Home ES EN

Trans
REVISTA TRANSCULTURAL DE MÚSICA
ISSN:1697-0101

PRESENTACIÓN
EQUIPO EDITORIAL
INFORMACIÓN PARA LOS AUTORES
CÓMO CITAR TRANS
INDEXACIÓN
CONTACTO

Última publicación   **Números publicados**

SIBE | Sociedad de Etnomusicología

< Volver   TRANS 14 (2010)

Uncanny Space: Theory, Experience and Affect in Contemporary Electronic Music

Robert Strachan

Abstract
This article draws upon the author's experiences of promoting an music event featuring three prominent European electronic musicians (Alva Noto, Vladislav Delay and Donnacha Costello) to examine the tensions between the theorisation of electronic music and the way it is experienced. Combining empirical analysis of the event itself and frequency analysis of the music used within it, the article works towards a theoretical framework that seeks to account for the social and physical contexts of listening. It suggests that affect engendered by the physical intersection of sound with the body provides a key way of understanding experience, creativity and culture within contemporary electronic music.

Keywords: Affect, Electronic Music, the body, glitch.

This article draws upon my own experiences of promoting an electronic music event entitled *Uncanny Space* in the British city of Liverpool in December 2008. It uses this one central event to examine the tensions between the theorisation of electronic music and the way it is experienced in particular social contexts. It begins by framing the event with regard to the dominant critical perspective on electronica. Theorists have utilised post-structuralist theory to suggest that contemporary subgenres of electronic music are primarily an articulation of changing subjectivities relating to our everyday interaction with digital technologies and virtual space (Young 1999/2000, Cascone 2000, Ashline 2002, Monroe 2003, Prior 2008, Kelly 2009). This work has specifically concentrated on the 'glitch' or 'microsound' aesthetic that emerged in the late 1990s to become perhaps the central paradigm of laptop music throughout the past ten years. As Vanhanen (2003, 46) glitch's musical use of 'error[s] in the production chain… various sonic "disturbances": distortions, buzzes and hums, clicks'n'cuts and scratches, produced by overloaded or otherwise misused operating systems and sound cards' has often been seen as constituting an 'aesthetics of failure' which highlights disturbances and rupture in our interactions with technology.

My observations of the *Uncanny Space* event (which featured three artists rooted in, or influenced by the glitch aesthetic) will be used to problematise this theoretical underpinning and question its over-riding assumptions in the light of how performances of this music are actually experienced. The theoretical thrust of scholarly work examining this music has tended to ignore the listening environment, specific social situation or changing musical contexts in which the sounds of glitch are produced and received. This contextual blindness towards listening environment has resulted in a fairly prescribed ascription of meaning which does not account for differing modes of engagement. Using the *Uncanny Space* event as a case study, the article argues that through its use of a high-spec sound system, audiovisual performances and the specific configuration of the crowd produced a particular sensory experience which raises a number of key questions. Namely, how sound might be experienced differentially (in terms of the body) in differing environments, how this might problematise dominant readings of glitch and importantly, how electronic musicians negotiate these environments through their creative action and performance strategies. In relation to these questions the article will discuss the intersection of sound and the body and how the concept of affect might help to illuminate this relationship. It argues that further exploration of music as affect might be useful in moving us beyond broadly semiotic approaches. Finally, attention will be given to selected tracks used in the event's performances (using textual analysis of spectrograms with specific reference to frequency range) to examine how particular frequencies are utilised by electronic music artists in order to solicit an affective response in listeners.

Twilight City

As well as being a lecturer at the University of Liverpool I have also promoted electronic music in the city over the past seven years as part of an organisation called the Hive collective. In December 2008 I was involved in staging an event in Liverpool as part of the city's tenure as the European Capital of

Convocatoria para artículos:
Trans 16 2012

Explorar TRANS:
Por Número >
Por Artículo >
Por Autor >

Buscar

Share |

Suscribir RSS Feed

Sociedad de Etnomusicología
Observatorio de Prácticas Musicales Emergentes
ETNO Revista de música y cultura
iaspm ESPAÑA
Musicología feminista
ICTM INTERNATIONAL COUNCIL FOR TRADICIONAL MUSIC
iaspm

The thematic thrust of the last event (which we called *Uncanny Space*) was loosely based around the imagined future, the changing city and the way in which new digital technologies might have an effect on our subjectivity and our relationship to notions of place and space. Each element of the event was planned in order to respond to at least one of these themes. The event was staged in an abandoned nightclub recently commandeered by a local anarchist performance art and theatre collective. The intent was to work with and transform the somewhat dilapidated physical space of the building's interior using projections and music in order to explore the ways in which we re-imagine ourselves and our environment through digital technology.

The artists we invited to play live sets at the event were those who we considered to be working with differing representations of new digital soundscapes: Alva Noto (the German artist Carsten Nicholai) one of the initiators of the glitch or microsound genre that emerged in the 1990s, the Finnish ambient glitch artist Vladislav Delay and the Irish minimal techno producer Donnacha Costello. Hence, the whole event was positioned in a particular thematic way which chimed with the overall remit of the Twilight City project; that is, the way in which electronic music and audiovisual performance can represent and engage with differing types of urban landscape. This thematic element was central to the event which was financially supported by the Liverpool Culture Company[2] under an understanding that it would celebrate and respond to overlooked aspects of the city's urban environment. As one of the people who developed the themes of the *Uncanny Space* I was keen to understand how the event's conceptual underpinning would translate to the actualised event. What actually transpired was a social and technical success; the interactive visual elements worked without technical hitch, the artists arrived on time from various places in Europe, played well received sets and lots of people came, danced and enjoyed themselves. In short, it ended up being a great party (evidenced by the fact that the afterparty in an adjoining abandoned building carried on until 6am the following morning).

