalley 1997), which puts gesture, texture and timbre as the key musical elements to be explored rather than the parameters explored in popular music: melody, harmony and rhythm.

Summer Anthem presents a striking melodic feature: a descending tune that is most recently recognisable for its presence in 2012 electronic dance track On The Floor, produced by US dance music producer Pitbull and featuring Jennifer Lopez on vocals. Pitbull had borrowed this melody from Lambada (1989), a track by French-Brazilian group Kaoma. Kaoma, in turn, produced their song as a direct cover of Brazilian singer-songwriter Márcia Ferreira's 1986 song Chorando se foi, which was itself a legally authorised Portuguese-translated rendition of the 1981 ballad *Llorando se fue* by Bolivian group Los Kjarkas. My motivation for incorporating this melody within Summer Anthem was to acknowledge the Pitbull and Jennifer Lopez track. Given the resituated presence of this melody in my work and how electronic music listeners are likely to have come across it (through the Pitbull track), the use of this melody thus references commercial dance music culture within an electroacoustic composition. However, my presentation of this melody on the mandolin also makes reference to the tune's vernacular origins. This use of the mandolin would not be congruent with the dance genre in which Pitbull works, but would be fully compatible with the band layouts of the Kaoma or Los Kjarkas ensembles. Although a mandolin does not feature within these two groups, the Kaoma version opens with the melody presented on an accordion and the Los Kjarkas original presents the tune first on the panpipes.

A Berry Bursts sees melodic material presented by the voice from the original pop song strongly evident within my remix. The voice is the least electronically processed component of the original track that features within the electroacoustic version; the song's harmony has been rearranged, the duration expanded and the individual chords time-stretched, but the vocal line's melodic shape has had no alteration. This is the opposite approach to that taken by Trevor Wishart in his seminal work *Tongues of Fire* (1994) which seeks to manipulate a single vocal sample based around extended technique in as many different ways as possible. It is notable that within this work, the original melodic shape of the speech fragment gradually becomes recognisable. Åke Parmerud's Grains of Voices (1995) also demonstrates strong electroacoustic manipulations of vocal recordings through granular synthesis, but obfuscating any melodic content from the sung fragments. Wishart's more recent work, Encounters in the Republic of Heaven (2012), presents many different vocal samples with no processing. Here, Wishart is actively seeking to present melodic patterns embedded in the speech of the accents of people from north-east England. This work sees melody placed at the forefront of an electroacoustic work, although the melodies are constructed from speech fragments, bearing a strong link with the work of Steve Reich in Different Trains (1988) and City Life (1995), which sees speech melodies replicated in instrumental ensemble writing. Although not so related to popular music, the acknowledgement within Encounters in the Republic of Heaven that melody could be used as the key component of an acousmatic composition provides important context for my own work.

Russian Roulette presents an arpeggiated melody within the final section of the work, beginning at 09:00. At this point, the guitar plays this melody with a more natural tone; the prominent delay effect from the section of the work is now not present. The arpeggio is construed of quaver-length notes being plucked on the guitar with a plectrum; note alternation is much more rapid than in the electronically oriented arpeggio present within the opening section of the work. This latter section takes influence from the warped acoustic guitar figures presented by Christian Fennesz on 2001 track Endless Summer: at 04:59, a strummed pattern is gradually subjected to increased levels of processing, but the pattern played on the guitar does not change. The intricate style of playing that I have presented within Russian Roulette finds lineage in the work of folk-electronica producer Bibio. On the 2013 album Silver Wilkinson, an elaborate arpeggiated pattern is heard throughout the final track, You Won't Remember. This style of playing that Bibio presents has its roots in the flatpicking style of guitarists such as John Renbourn and Bert Jansch, with Jansch's Angie (1965) and Needle of Death (1965) being notable examples. The pattern that is played from 09:00 is indebted to this playing style. This melody finds equal influence in Fennesz, as my two-bar arpeggiated phrase is looped and gradually processed through additional reverb, chorus and detuning effects. Fennesz, on Venice (2001), made a particular feature of this method of transforming looped audio, as did Bibio on A Tout A L'Heure (2013). This section of Russian Roulette thus hybridises folk, electronica and ambient styles over the final three minutes of the work through an arpeggiated melody, looping techniques and simple processing techniques.

