Geometries of Flight: Remix as Nodal Practice

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Abstract: This paper considers the authors' audiovisual work Geometries of Flight as an example of nodal practice as proposed by Philip Gochenour. The paper outlines Gochenour's concept and situates the 'remix' and the 'mashup' within this model. The paper interrogates various models of thought concurrent with Gochenour's to question the nature of the 'remix', appropriation, and originality in creative practice.



"The task is to vision anew what is possible, but in a way that allows others to share the view." Graeme Sullivan (2006)

1. Introduction

Geometries of Flight is an audiovisual work created by the authors in 2013. Geometries of Flight was commissioned by Tobias Fischer as a contribution to a publication centred on the work of Kenneth Kirschner. The brief for the project was to use any of Kirschner's compositions as the starting point for a remix. All of the sound artists commissioned were given free reign to use his work in any way with no restriction on length or media. The audio component of the project utilizes solely samples taken from Kirschner's 10 July, 2012 whilst the video uses youtube footage. The authors propose that their use of these materials goes beyond the accepted notion of the 'remix' and is an example of nodal practice.

1.1. Defining 'nodalism'

Developing out of Modernism and Post-Modernism, Deleuze and Guattari proposed in Mille Plateaux the notion of a rhizomatic culture, one in which hierarchical structures were discarded in favour of the concept of a planar network of connections. This concept of a rhizomatic understanding of society and culture has been elaborated further in Philip Gochenour's concept of nodalism. Although similar to the rhizomatic model proposed by Deleuze and Guattari, nodalism proposes a model and way of thinking adopted by a number of contemporary disciplines and in its 'neutrality' supersedes the cultural baggage associated with post-modernist thinking and its notions of deconstructivism, rationalization, parody, quotation and irony. Gochenour proposes that in the 21st century "we find that our conception of the world has taken on a particular form, one of nodes situated in networks." (Gochenour, 2011) He writes that the "nodalistic trope can be simply described as a figure of speech that is used to portray an object or process in terms of the connection of discrete units by an open network system that has no hierarchical structure." (Gochenour, 2011) In contemporary society the 'node' is ubiquitous — from referring to the internet as the 'web', the Facebook logo and our social networking structures, mathematics, transportation networks, computer science, economics and critical theory as well as its use in popular culture such as *Node Magazine* — a literary project initiated by Sean Kearney growing out of William Gibson's novel Spook Country. Gochenour maintains that nodalism "has arguably become a dominant discourse within Western culture." (Gochenour, 2011) Thus far this notion has not been applied specifically to music or visual culture.

We propose that nodalism is the way of approaching the production of all artwork in contemporary culture; that nodalism enables the reintroduction of a sense of *local*-hierarchy within a network and that understanding this *local*-hierarchy and its associated network is the means of interpreting and contextualising new artistic endeavour.

1.2. Riffs on 'remixing'

Understanding the concept of 'originality', where our ideas come from and how we appropriate, re-use and adapt familiar tropes is the subject of many academic texts.

1. www.everythingisaremix.info

Modernist texts such as Harold Bloom's The Anxiety of Influence: A theory of Poetry posits a central thesis that poets are hindered in their quest for an original voice because of the influence of other poets. Such an 'anxiety' can also be found in the 'ground zero' musical perspective of post-1945 composers such as Pierre Boulez and Karlheinz Stockhausen. From a nodalist perspective, however, all new artistic endeavour is a hybrid of preexisting models, thoughts or work — or as Kirby Ferguson puts it "everything is a remix".1 Michel Foucault in The Archaeology of Knowledge writes that, "The frontiers of a book are never clear-cut... it is caught up in a system of references to other books, other texts, other sentences: it is a node within a network." (Foucault, 1982) This method of thinking does not lead to a Bloomian anxiety but rather acknowledges culture and its development as an evolutionary process. Such a model is proposed in The Selfish Gene by Richard Dawkins (Dawkins, 1976). Dawkins' model of culture is one comprised of memes, units of cultural information that are transmitted from one individual to another. Eventually a critical mass of memes can be used to identify cultures and sub-cultures that have a shared understanding of such memes. From a nodal perspective, the identification of a genre is understood as a grouping of culturally encoded memes i.e. there is a local hierarchy of memes — certain memes are valued above others in order to form a shared sense of identity. In Geometries of Flight such 'memes' or 'nodes' are Kirschner's work 10 July, 2012; an approach to handling form, tonality, and sound processing that stems from the genre within which Kirschner's work is identified — a kind of instrumental experimental ambient music characterised by such labels as 12k, Room40, Spekk and Audiobulb.