Watching the partying crowd have a good time subsequently led to a fairly obvious realisation; that the conceptual remit under which the event had been planned and structured did not necessarily relate to the way in which people actually experienced it as an event. For example, audience members were photographed as they entered the venue and these digital images were integrated into the surround screen visuals that were a central part of transforming the venue for the event. Editing software was used to give a morphing and degraded feel to the images (See fig I). The faces of the crowd on the screen melded into each other, sometimes seamlessly, sometimes with a visual stutter designed to give a sense of the uncanny, the immediacy of a familiar face rendered unfamiliar through disruptive technology. The idea was that audience members might feel unsettled by the images, perhaps reflecting on the way in which we are all embroiled in digital representation within our everyday lives evidenced for instance in the ubiquitous patrolling gaze of CCTV in the UK which constantly monitors and records the everyday interactions of the urban populace. However, I am not convinced that this is how audience members actually experienced or understood this work. Many laughed and pointed as friends appeared and the work became a tableaux of a night out clubbing, a technological celebration of the dancing crowd.

Fig I. Vladislav Delay performing in front of visuals of morphed audience members

Similarly, the experience of the event led me to question the way in which our conceptual remit was (or rather was not) articulated musically. Each artist used the cut up, dislocated sounds of glitch in their individual sets echoing the disruptive power of digital technologies we had hoped to reflect within the visuals. However, within the context of the particular sets, glitches were perhaps not experienced as frozen moments of technological reflection but rather as unifying and unified within the rhythmic pulses of a series of dancefloor orientated sets. The crowd responded enthusiastically, dancing, lost within the beats and enjoying the pleasures of the interaction between sound and body afforded by the high-spec sound system we had hired in for the evening.

Did the event therefore, belie some kind of schism between theory and social use and how did this fit into wider issues about representation in electronic music and the way that it has been theorised within scholarship? By positioning the event conceptually within ideas around transformation and the environment we were after all, echoing the scholarly mainstream in terms of how contemporary electronica genres have been framed and understood.

Glitch and Theory

Much of the work on electronica and digital music making has positioned itself within a theoretical framework related to relationships of space and place. Scholars such as Theberge (2004) and Prior (2008) for example, have used network theory derived from the work of Castells, Urry and Appadurai to analyse how digital technologies such as the laptop and the virtual studio can be seen as part of a trend towards the use of nomadic digital machines, thereby changing our relationship to place and space. A similar preoccupation can be found in poststructuralist influenced work manifest within the proliferation of scholarly attention on glitch music over the past ten years.

associated with computer technology such as drones and electrical hums and random and error sounds which are by-products of digital technologies more generally such as glitches, pops, hisses and CD skipping. These sounds are moulded into the rhythmic structures and timbral palette of a given track. In practice these elements work as technologically reflexive anaphones which draw attention to their means of production. It is important to understand these as I anaphones as they are not necessarily samples of these types of sounds but replications using various VST software. The now common use and variety of these sound sntaches is illustrated by production software such as Logic and Ableton which include whole glitch soundbanks and kits illustrating the enculturation of these sounds into the broader electronic music spectrum.

In its broadest sense scholarly work on glitch has been interested in how particular sounds and techniques can be understood within the context of the global digital realm as having a profound effect upon our subjectivities. More specifically this work has used post-Deleuzian theory to examine our relationship to technology and space. In these approaches the enculturation of digital technologies into our everyday lives is understood as symptomatic of a wider deterritorialization, that is, the loosening of the relationship between culture and place as we spend more of our time engaging and interacting with virtual space. So, in this theoretical framework, the sounds of glitch are taken as reflecting our relationships with contemporary landscapes, both real-world and virtual. Take for instance, the following quotes both of which frame glitch within specific aspects of Deleuzian theory:

Microsound suggests both the inscrutably pointillist 'click', as well as the 'microtonal' possibilities of the laptop as a musical instrument, the creation of sound within, between, and outside normative scales- sound itself as a mode of deterritorialization (Ashline 2002, 90)

Characterised by colossal shifts in dynamics, tone and frequency, this is an urban environmental music- the cybernetics of everyday life - that reflects the depletion of 'natural' rhythms in the city experience, and in the striate plateaux of the virtual domain (Young 2002, 47)

Despite their grounding in post-structuralist theory, in which meaning tends to be slippery, there is a clear impulse within this type of work to tie down meaning. This theorisation is perhaps a natural fit for two main reasons. Firstly, glitch emerged as something of a self-theorising genre. From its inception in the 1990s glitch has been a subgenre bound up in post-structuralist theory, not only in subsequent academic work on the subject but also through the way it has been discursively framed by its own practitioners (many of whom have philosophy or art theory backgrounds). From the liner notes of various compilation CDs to its coverage in magazines such as the UK publication *the Wire*, theory has been foregrounded in the discourse relating prevalent in glitch's own mediation.