Ivory Terrace and Sauntering both incorporate melodic ideas that are rooted in the minimalist school of composition established by Steve Reich and Philip Glass in the 1960s. The key technique demonstrated through these works is that of hocketing. In instrumental composition, this would involve a single melodic line split over two or more instruments in any given ensemble. Examples include Andreas Stahel's Circular Hocket (2010) for bass flute and voice, Meredith Monk's Hocket (2000) from her large-scale concept work Facing North (1998-2000), and Louis Andriessen's De Staat (1976), which features large sections in which brass ensembles play melodies in a hocket at opposite ends of the stage.⁶ Steve Reich pioneered a form of hocketing that involved instruments and electronics; his Counterpoint series of works are composed for one instrument and pre-recorded tape. The tape part consists of recordings of the same instrument that is being performed live. New York Counterpoint (1984) is for clarinet and ten pre-recorded clarinets (including two bass clarinets), Cello Counterpoint (2001) is for cello and seven pre-recorded cellos and Electric Counterpoint (1987) is scored for electric guitar, eleven pre-recorded guitars and two pre-recorded electric bass guitars. Because the instruments (or instrument and recordings) are all identical in terms of register and spectral content, the effect is that of a densely woven fabric of melodic material.

Ivory Terrace and Summer Anthem both seek to build on this idea by having one pre-recorded instrument across eight loudspeakers. Each loudspeaker can be thought of as an instrument, able to 'perform' one note in a melodic hocket. This can also be heard at 16:43 in Sauntering, at which point a diatonic melody in the Ionian mode is presented with each loudspeaker assigned one note. The melody moves around the listener, as if an ensemble of violins surrounded the audience. This is a technique I have termed spatial hocketing. This idea continues in Sauntering, with a new hocket presented at 17:46. This hocket consists of several identical arco pitches, followed by a descending semitone figure. The notes are presented on pairs of speakers, replicating the sensation of two instruments playing the same note at the same time. Ivory Terrace makes use of this technique but with notes of varying durations. Across the first three minutes, chromatic melodies made up of notes of a short duration are built up by each short note being presented on one loudspeaker, with each loudspeaker being treated as an individual bass trombone. Simultaneously, choralelike textures are built up by presenting one long note in each speaker, with differently pitched notes for each speaker.

⁶This can be heard at 11:12 on the recording of *De Staat* by the Schönberg Ensemble, 1991.

January and February are Always Dark makes reference to electronic pop through its inclusion of a melody that is sampled from the track The Big Up (2011) by electronica producer The Bedroom. This melody, rather than being directly sampled from the track on which it is heard played by a brass section, is presented on the descant recorder in my own work. Heard on this instrument, the melody sounds plausible as an excerpt from Brooks Frederickson's Quintet for Fifteen Recorders (2013), due to its plaintive Aeolian modality. The decision to present a melody in this work was contextualised first by the use of melody within Summer Anthem, in which I presented a tune originally recorded by Los Kjarkas but widely known through the collaboration between Pitbull and Jennifer Lopez.⁷ The idea of using a strong melodic aspect again appealed; it disrupts the ambient focus of the work, bringing pop and early music references into the fray. It is notable that I had actually worked with this tune beforehand; in December 2013, a five-minute stem-based remix of The Big Up was composed, transforming it into an electroacoustic work with instrumental hip-hop at its core. This further implanted the idea of transferring some of The Bedroom's material into January and February Are Always Dark.

6. RECONSTRUCTIVE SAMPLING

In both January and February Are Always Dark and Summer Anthem, it is clear that I am using melodies that were originally composed by an artist other than myself, working within genres distant to electroacoustic music. When producers of electronic music borrow any sort of musical material from other producers, it is often referred to as sampling (Demers 2010), which can be defined as the act of replaying existing recordings in new works. Reconstructive sampling is a compositional concept that attempts to merge ideas of what constitutes musical borrowing and compositional invention, taking a method rooted in hip-hop production and hybridising it with an electroacoustic sensibility. The above definition of sampling does hold true for the working methods of modern hip-hop producers such as J Dilla and Samiyam, who use one or many pre-recorded audio fragments in any one production.⁸ Samiyam's Come Thru (2013) is a good example of a portion of a recorded jazz album being used in fragmentary form within a sampling context after the original material has been presented. This is also the correct definition for the working method in A Berry Bursts, as the original vocal melody is presented within my remixed electroacoustic version through the method of stem-based sampling. This occurs when the artist undertaking the sampling obtains separate tracks of all the musical components that make up a song. However, in January and February Are Always Dark and Summer Anthem, I have not used this working method of taking pre-recorded sounds from other artists; what occurs instead is the recording of melodies that I have heard on other artists' tracks by playing them myself on an instrument, making a new recording in the process. It is next useful to look at the idea of musical construction, which could be viewed as the creation of new material by means of performance, recording or synthesis (Demers 2010). What occurs with my presentation of melodic materials in January and February Are Always Dark and Summer Anthem is certainly the creation of *constructed* material, as the materials have been performed and recorded for the new compositions. However, the melodies themselves were sampled material; I have copied both tunes' melodic, temporal and rhythmic shape note for note even if the spectral quality of my recordings of the tunes is very different. Construction here does not refer so much to the making of music, but more to the recording of sound materials for the purpose of composition.