From a compositional perspective, the conscious (or unconscious) usage of memes inherently implies the drawing together of different musical elements or stylistic traits either from within a genre, or from another genre: in other words, in electronic music — sampling (in the broadest sense of the word). This mode of thinking shares a close kinship with the post-modern sampling aesthetic of Paul Miller (aka DJ Spooky) who writes,

Essentially, for me, music is a metaphor, a tool for reflection. We need to think of music as information, not simply as rhythms, but as codes for aesthetic translation between blurred categories that have slowly become more and more obsolete. For me, the DJ metaphor is about thinking around the concept of collage and its place in the everyday world of information, computational modelling, and conceptual art...the basic sense of "rhizomatic" thought — thinking in meshworks, in nets that extend to other nets — it's the driving force of my music and art... We live in an era where quotation and sampling operate on such a deep level that the archaeology of what can be called knowledge floats in a murky realm between the real and unreal (Miller, 2005).

Nodalism with its emphasis on interconnectedness seeks to understand phenomena through an understanding of the plurality of links or memes that link to the artistic work under examination. Nodalism, memetics and the rhizomatic are all means of

discussing a post-structuralistic aesthetic in which the line between creating an 'original' artwork and one that uses elements of pre-existing material is fragile.

We argue that in light of the writings of Foucault, Dawkins, Miller et al, the concept of originality is such a loaded term that the 'material' which constitutes the piece is now not a relevant measure. To paraphrase Brian Eno, in contemporary practice it is the art of arranging and editing that is more important than content. It is this emphasis on arranging and editing material that is to be found in artists and works as diverse as Igor Stravinsky's *Pulcinella* (1919–20), William Burrough's cut-ups and John Oswald's plunderphonics.

In *Geometries of Flight*, as in the works cited above, it is the 'process' and reframing of the original material that is the most important factor in determining the identity of the new work rather than the embedding of 'samples' as referential units. In such works, material, concepts, and ideas are assimilated into the very fabric of the new work rather than merely weaving quotations into the surface level of the work.

In his book *In Praise of Copying*, Marcus Boon writes that "*The assemblage of a new artifact from fragments of preexisting objects or forms is one of the key practices of modernist aesthetics.*" (Boon, 2010:145–146) Boon states that today the terms montage and collage are often taken to mean the same thing, and assemblage is often used to describe the use of similar techniques in sound and literary work. Boon continues,

the power of *détournement*, the transformation of pre-existing elements in a new ensemble, "stems from the double meaning, from the enrichment of most of the terms by the coexistence within them of their old and new senses." It is in this sense that montage is a practice of copying, since it often involves the citation of the old object in the new. (Boon, 2010:146)

However, Geometries of Flight is not a montage. In a montage something is decon-

structed and often, as in a commercial remix, it is important for the audience to be aware of the 'breaks'. Like Oswald's plunderphonics and Portishead's Strangers2, it is the identification of the 'breaks' that engenders understanding and meaning in the new artwork. A more elaborate example can be found in Robin Holloway's Gilded Goldbergs Op.86 (1992–97). The work transcends the transcriptions of Bach by Busoni to become an elaborate reworking within a contemporary idiom. Bach's Goldberg Variations provides the structural and harmonic framework which then acts as a springboard for musical portraits and character vignettes in the manner of Elgar's Enigma Variations Op.39 (1899). Holloway's work is neither a montage or a remix in that the structure of the original Bach composition — an aria and thirty variations is adhered to. Amon Tobin's works present a final and perhaps the most sophisticated example of such work. Tobin's albums Supermodified, Permutations and Bricolage take samples from a variety of sources and remix them into a new form with extensive processing. In Tobin's work the origin of the samples used is of less importance than their inherent musical interest to him as a musician. Although such samples when remixed nevertheless act as signposts to the original track, Tobin is not trying to 'say' anything about the specific combination of samples other than something musical. In this case the extensive nodal connections made carry no intended message rather the focus is on the resulting mix by Tobin.