Secondly, the processes used in producing glitch and the actual sounds that have become generic markers provide a fairly obvious correlation between sound and the technology used in its production. This highly technologically reflexive soundworld has then perhaps leant itself to an interpretation which foregrounds our relationship to technology in relation to meaning. Monroe (2003) for example, understands various forms of digital laptop music as in a continuum with the dystopian tendencies of 'analogue' industrial music. For Monroe the rendering of 'audible alienation produced by decaying industrial environments' is replaced by a distancing from the ideological construct of digital technologies as helpful, 'fun' and funky . The glitch 'aesthetic based on the undistinguished sounds of raw data and signal overloads' (2003, 40) is viewed here as a continuation of the industrial distancing effect from everyday reality. Indeed, glitch has been routinely theorised as constituting an aesthetics of failure (Cascone 2004; Kelly 2009) whereby the central positioning of the sounds of error and overload invites reflection upon our relationship to technology.

The experience of participating in the *Uncanny Space* event highlights that these types of analysis, whilst being a useful way of thinking about representation, are perhaps too fixed in their ascription of both meaning and affect. This can be related to the fact that they tend to underplay the social uses and social contexts of music in a broader sense; not least where music is listened to or how these individual techniques are integrated into music where the primary use value might be say, dancing, relaxation, concentration or work. Also such work perhaps unintentionally abstracts sound from music. As Philip Sherburne (2002, 174) notes, glitch 'exists in a cultural space as well as a purely sonic one. The stress upon generic minutiae can confound some critics who would prefer to free the music from the predeterminations that accompany any form of categorisation, but it is important to remember meaning is made precisely through the manipulation of such categories'. Hence, concentration on glitch as a manifestation of post-digital subjectivities serves to at best, marginalise other aspects of musical signification and musical use that might be at work within the genre. Despite assertions from artists such as Carsten Nicholai that he is 'not a musician', glitch artists are still engaged with producing sound texts which are received and understood as music. Their primary situation within recordings and live performances grounds them within a social context which invites their reception as music. Glitch techniques are therefore necessarily utilised in the service of musical strategies such as rhythm, timbre and in some instances, tonality. The predominant theorisation of glitch also ignores glitch's place within an historical continuum of music and music culture; a clearly important aspect of the signification processes in which we receive and understand music.

Contexts

It is important therefore to take into account firstly the social and cultural milieu in which electronic musicians operate and secondly, the social contexts in which music is experienced. Glitch as an aesthetic and as a set of techniques has to be set into its varying social contexts of production and performance. The differing ways in which these techniques are used can be understood in the light of what Hofer (2006) identifies as the common practice for electronic musicians, producers and DJs to adopt differing performed multiple identities. This is linked to the duality of post-techno electronic musics that on the one hand are grounded in dance contexts whilst also being gradually enculturated into, and having a conceptual relationship with, the contemporary art world. Pearson and Gilbert (1999, 76) note that 'such unfortunately titled labels as intelligent techno signalled the removal of these musics from the

and body as through the use of performed multiple identities, producers working in the field are able to negotiate differing musical modes and social uses with comfort and without seeming contradiction. The dance music tradition of operating under different names is used as a way to signal to audiences that when using a particular moniker the artist will perform with a particular musical style usually tied to a particular social context or tradition of listening engagement. For example, many artists will have different sets of repertoires of music depending on their expected listening contexts, whether it is designed to be heard on the dancefloor, within an art context (such as the sonic dimension of an installations or a performances within an art space) or at home[4]. Whilst the techniques used to make such music and the micro sonic elements within each set might be very similar, the musical context in which they are rendered may differ greatly. For example, Sasu Ripatti described his work (which encompasses various stage names including Vladislav Delay, Luomo, Sistol, Uusitalo and Conoco) as narrow but ultimately easily transferable between social contexts and social use.

For me it's a question of the sort of music. When you look at the whole field of art and music as a big picture, what I do is fairly narrow but what I do within this narrow field I try to expand as much as I can. But I try to take advantage of what it's possible to do in both. You can do some weird shit music alone, you can do some socially connected music in clubs or semi-clubs, you can do the remix orientated stuff. (Personal communication 3/12/08)

Ripatti's comments here are typical of the way in which many post-techno artists negotiate an easy shift between differing musical registers and musical use value. Given this duality of practice it is perhaps unsurprising that certain sonic characteristics cross over into differing musical modes of engagement. As Vanhanen (2003) notes, glitch has become a 'stable signifier' as part of an established musical vocabulary which has crossed over from underground scenes into the wider musical vernacular and that 'car adverts, MTV inserts and music videos are now decorated with glitch filigree' (2003, 47) . Ultimately he concludes that glitches 'are events that refer to no other reality than that of their production' as a 'becoming sound of the production process itself' (ibid.).

Nevertheless it is in dance music where the glitch sound has had most resonance. Glitch techniques have been incorporated into various forms of dance musics such as microhouse, glitch house, techno and can be found in the proliferation of music that has been grouped within the term minimal in the past few years. In the context of the dancefloor, with its communal and corporeal pleasures, the same set of sounds might operate (and signify) in different ways. If we follow this into the realm of meaning and musical experience we might see the type of corporeal engagement found in the context of the dancefloor as being the primary social use or as the primary mode of engagement. The movement of glitch techniques into dancefloor musics means they shift use register. They become understood as part of, and in a tradition of, what Gilbert and Pearson (1999, 47) call 'musics whose primary purpose is to move our bodies via the materiality of the bass'.