The term reconstructive sampling merges these two definitions; this means the production of new audio materials that contain a recognisable reference to existing recordings, whether that is melodic, rhythmic or spectral. Reconstructive sampling stresses the importance of ability of the listener to recognise what musical item the new material has been constructed from. The tune in Summer Anthem is a particularly good example, as Kaoma had already reconstructively sampled this tune in their song Lambada (1989) from Llorando Se Fue (1983) by Los Kjarkas. It is imperative that the term is reconstructive sampling and not simply *reconstruction*; the *sampling* part of the term implies the strong tie of ownership of artists to melodic material they have created. Reconstructive sampling is more pertinent to melody than rhythm or harmony, as these musical ideas are not subject to such strong concepts of ownership; despite widespread use of the interrupted cadence in dance music, no one owns this chord sequence. This working method may be used effectively when thinking about how reconstructed materials can be considered in new areas of spectral space that are more drastically different to the original. These materials developed for the aforementioned works engage with this spectral consideration, as the melodies involved had never before been presented on the instruments I played them on (the mandolin is drastically different to a synthesiser). My 2014 remix of The Big Up, originally by The Bedroom, also engages with this concept through the presentation of a brassy melody on the descant recorder, which was recorded

⁷Jennifer Lopez feat. Pitbull (2011). *On The Floor* (Radio Edit). On *Love?*. USA: Island Records.

⁸Samiyam, *Come Thru* (2013). *Wish You Were Here* LP. Brainfeeder Records.

by myself. *Reconstructive sampling* has parallels with traditional music, in that vernacular tunes can often be re-imagined by presenting them on different instruments with varying spectral registers.

7. RHYTHM

Rhythm is another musical feature used to hybridise discourse within electroacoustic compositions. The recent works of Åke Parmerud, such as Transmissions II (2015) and Grooves (2011) make use of intricate rhythms that are resemblant of the glitch electronica made by Ryoji Ikeda in works such as the 2006 album Dataplex. Several of Javier Alvarez's works make strong use of rhythm: Papalotl (1987) uses rhythmical motifs to make reference to a wide array of Latin American dance genres, and in Mambo a la Braque (1991) makes specific reference to the Cuban dance style of mambo. Furthermore, Offrande (2001) presents a mixture of Latin American and glitch rhythms on the steel pans. My work Ivory Terrace uses a rhythmical motif to make reference to a genre of electronic dance music known as trap.9 This is heard at 04:15, when a riff enters, presenting short, sharp trombone notes in groups of three crotchets. The riff takes inspiration from *trap* production collective TNGHT, a collaboration between modern hip-hop producers Hudson Mohawke and Lunice. TNGHT's Higher Ground (2012) makes extensive use of a bass trombone sample in regular rhythmic patterns. This sharp rhythmical use of the bass trombone sound owes heavily to the dubstep style developed in the UK from the late 1990s onwards by artists such as Kode9 and Zed Bias. This style saw bass-lines become more rhythmically active to fill out the musical dialogue as drum sequences were stripped back in density to emphasise a half-time feel. The bass trombone in the TNGHT production sees the same functional use as synthetic bass-lines in dubstep tracks.¹⁰ The riff within my work introduces a rhythm with ample silence between segments of audio, thus emulating the musical spaces present in the work of TNGHT. Ivory Terrace also makes reference to the trap style by the nature of how the trombone sound is treated at 04:15: the audio is loaded into a sampler and triggered. The nature of sampling the short sounds to create the rhythmical section makes this part of the work feel more electronic, aligning it more with the TNGHT track. The effect is quite drastic; up until this point, all the materials within the work are plausible as

recordings of live performances. The precision of the rhythmical repetition created by loading sounds into the sampler dispels this possibility. The idea to load the short trombone materials into a sampler originated with electronica producer Cellerton's Burmese Pictures (Aquacrunk Remix) (2014) and Samoved's Consorts (Bloom Remix) (2014). Both of these tracks make use of sampler technology to remix works composed for recorder consort Consortium5 and featured on their album Tangled Pipes (2014). The aforementioned works clearly create loops that are both rhythmical and melodic by sampling short fragments of the original works. Here, Ivory Terrace merges discourse of electroacoustic composition and electronica; transforming materials in ways that generate irregular or nonrhythmical material (granular synthesis) and rhythmical phrases (sampling).

Summer Anthem makes use of rhythmical ideas lifted from dance music within the electroacoustic domain. This genre is characterised by strong syncopation. In dance tracks such as Tielsie's *Palette* (2014) and Swedish House Mafia's Miami 2 Ibiza (2010), the synthesiser presents triplets while the bass and kick drum maintain a steady four-to-the-floor rhythm. This rhythmical item was one I would go on to deconstruct in Summer Anthem by dislocating its two components: the triplet part of this rhythmic construct is heard in the mandolin during the first half of the work (03:56–04:20), and the four-to-the-floor bass-line is presented in the second half (17:54-19:30), layered under ambient distorted mandolin chords. This idea is emulated in A. G. Cook's remix of *Doing It* (2015), originally by Charli XCX featuring Rita Ora – within this track, the triplet rhythm is presented with the expected four-to-the-floor bass-line not appearing until very near the end of the track.