^{2.} Portishead, Dummy, Go! Beat, 1994

As such nodal practice is a more pertinent way of describing the work of Tobin and such figures as Fatboy Slim rather than the post-modern aesthetic of sampling and collage technique — also found in the work of composers such as Alfred Schnittke and Holloway.

In order to situate and understand *Geometries of Flight* as a work it is important to interrogate the notion of the 'remix'. In the commercial world of popular music the remix has a particular currency. Although exceptionally, Matthew Herbert may remix a track using only the packaging it was sent to him in, the normal process of remixing is,

(...) to take an already finished track and remake it by using a combination of: rearranging it in a different way, removing parts, adding new parts, adding new effects, changing the genre of the music completely or whatever you can come up with to artistically make it different than the original. A remix is in an area of change from the original track that is more than just an edited version or cover version of the track but it is not too different that it becomes a new track that happens to sample the original (...) Making the original track artistically different — but at the same time keeping some essential elements of the original version.³

3. http://www.remixcomps.com/ blog/guide-remix-contests-andremixing-part-1 [accessed 16.1.2013]

Kirschner's 10 July, 2012 was used as a source for the sonic materials. Five short samples were taken and processed considerably. What results is a deconstruction of the conceptual identity of the original. As such it is somewhat removed from the notion of the remix cited above and also from the plunderphonics work of John Oswald insomuch that idenification of the original source is no longer relevant in the formation of meaning and understanding in the resulting artwork. In this sense Kirschner's work is not 'remixed' but becomes a repository of sonic resource to be drawn upon. From this perspective *Geometries of Flight* is not so far removed in its methodology from a work such as Elizabeth Hoffman's electroacoustic work d-ness (2011) which uses as its source material a recording of another of Hoffman's works *Red is the Rows* (2011) for two violins.

In his book Crowds and Power (1960) Elias Canetti maintains that imitation is only the first stage on the way to total transformation. Canetti's observations on the different degrees of transformation propose a spectrum of 'difference' between mere surface or superficial imitation and a total interior and exterior transformation. In Geometries of Flight Kirschner's original sonic material has undergone such a fundamental interior transformation resulting in an exterior that has little superficial sonic resemblance to the original. Yet there is still a kinship between the two. The question there is what remains of the original? Here we are reminded of Picasso's statement on abstract art which states that "There is no abstract art. You must always start with something. Afterwards you can remove all traces of reality. There's no danger then, anyway, because the idea of the object will have left an indelible mark." 4 Picasso's quotation suggests that there always remains a 'trace' of the original. In a commercial remix there often remains a surface level connection with the original track. Specific gestures, sound objects or motifs are embedded clearly in the remix as unambiguous signposts to the original track. In Geometries of Flight this 'trace' is to be found not in such blatant sonic markers but in the harmonic fields employed within the piece. The gestural language of Geometries of Flight

Pablo Picasso qotation cited from: http://quote.robertgenn.com/ /auth_search.php?authid=72 [accessed 16.1.2013]

is far removed from Kirschner's original. However, due to the layering of granular sound processing the harmonic characteristics of the original gestures and phrases is evident. In this sense the notion of the remix is extended to include deeper level musical processes and a more experimental approach to listening as expounded by Smalley (1997).

The remix therefore becomes not merely the reframing of elements from one node — the original track itself, but establishes a local-hierarchy of other nodes regarding the identification of style and context. In the case of *Geometries of Flight* the 'remix' involves nodes that draw together Kirschner's oeuvre, the genre in which he works, the author's own work and idiom, sound processing techniques and the sonic trace of software, reading audio-visual materials, sampling, Smalley's technological listening, as well as other audio works. It is these additional nodal connections that makes the contemporary remix such a rich creative endeavour.