Differing listening contexts engender differing forms of listening experience and hence differing types of musical engagement. Even the same musical texts can shift in terms of experience and engagement depending upon context. The example of the *Uncanny Space* event is instructive here. At the event Alva Noto performed his *Untxt* project in its entirety. The album itself is something of an exercise in data sonification in that it translates various kinds of data into audio information: the contents of Nicolai's wallet are transferred into numbers and spoken word, number sequences on credit cards and receipts are converted into sonic data, the binary codes within software applications like Excel, Word and Powerpoint are reinterpreted as a raw stream of sound matter. So far so conceptual - and this conceptual underpinning clearly fitted into the overall remit of the *Uncanny Space* project. At the event Nicholai performed tracks from the *Untxt* album exactly in their running order. Essentially we were listening to an existing musical text that had already been released as a recording. However, the event itself is in effect transformative, shifting the listening mode and transforming the musical experience. In the lead up to the event Nicholai sent through a very detailed technical specification (outlining exactly which PA and speakers were required) which was deliberately configured in order to present the full spectrum of frequencies at a relatively loud volume while maintaining maximum clarity. The 'live' event enabled the recorded material to be staged, heard and experienced in a way which is not possible when listening to the album through a domestic stereo or through headphones. Experienced through this type of sound system the digital clicks, cuts and hums that make up Noto's work become primarily corporeal with differing frequencies having differing effects upon various parts of the body. In this performance context then, a set of sounds which are often understood as being alienated from the body were reconnected with the corporeal in a real and inescapable sense. Whilst not necessarily conforming to the generic conventions of dance music per-se, the volume and the context of the audiovisual performance in that particular space for that particular crowd served to shift the experience of that particular musical text. The experience of the event was perhaps more akin to what Fikentscher describes as the disco experience whereby 'the intensity of audio and visual signal… is apt, even designed to lead to other-than-everyday sensations on the part of the dancer' in turn leading to the 'manifestation of possibility, the option, or the attempt to step outside the restrictions, conventions, and norms of the world beyond the doors of the dance venue' (2000, 75).

Electronic Music, the Club Experience and Affect

The disjuncture I have identified between my own experience of the *Uncanny Space* event and the text-centric, post-structuralist analysis described above draws attention to the fact that such interpretations of glitch rely solely upon how particular sounds might work in a particular framework of signification. While the sounds of electronic music do have the power to signify or connote such meaning, my point is that there is a flatness within interpretations of glitch where the physical (and immediate social) contexts of listening are ironed out. How then, are we to account for the differing physicalites of sound accorded through particular listening contexts? How might for instance, differing levels of volume or the perception of sound within the context of a particular immersive audiovisual environment, be understood as central to the way in which sound is experienced?

Clearly, it is necessary to attempt some tentative explanation of the relationship between music and

experiences afforded by media or environment that are presocial or non-linguistic (and thus defy standard rhetorical and semiotic critical approaches). Most simply put, we can understand affect as describing a neurological response to external stimulus or 'an autonomous reaction of an observer's body when confronted with a particular perception' (Meelberg 2009, 324). Affect is thus a primary experience that may or may not be 'translated' into reaction or emotion such as joy, fear, sadness or surprise. Within this model there is a clear relationship between the affective and the cognitive. Indeed, a considerable body of recent work within musicology there has been something of an elision between affect and emotion. For Spitzer (2009, 162) for example, 'the cyclical interaction (or feedback loop) between affective and cognitive (re)appraisals is fast and complex' whereby the listener makes a 'quick and dirty' appraisal of perceived sonic materials which are almost simultaneously refracted through frameworks of signification, meaning and ultimately, emotion.

However, there is something more than transfer going on in terms of the body's intersection with external stimuli. As Deleuze (1986, 66) notes, 'there is inevitably a part of external movements we "absorb", that we refract, and which does not transform itself into either objects of perception or acts of the subject. Rather they mark the coincidence of the subject and the object in pure quality'. Similarly, for Massumi (2002) affect is always 'couched in it perceptions and congnitions' whereby the 'presocial' experienced sensation is subject to capture (through emotion, fear, surprise etc.). However, within affect there is always a residue which escapes such capture. Indeed, for Massumi an emotional response to an external phenomenon actually derives its intensity and power from elements of affect being untranslated and unknowable (what he calls the autonomy of affect).

Emotion is the most intense… expression of… capture - and of the fact that something has always and again escaped. Something remains unactualized, inseparable from but unassimilable to and particular, functionally anchored perspective. That is why it is classically described as being outside of oneself, at the very point at which one is most intimately and unshareably in contact with onseself and one's vitality. (Massumi 2002, 35)

This observation has intriguing and far-reaching consequences for music. For all its signifying power, the affective response that music produces means that it is always enmeshed within other forms of experience and sensation. Furthermore, the uncaptured or untranslated elements of affect may be understood to be central to the pleasures and sense of transcendence that music engenders.