Having referenced the rhythmical motifs present in contemporary urban styles of electronic music within *Ivory Terrace* and *Summer Anthem*, this idea is also present in the composition *A Berry Bursts*. The overarching feel within the work is that of an ambient track, more concerned with texture than rhythm. This is indeed the case: the work sought to deconstruct the rigid rhythmical structure of the original in order to focus more on the spectral qualities of the work. However, the style of dancehall¹¹ is referenced through the inclusion of short drum sequences in the opening section. This rhythm is clearly audible within the original work, demonstrating the stylistic hybrids that

⁹Trap music is based on an extensive use of multilayered melodic synthesisers, crisp, grimy and rhythmic snares, deep 808 sub-bass kick drums, pitched down vocals, double-time, triple-time and similarly divided hi-hats, and a cinematic and symphonic string and keyboard samples creating a dark musical atmosphere. ¹⁰The use of synthetic bass-lines to achieve this effect can be heard on

¹⁰The use of synthetic bass-lines to achieve this effect can be heard on Flux Pavilion's track *I Can't Stop* (2010) as well as Meg & Dia's *Monster (DotEXE Remix)* (2011).

¹¹Dancehall is a genre of Jamaican popular music that originated in the late 1970s. Initially dancehall was a more sparse version of reggae than the roots style, which had dominated much of the 1970s. In the mid-1980s, digital instrumentation became more prevalent, changing the sound considerably, with digital dancehall or 'ragga' becoming increasingly characterised by faster rhythms. These rhythms are high in syncopation, featuring a mixture of tuplets and triplets in any one bar. The snare drum and bass drum are the main articulators of these rhythms.

were built into the track before the remixing process was even started. The dancehall rhythm is heard alongside an ambient drone, thus removed from its original context in which it would be part of an arrangement featuring a bass-line, sung vocal and offbeat guitar rhythm. This style of rhythm can be heard in context in tracks by dancehall artist Elephant Man, a notable example being *Azonto (Dancehall Remix)* (2014).

8. CONCLUSIONS

Works discussed in this article demonstrate genre hybridisation through the strategies outlined. These methods are, at their core, devised with electroacoustic composition in mind, and are rooted in spectromorphological thinking with polystylism woven in. It is notable that some polystylistic compositional decisions may reference styles outside the electroacoustic domain more clearly than others. There is always a desire to 'point outside the work' (Emmerson 2007) and acknowledge the cultural, as well as personal, significance of the other genres of music presented within the electroacoustic works. The material for the works that is obtained from other styles is not simply 'material', ready to be processed and fully contained within the conventional confines of acousmatic music discourse. It is intentional to point out the perceived level of kitsch in Eurodance music through the composition of Summer Anthem by placing references to it in an avant-garde genre. In this respect, like many electroacoustic composers, I reject Schaeffer's theories of reduced listening, instead embracing the referential capacity of the acousmatic domain. In the same vein as composers such as Ramsay and Ratcliffe, works discussed here outline how other styles can be clearly presented within an acousmatic situation, rather than subtly hinting at them through high levels of processing and abstraction. The concept of reconstructive sampling is a new way for composers to approach referencing the music of other artists or works in a disparate style while still developing materials in a more traditionally 'compositional' way.

The works composed with these hybridisation strategies are not invalidated if the listener does not get the reference to the styles that are being inferred; as electroacoustic works, they are still focused on sound and have value as works of acousmatic art, exploring and developing material for its spectral interest. This, alongside the fact that the works are for concert performance, cements the notion that these works are polystylistic works, not attempts to found a new genre. Instead, the view is taken that acoustatic music is a genre capable of evolving with greater flexibility to allow for new tangents on its premise to develop and flourish. Rejecting this notion would lead to a validation of the term 'post-acousmatic', based around the idea that acousmatic music has a rigid set of stylistic traits and not abiding by them would leave a work within the post-acousmatic genre. As a composer, I dispute this, and, as previously stated, view acousmatic music as something situational, based around high-quality concert presentation, rather than as a material-focused genre. Works discussed within this article were all composed for concert performance. The methodologies presented within this article are merely suggestions for approaches that composers could take to integrate various genres into one piece, and are not intended as a fixed set of rules about how to compose in a hybrid manner. If anything, there are more strategies that will likely develop as new generations of composers make music within the field. All these strategies attempt to view the electroacoustic genre as a ground for experimentation rather than a genre with stylistic paradigms that must be adhered to.

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