2. Knowing through visual remaking

2.1. Understanding through of visual editing on verbal cues

Nodalism, beyond presenting a contemporary approach to poietics and 'originality' is also a vehicle for understanding in that it provides for a nodal hierarchy in which to traverse a work of art; it can become a research procedure as well as a creative one. Discussing what constitutes a research act in art practice, Graeme Sullivan (2006) tells us that,

if the purpose of research is the creation of new knowledge, then the outcome is not merely to help explain things in causal or relational terms, but to fully understand them in a way that helps us act on that knowledge.

This acting is the creation of a new work of art. The visual language employed in Geometries of Flight is one such example of acting on new knowledge provided by the music. In conversations between the authors we found a common subjective visualisation of the large swathes of granular material as an 'epic freeze'. This new intersubjective knowledge, began to disambiguate the meaning of the new music, to paraphrase Tagg (Tagg, 2012:Loc 156), by going beyond the iconic, indexical and connotative types of semiosis we would normally expect. These were simply not obvious as the music resembled itself and other instances of granulations and ambient composition yet with a particular take on the original material (broadly Lo-Fi, irregular piano music passages revealing a recognisable sample of the original almost halfway through the piece). By placing ourselves at the receiving end of the communication process (Tagg, 2012) and trying to find common verbalisations to express the musical experience we came up with imagined landscapes of glaciation, of flight, of blinding whiteness, and of arbitrary arrangements of streaming video within the cinematic canvas. For now, let us consider the audiovisual discourse yielded by the second degree of remixing the Kirschner which is the visual mode of Geometries of Flight.

In an attempt to capture this 'epic freeze' image, one of the authors scoured youtube with the intention of finding vistas of arctic or antarctic landscape where ice would be prominent. This led also to the inclusion of aerial polar landscape footage. Once this

material had been identified, a process of de-contextualisation began. The idea was first to create a database of 'ice materials' that brought to mind the musical strands in the audio mix, secondly it became important to make explicit that this was to be, in the words of Lev Manovich (2001:Loc 241) an instance of 'database imagination'. Much like the original Kirschner is broken down, modified, re-selected, given order and re-layered, the visuals attempted to do the same — in essence, the same nodal practice is applied in both the musical and the visual domains. The resulting edit of video attempting, again paraphrasing ideas of Manovich (2001:Loc 297) a simulacra of new media. With the visual loop at its core *Geometries of Flight* now results in a non-story that tells the gradual discovery of a visual language. And much like Manovich's assessment of Dziga Vertov as providing narrative through a gradual process of discovery of the database (Manovich, 2001:Loc 266), we have released our database of visuals as a gradual discovery of the sounding music of *Geometries of Flight*.

Rather than being an attempt at verbosity, we mention 'sounding music' in an intended contraposition to 'visual music'. The term visual music, coined by art critic Roger Fry in 1912 to describe the work of Kandinsky is perfectly consonant with our intentions for *Geometries of Flight*. In our case, the sounding music gives rise to the visual music, mediated by the authors' intersubjective experience. Garro (2012:103) gives an informative account of visual music primed for the consideration of electroacoustic music, especially in the binding of the visual experience to time (even as we regard the canvas, beyond the first general intuitive sighting, we traverse 'that which is framed' in time). Kandinsky's 'improvisations' and 'compositions' between 1910 and 1914, operate according to this timed viewing. And it is interesting to consider pieces like *Composition VIII* (1923) as an example of an image that needs to be traversed to be comprehended, the overall view not revealing anything other than multiple paths for the eye to consider. In *Point and Line to Plane* (1926), Kandinsky makes much of sound to describe what is in essence visual, eventually both becoming the same thing: organised vibrations experienced in time.

2.2. The Plunderphonic model: understanding by remaking

Plunderphonics is a good example to look at to illustrate this understanding of Kirschner's original material and deriving new knowledge from it by remaking it. In an interview with Norman Igma, John Oswald defines a plunderphone as "a recognizable sonic quote, using the actual sound of something familiar which has already been recorded..." Further, he distinguishes that from musical quotation: "Whistling a bar of Density 21.5 is a traditional musical quote. Taking Madonna singing Like a Virgin and re-recording it backwards or slower is plunderphonics, as long as you can reasonably recognize the source" (Igma, 2000). The key characteristic of the plunderphone is the ability of the listener to recognise the source. This act of recognition mediated by transformation raises interesting epistemological issues. These can be discussed usefully in three ways that are applicable to any remix aesthetic.