A Culture of Affect

Sylvian's (2005) detailed ethnographic work with club goers is instructive of how the relationship between sound and the body can be experienced within a particular cultural context. Although Sylvian's main concern is with how the club experience can be equated with states of spiritual or religious transcendence, his ethnographic data is also illustrative of how the pleasures of affect are valued in, and of, themselves. A key element in many of his subjects' responses is the way in which the sensations felt by the body become primary and transformative. He notes that a common pleasure for many ravers is 'being in the body' and thereby 'bringing as much awareness as possible to one's own somatic experience' (2005, 77). Within this context, a heightened engagement with bodily affect is fundamental in the pleasures of an experience which goes beyond everyday rationality and 'normal' thought processes. One respondent for example, notes how 'your self conscious awareness of yourself is suddenly shifted away from concerning yourself with how you're seen with other people and you're in the pure experiential mode of feeling' (2005, 74) whilst another felt that the club experience gave them the chance to 'really inhabit the physical body from another space, so that you're feeling your own consciousness participating with physical matter' (2005, 77). For many of Sylvian's respondents then, the dance experience is a form of undoing of the conscious and socialised self, a negation of the ego, in Massumi's (2002) terms 'being outside of oneself,' whilst being 'intimately in touch with one's own vitality'. Whether or not this aspect of the club experience is spiritual or religious, as Sylvian would have it, is debateable but the implications are clear: for many clubbers the power of affect gives them something beyond meaning which draws them back to the club experience time and again. In short, it is the 'pure quality' of experience that is key to understanding the pleasures that the experience affords.

The broad cultural context of electronic music in which the *Uncanny Space* event unfolded is a case in point here. The affective power of music is something that producers and participants within club cultures seem intuitively (and empirically) aware of. Furthermore, club cultures are instructive of the way in which increases in volume, the deliberate accentuation of certain frequencies and the immediate listening context serve to intensify (or at least) change the affective power of music. Nicholi's insistence on a very specific sound system coupled with visuals for instance, suggest a tacit awareness of the intense embodiment of sound afforded by such technologies. The shifting of a set of sounds from a conceptually tight recorded project into the 'disco experience' belies an implicit understanding of the histories and pleasures of club culture.

The ongoing history of club culture has been characterised by the progression of sound technologies specifically designed to solicit affective response. This is evidenced in the value placed upon sound systems within electronic club cultures. A key element within the establishment of a club and the building up a loyal clientele has been though an investment in expensive professional sound systems. Clubs such as Fabric (London), Berghain (Berlin), Space (Ibiza) and Cocoon (Frankfurt) have built up an international standing based upon the reputations of their sound systems. In addition audio companies such as Funktion One, Martin Audio and EAW are valorized and dissected by club goers on web forums[5] and are used in the marketing of individual clubs. A key value of those systems as articulated by clubbers, promoters and DJs is not merely the volume they afford the music but about the clarity of sound. Indeed, high-end club systems are often designed to accentuate specific elements within the frequency range. Crispness and clarity at the top end of the frequency range are valued along side technology which serves to accentuate the bass and sub-bass frequencies which intersect with the listener's body in powerful and inescapable ways.

The high importance of these sonic attributes is evident in the way in which the rational behind the

deliver as much resolution and detail as is possible. We also pay considerable attention to the emotional effect of not just music, but the sound itself, what you might call its "quality"'[6]. Similarly, the club designer Dave Parry (of the company Most Technical who have designed sound and lighting systems for the London clubs Matter, Fabric and Ministry of Sound) talks about his aim of creating environments where:

> music, lights and colour, movement and vibrations…[send] you into a trance-like state…. it's about immersing people within this fantastic sound system, and combining that with video, the dancefloor and the lighting to create a cohesive whole… The idea is to get every sense attuned to what is happening around you. So that while you're feeling the music through your feet and through your entire body, it's also hitting you in the ears and punching you in the chest. (Gilbert 2008, 1)

Sound System Technology and Creativity

The move towards 'high-end' sound systems within club culture has a clear relationship to creativity within electronic dance music. Various electronic music sub-genres such as techno, house, drum and bass, and dubstep are designed to be played through such systems, making the most of their increased bass response and high end clarity. In effect, producers within these genres are engaging in a form of system led-production, whereby there is an understanding within the creative process of how music will be experienced through particular types of mediating technology[7]. Hence, the affective power of music and the differential bodily experiences afforded by different listening environments are elements that electronic music producers are acutely aware of. Their negotiation of distinct modes of listening through performed multiple identities and performative strategies show a high level of engagement with (and understanding of) a culture which has routinely sought to solicit affective response. Producers within these genres are in effect engaged in affective work. For example, each of the artists involved in the *Uncanny Space* event negotiated the specificities of the event including the space of the venue, the sound system, visuals and crowd expectation in differing ways. For Nicholi, the use of a particular sound system served to transform existing audio materials. Costello and Vladislav Delay negotiated the specificities of context through their choice of material. Both performed sets which drew upon the beat driven, dancefloor orientated elements of their work eschewing the more ambient and less rhythmically pronounced tracks for which both are known.

Frequency and the Body

A closer examination of the musical elements of the *Uncanny Space* event reveals a more empirically driven understanding of its intersections between technology and the body. An analysis of how frequency range was utilized on the night aids an understanding of the acoustic properties the music performed within the differing sets. This is useful in two ways as it enables an understanding of how a particular piece intersects with the human body and how it fits with overarching conventions of recordings more generally.
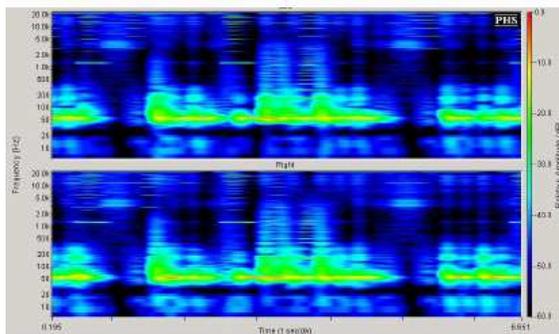

Fig II. Spectrogram of wav file of Alva Noto performing Unitxt

Fig. II for instance shows a spectrogram of around seven seconds of a desk recording of Alva Noto's set recorded at the event. The horizontal axis illustrates the track unfolding in time while the vertical axis represents the particular frequencies being used from 0Hz to 20,000 Htz and the colours illustrate the level of relative amplitude.

Most strikingly the spectrogram reveals that Nicholi uses extremes of the frequency range which are important to the way in which the piece works and how it is experienced. The illustrated section shows an unusually high amplitude and density of frequencies which are at the extreme bottom end of the audible range. The green sections are a visualization of a series of low glitches which provide a rhythmic pulse (at around 50Hz) layered above a sub-bass tone the frequency of which dips down below the 10HZ mark. The use of frequency range provides a particular and very deliberate configuration that results in known bodily affects. The standard range of audible frequencies perceptible by the human ear is from around 20 to 20,000 hertz. Sub-basses (from around 40Hz and below) are primarily experienced in other elements of the body aside from the ear. Whilst it is possible for individuals to ascertain tonal characteristics as low as 12 Hz (Olsen 1967, 249) these very low tones have a more pronounced and projected resonance within the body. That is, they cause minute vibrations in the torso, abdomen and viscera (internal organs)[8].

Fig. II therefore reveals elements within the performance that are primarily felt rather than heard. The use of these sub-bass frequencies is designed to have a bodily effect and when played through a system with dedicated sub-woofer speakers the effect upon the body becomes even more pronounced. In a discussion of sound within electroacoustic compositional practice the composer Robert Platz (1995, 26) refers to the musical use of these frequencies as 'body tones'. Interestingly, as a composer
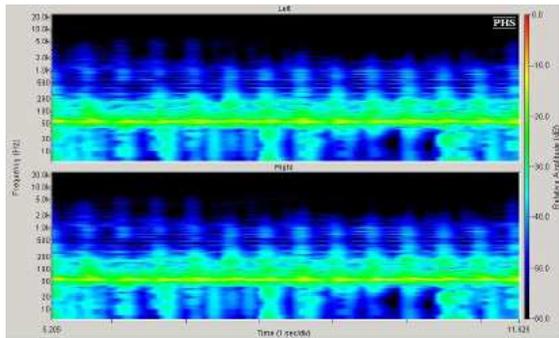
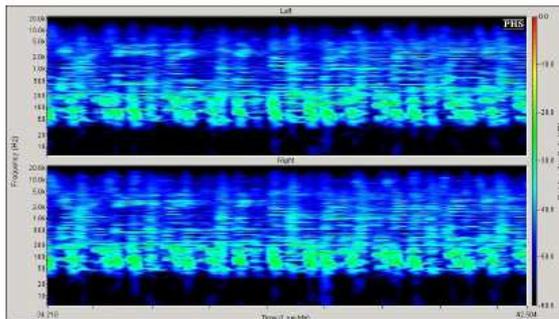Fig III. Spectrogram of 'Tears of the Vampire' Donnacha Costello (2009)

Fig IV. Spectrogram of 'Beautiful Ones' Suede (1996)

This particular use of frequency range has of course, commonalities with numerous forms of contemporary dance music. For example Fig. III is a spectrogram of Donnacha Costello's Tears of the Vampire, a minimal techno track of the kind that made up his *Twilight City* set. We can note a similar use of sub bass frequencies for rhythmic effect and importantly a similar level of separation in frequency across time.

If we compare both Fig. II and Fig. III with a spectrogram of a recording from a differing genre we can identify marked differences. Fig. IV shows a seven second clip of the recording of 'Beautiful Ones' which appears on Suede's 1996 album *Coming Up*. In contrast to Fig II. there is a distinct lack of frequency below the 40Hz range. The more evenly dispersed frequency range is illustrative of a differing form of system led production. 'Beautiful Ones' is a record designed to sound at its best on the radio or through home stereo equipment and its use of a narrower but event spaced use of frequency range illustrate a full (and realist) sound which utilises a traditional spatial positioning which gives the impression of natural room reflection. These factors within the Suede recording are indicative of a pervading realist tendency within certain types of recording convention.

Toynbee (2000) makes a distinction between differing recording modes within the history popular music production: documentary, ventriloquism and virtual sonic environments, each of which have particular historic and aesthetic implications. Toynbee notes that even though the second half of the twentieth century saw the widespread adoption of technologies which have enabled endless possibilities there remains a strong conservative realist urge within many popular music recordings. Many recordings in genres such as rock, certain types of pop or country strive towards a replication (or representation) of the sound of real musicians performing in a real space. For example, another striking element of the comparison between the spectrograms is the much more even distribution of frequencies above the 40 Hz range. So for example, even though in Fig. IV we can clearly see frequencies toward the upper end of the range (around the 5-10 K Hz mark) they are part of a much less separated soundworld. So there is a fuller and more connected soundworld in which frequencies sit together in a way which is much more akin to the reflections of soundwaves in real space. The high frequencies we can see in Fig. IV are resultant from high-hats (which generally operate in the 8khz - 12K range) as well as reflections from (either natural or processed) reverberation.