Firstly, by choosing objects to be remade or imitated, we begin a process of critical categorisation, and categorisation shows understanding. For instance in *Brown*, from John Oswald's 69/96. This piece is a veritable catalogue of 'James-Brownisms' where Oswald takes us on a lightning tour of funkiness. In this piece we find that the samples of James Brown are chosen and grouped according to various strands: shouts, beats,

saxophone solos, hits, vamps etc. These elements are not just samples from the source (James Brown) but they are a choice of what makes James Brown into 'James Brown', from Oswald's point of view. They demonstrate Oswald's understanding of James Brown. This understanding is not expressed through language, but through placing samples one after another as well as alongside each other. The resulting listening experience is a transmission of this knowledge of 'James Brown', and is both an interpretation (hermeneutic process) communicated to fellow musicians as well as a new musical artefact gifted to the audience.

Secondly, attempting to blend together our material into new constructs, we also evidence that we understand the basic morphology of that material. Again, in *Brown*, if we look at the combination of hits, vocal cries and beats we see matching by beat, texture and general 'shape' likeness. A further level of complication comes from the 'framing' of the material for remixing. In this way a whole bar of a drum break may be cut and placed, a single "get down!" shout may be trimmed just so. The result becoming a new rhizomatic expression of 'James Brown' yet nodalised by the very act of ordering. Music, being time based, declares precedence and being amplitude sensitive, declares hierarchy (importance). In this way what is chosen as an introduction ("one, two, three, four... [stutter]") is clearly there as both an indexical sign (the count) and iconic sign (Tagg, 2012:117) (James Brown's characteristic voice and count-in). The following saxophone squeal is subservient to the beat and we know this because the amplitude of the drums is greater, the saxophone becoming just a colouring, perhaps a vocal anaphone of James Brown's funky yelling.

Similarly, in *Geometries of Flight*, an intimate relationship with the piece by Kirschner (10, July 2012) is evidenced by the choice and layering of granulations of the original piano material (a piece which wanders pleasantly in semi-improvisatory phrasing through cyclical note/chord sequences). Where Kirschner seems not to imply necessary harmonic, timbral or melodic precedence, *Geometries of Flight* interprets the essence of the piece as a celebration of the piano sound both in texture and register. It does this by presenting broad swathes of granulations which highlight the importance of timbre by 'freezing' and overlaying different samples of the original piano texture. The non-teleological 'cyclical' structure of the original is distilled into 'frozen' layers of sound. But further than this, *Geometries of Flight* imposes a form, thus re-framing the samples within a new 'com-position' (the act of putting things together anew). This is to say that the position or placement of the sounds obeys a new form. This new form results from basic compositional choices: what goes first; what goes second; if sounds are playing together, which should be louder?; how many sounds can co-exist at any moment in the mix, etc.



Fig. 1. Geometries of Flight: layers reframed⁵

5. https://vimeo.com/57453946

Thirdly, when remaking through mashup/remix, we show an understanding of semantic value and the ability to recombine the original material into new semantic constructs. In parallel to the audio discourse, the visuals in *Geometries of Flight* show both iconic signs (as snow and ice are presented) to the idea of 'freezing' sound through granulation and an indexical sign through synchrony with chosen moments of presumed musical importance. Iconic signs that evidence an understanding of layering within the sound world are also evidenced by visual layers of video. Each telling its own story but only partially, enigmatically, thanks to the framing of the streaming video, the choice and the positioning within the screen as 'canvas'.

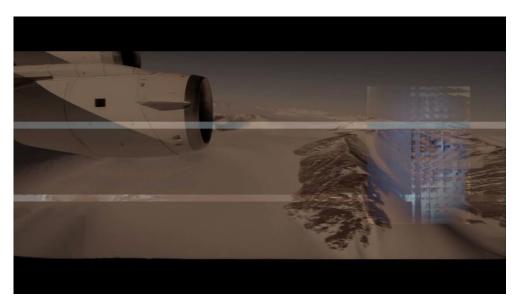


Fig. 2. Geometries of Flight: indexical and iconic signs of freezing⁶

6. https://vimeo.com/57453946

Our imagination is embodied in our art practice. Ideas become tangible as the work gets made and our 'thinking in a medium' (Sullivan, 2006) raises domain-specific epistemological issues as the piece takes shape. *Geometries of Flight* evidences audiovisual thinking as much as it does musical thinking and insights about both modalities are primed by each other.