In contrast Fig. II illustrates Nicholi's aesthetic grounding in the virtual sonic environment mode. The spectrogram shows intense sonic slabs of bass interspersed with silence, silences which serve to emphasise the corporeal intensity of the bass. Fig. V is a harmonic spectrogram of the same Alva Noto audio clip which illustrates even more clearly the amount of space between high and low. The small regular lines at the higher end of the frequency range show a distinct rhythmic pattern using frequencies which are very much in the upper range of audibility. As we can see, these high frequency tones are given space within the track, lending them a singular emphasis. Even though in terms of amplitude the occurrence of high frequencies in Fig. V may seem minimal in comparison with Fig. IV, their very separation from (and tension with) the low frequencies in the piece mark them out as prominent within its soundworld. The isolation of these sounds in such a way draws the listener's attention and engages their body in very specific ways. In other words, this type of separation within frequency range serves to re-enforce the use of body tones and thus accentuate the piece's affective impact.
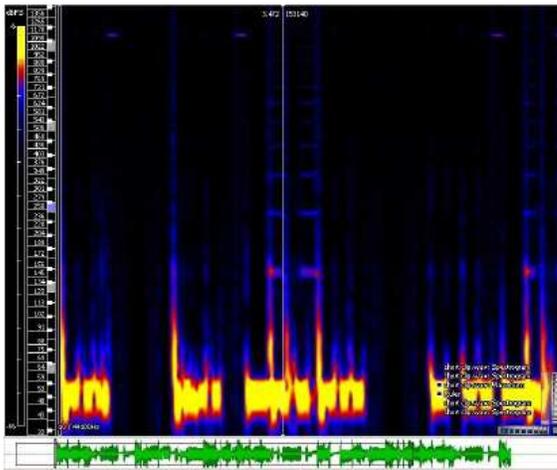
Fig V harmonic spectrogram Alva Noto Desk Recording

Conclusion

Despite my initial reservations about the conceptual failure of the *Uncanny Space* event, I think we did end up producing an event which was transformative, albeit in a way which unravels and asks questions of the dominant theorization of electronic music over the past ten years. A transformation took place in the way in which music and sound were experienced through that particular environment with its specificities of technology, volume, sociality and space. The event is thus illustrative of the way in which how and where we hear and feel music has a central role in shaping musical experience. This has wider implications for the study of music as it is crucially important that we take into account the cultural and physical context of a given musical experience. As Kassabian (2010) has noted, the study of music has too long been blind to listening environments and the differing modes of engagement within listening that they might engender.

In addition, musical texts are often positioned in terms of specific cultural contexts both in how they are made and how they are received in the world. In other words creativity and listening are not just framed, but inherently located *within* contextual factors. For example, the handful of illustrations I have outlined illustrate how musicians and producers are involved in affective work. That is their work can be seen as specifically positioned in response to the specificities of the particular cultural field in which they are engaged. The analysis of frequency range offered above allows for a further understanding about the way in which the artists negotiated the physical and social context of the *Uncanny Space* event. Namely, through a specific amalgamation of sound, an understanding and organisation of frequency range, an acute awareness of the performance context, and awareness of the mediating technology though which the sounds were experienced. All of these factors also belie a tacit understanding of the way in which music operates as affect, the body's power to absorb an external phenomenon and the intense reactions that this engenders. In other words, the system led production described above is necessarily bound up with the intensive vibration of affect and the way sound is experienced in particular social contexts.

While the physical context of experiencing sound has been central to this article I do not wish to divorce this bodily experience from the social. Performance contexts such as the case study described within this article provide key spaces that connect the effects of glitch music both with the physical/individual body and with the social body. Experiencing organized noise in this way is necessarily mediated by the social. The repeated pleasures of affect within a particular social space on the individual body are experienced and understood communally. Further, as Attali notes in his seminal theoretical treatise on the politics of music and noise, the pleasures of connection of noise and the body are a prospective site of social connection and change. He notes that 'noise, when two people decide to invest their imaginary and their desire in it, becomes a potential relationship, future order' (Attali 2009, 143). The liberatory potential of noise outlined by Attali is taken up by Toth's (2009) work on noise music which positions the pre-linguistic and pre-subjective qualities of noise as breaking down our identities rather than reinforcing them, thereby providing a fault line in subjectivities saturated by the commodifying thrust of capitalism. Such a theorization has clear parallels with the affective cultures under discussion here and provides an interesting insight into how the pleasures of affective experience can be understood in relation to wider social realities. The temporal, physical and sonic specificities of *Uncanny Space* can thus be read as offering a potentially transformative environment taking place within a culture in which performer and audience recognize the possibilities of the affective power of sound.

Of course, we should not loose sight of the fact that the use of particular sounds such as body tones and high frequencies are unfolding within the context of music. Indeed, there is something about the organisation of affect within artistic endeavour that perhaps intensifies the sensory response. As Deleuze and Guattari observe successful art 'produces affects that surpass ordinary affectations and perceptions, just as concepts go beyond everyday opinions' (1994, 65). The type of analysis of frequency range that I have begun to undertake in this article is therefore a possible step towards a theorisation of the affective work of music. Ultimately, a critical turn towards music as affect is important as only by considering both the semiotic and affective power of music can we come to a closer understanding of the ways in which it is experienced.

References

Attali, Jaques (2009) *Noise: the Politcal Economy of Music.* Minneapolis: Minnesota University Press.