2.3. Remaking and 'liking' as confirmation of knowledge reception

Remixing something shows at least interest in the original if not outright appreciation, yet placing the work in the contemporary social web yields further signs of acceptance (and possible understanding) for a work. Contemporary social media requires that we react to what is shared with us. The ubiquitous 'thumbs-up' icon popularised by Facebook is now to be found anywhere content is presented on internet. Twitter and Google+ have their equivalents in 'favourite' and '+1' respectively. At the same time, sites like Vimeo, Flickr or Soundcloud allow for author-enabled downloading and sometimes attaching Creative Commons licenses that tell us what we are allowed to do with the media (usually implying that we should probably think of doing something with it!). This 'liking' seems certainly a way of confirming the artistic 'message', which is the work itself. We 'like' if we like and we do not 'like' as a passive indication of either indifference or rejection (which for an artist is the same). The new Facebook Graph Search, for instance, is a way to trawl through the evidences of reception of media shared on the net as well as $identifying \ `meta-communities' \ of \ `likers'. \ This \ introduces \ nodal \ thinking \ into \ the \ social$ reception phenomenon. In the same way that the artist categorises, orders and evaluates signification introducing nodalism into what was essentially rhizomatic thinking, now liking establishes nodalism in reception. The 'database narrative' described by Lev Manovich in his Language of New Media (2001) finds an equivalent in a sort of 'database reception'. Here, audio-viewers are then able to categorise, order and assess signification through the construction of playlists or collections and by grouping themselves into communities of friends/subscribers.

Although the above applies to text-based media, we could say it finds its real purpose in non-verbal media. Audiovisual art evidences the world in a non-verbal manner so it is only fair that it will demand just two things of its audience: to like or to remake. If the latter is intended, then downloading or sharing will be enabled, but the dynamics of the net are such that often sharing may be construed by the simple act of posting, with the knowledge that copying is possible and easy. In this sense Graeme Sullivan (2006) captures the interaction between artist and audience perfectly when he writes:

There is an acknowledgment that art practice is not only a personal pursuit but also a public process that can change the way we understand things. Consequently, the ideas expressed and communicated have an interpretive utility that assumes different textual forms as others make sense of what it is artists have to say through what it is they see. Interpretive research acts build on the rich conceptual traditions associated with image making whose purpose is to open up dialogue between the artist and viewer, and among an interpretive community whose interests may cut across disciplines... (Sullivan, 2006).

3. Conclusion

Nodalism engenders a means of understanding the creative work and brings together the oft cited characteristics opposing Modernism with Post–Modernism into a neutral frame that considers all materials, ideas, and concepts can be hybridised and developed in the creation of new artwork. The authors also propose that nodalism, if one accepts a memetic understanding of culture, allows a local-hierarchy of nodes (or memes) to be re-introduced into an essentially rhizomatic model. Further, nodalism introduces tools to understand a work of art and to evidence this through remaking. Where all nodes of a rhizomatic structure are egalitarian, nodalism introduces a sense of direction by virtue of hierarchy. This then becomes useful for finding one's way through databases of creative materials.

The hierarchy of nodes is not that between 'high' and 'low' art or the inherent value of one artwork over another, but rather the preferencing of certain nodes over others. It is acknowledged that whilst larger nodal interconnections will assist in the definition of genres, more localised nodal connections will define a specific artists idiom within this genre.

In contemporary artistic practice it is the modernist Bloomian anxiety that ironically may well produce unoriginal work. It is the outward looking practice of nodalism that facilitates a plethora of resources to be plundered. It is arguable that the more nodes one is aware of, the more original one's work will be. A similar model is found in Jacques Lacan description of the linguistic signifying chain which he described as 'rings of a necklace that is a ring in another necklace made of rings' (Lacan, 1977:153). Or to put it in the language of semiotics applied to music proposed by Tagg (2012), the mapping of one semantic network made up of nodes to a new one of nodes re-made.

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