Bach, Glenn (2003)'The Extra-Digital Axis Mundi: Myth, Magic and Metaphor in Laptop Music',*Contemporary Music Review*,22(4), pp. 3-9

Brennan, Teresa (2004) *The Transmission of Affect.* Ithaca NY. Cornell University Press

Cascone, Kim (2000). The aesthetics of failure: "Post-digital" tendencies in

contemporary computer music. *Computer Music Journal*, 24(4), pp. 12–18.

Deleuze, Gilles (1986) *Cinema 1: The Movement Image.* Minneapolis: University of Minnesota Press.

Deleuze, Giles and Felix Guattari (1994) *What Is Philosophy.* London. Verso

Fikentscher, Kai (2000) "*You Better Work!" Underground Dance Music in New York* Wesleyan University Press

Gilbert, Jeremy and Ewan Pearson (1999) *Discographies : dance music, culture, and the politics of sound*, London. Routledge

Gilbert, Jeremy (2008) 'Interview: Dave Parry' *MONDOdr: The International Publication for Technology in Entertainment* November/December 2008

http://www.mondodr.com/report/interviews/189098/interview_dave_parry.html

Hofer, Sonya (2006) 'I Am They: Technological Mediation, Shifting Conceptions of Identity and Techno Music' *Convergence* 12(3) pp307-324

Huang, Ya and Michael J. Griffin (2009) 'Nonlinearity in apparent mass and transmissibility of the supine human body during vertical whole-body vibration' *Journal of Sound and Vibration* 324(1-2), pp. 429-452

Kassabian, Anahid (2010) 'Ubiquitous Music' 2009/10 Inaugural Lecture Series, the University of Liverpool.

Kelly, Caleb (2009) *Cracked Media: The Sound of Malfunction*. Cambridge, MA. MIT Press.

Massumi, Brian (2002) *Parables for the Virtual: Movement, Affect, Sensation*. London. Duke University Press.

Meelberg, Vincent (2009) 'Sonic Strokes and Musical Gestures: The Difference between Musical Affect and Musical Emotion' *Proceedings of the 7th Annual Triennial Conference of the European Society for the Cognitive Sciences of Music,* pp. 324-327.

Monroe, Alexei (2003)'Ice on the Circuits/Coldness as Crisis: The Re-subordination of Laptop Sound', *Contemporary Music Review*, 22(4), pp. 35-43

Morton, David (2000) *Off the Record: The Technology and Culture of Sound Recording in America.* Chapel Hill, NC. Rutgers.

Olsen, Harry F. (1967) *Music, Physics and Engineering*. New York: Dover.

Platz, Robert (1995) 'More Than Just Notes: Psychoacoustics and Composition *Leonardo Music Journal* Vol 5, pp. 23-28

Prior, Nick (2008)'OK COMPUTER: Mobility, software and the laptop musician',Information, *Communication & Society*,11(7), pp. 912 -932

Sherburne, Philip (2002) 12k: between two points *Organised Sound* **7**(1), pp. 171–176

Spitzer, Michael (2009) 'Emotions and Meaning in Music' *Musica Humana* Vol.2 pp. 153-194

Sylvian, Robin (2005) *Trance Formation: the Spiritual and Religious Dimensions of Global Rave Culture*. London. Routledge.

Théberge, Paul (2004) 'The Network Studio: Historical and Technological Paths to a New Ideal in Music Making' *Social Studies of Science* 34(5), pp. 759–781

Toth, Csaba (2009) 'Noise Theory' in Mattin and Anthony Iles (eds). *Noise and Capitalism.* San Sabastian. Arteleku Audiolab, pp. 25-38.

Toynbee, Jason (2000) *Making Popular Music*. London. Arnold.

Vanhanen, Janne (2003)'Virtual Sound: Examining Glitch and Production', *Contemporary Music Review*, 22(4), pp. 45-52

Young, R. (1999, December/2000, January). Undercurrents #12: Worship the glitch. *The wire: Adventures in modern* music, 190/191, pp. 52–56.

Notes

[1]*Hive Twilight City* was a series of themed events that was designed to reflect and respond to the city through electronic music and audiovisual performance. Previous events had included a sound art/live art event in a local shopping centre. Here shoppers were invited to interact with the seemingly passive soundscape of their environment through portable electronic theremin style instruments wired through the bodies of performers. The project also included commissions of new work from prominent electronic

developing the Cultural programme for Liverpool's tenure as European Capital of Culture 2008 and beyond.

[3]The ICA is the Institute for Contemporary Arts in London. The venue was central in curating and promoting various types of electronica during the 1990s.

[4]For example, the music of various electronic music projects has been rather clunkily been labelled home listening or electronic listening music by critics and retailers.

[5]See for example the extensive discussion of the 'best club sound systems in the world' on the club culture web community *Resident Advisor* http://www.residentadvisor.net/forum-read.aspx?id=63548&page=1 accessed 05/01/10

[6] http://www.funktion-one.com accessed 06/01/10

[7]I am not suggesting that these genres are singular in engaging in system led-production at the creative/production stage. Indeed, the history of sound recording has been punctuated with recordings specially designed for specific systems. Morton (2000, 40) for instance, points to specialist binaural recordings in the 1950s which were designed only to be heard through headphones.

[8]Although the effect of these vibrations is mediated in terms of the body's positioning to a sound source and the posture of the body. See for example Huang and Griffin, 2009.

---

subir >

x?