

‘A Delicate Balance’: Music Theory, New Musicology, and the Analysis of Sound in Radiohead’s ‘Like Spinning Plates’

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The analysis of popular music is a contentious topic in music scholarship. Substantial academic and cultural capital is at stake, and scholars of various disciplines—including traditional music theory, traditional musicology, new musicology, ethnomusicology, cultural studies, anthropology, and numerous ethnic studies disciplines—are all vying for power or at least a significant presence in this field. However, what is often left in the fray of the ideological debate between these scholars and the myriad attempts to apply existing methodologies to the analysis of popular music is an in depth study of some of the most salient aspects of this music. Most conspicuously absent from these attempts at popular music analysis—due in large part to the dependency of existing methodologies on text and musical notation, as well as a focus on the written over the oral or recorded—is substantive treatment of the aspects of the sound material which cannot be represented as text (i.e. the lyrics) or Western musical notation (notes and simple rhythms).

With this in mind, I would like to present an analysis of Radiohead's 'Like Spinning Plates'—from their 2001 album *Amnesiac*—which focuses on these aspects of the sound material. I have chosen this piece for such an analysis because the most salient aspects of its construction are outside the bounds of melody, harmony, meter, and text. The overall affect of the song is essential to its meaning, and this affect is achieved primarily by techniques of performance and digital audio production. Further, the 'information content' (c.f. Meyer 1967/1994, ch. 1-2) of the song's melodic, harmonic, and metric structure—whether measured by overall complexity or by deviation from the norms of rock or of Radiohead's repertoire as a whole—is low relative to much of Radiohead's earlier work. Thus an analysis which focuses on those aspects will not yield much analytical or interpretive fruit in this song. And perhaps most significantly, Radiohead seems to draw listeners' attention to these performative and technological sonic elements, through the song's temporal arrangement, the building up of a particular sonic space, and the relationship between the text and these sonic elements. Such a piece makes an excellent case study for exploring the role of the sound material in the analysis of popular music.

Of course the question of methodologies—and the ideologies which they represent—is still present. The analysis of a piece of music is not a benign act but a political one, especially in a hotbed of disciplinary conflict such as popular music scholarship. And since I am offering my analysis as a model of sorts for future analyses of popular musical works, I feel the need to be open about my position in the ideological debate over popular music. There are three ideological or disciplinary approaches to popular music analysis which I am drawing from in this analysis, but I am hesitant about planting both feet firmly in any of these ideological camps. Those approaches are the primarily text-based approach of many scholars in cultural studies, anthropology, and even sometimes musicology; the post-Adornian approach of so-called ‘new musicology’; and the ‘traditional’ neo-Kantian approach of contemporary American music theory. All three offer helpful methodologies for analysis, but all three are problematic in some respect, and all three have limitations to their fruitfulness in analyzing a piece such as ‘Like Spinning Plates.’

The advantage of a primarily text-based approach is clear: the text (and, if applicable, the music video) is typically the easiest part of the musical product to interpret. Or, at least, the part which critics feel the most confident in interpreting. However, the limitations of such an approach are obvious to any music scholar and have been articulated in numerous articles and books on popular music. One of the chief problems with primarily text-based analysis is that the analyst’s interpretation of the text frequently pigeon-holes the musical analysis. It is hard to refute a text-based interpretation on purely musical grounds, and thus the music is only invoked in order to support the reading of the text. Were this how the works are constructed and received, this would be a moot point. However, in Western popular songs, lyrics and music are often composed simultaneously. In some cases, the music is composed first, followed by the lyrics. Further, fans of the music frequently do not find the greatest meaning of a song in the text, but in the overall sound of the track. So while a text-based or text-first approach to popular music analysis may provide the analyst with an easy road to a viable interpretation, that interpretation is often anachronistic or improperly con-

textualized, given the way that meaning in popular music is typically constructed and interpreted by those within the musical culture (c.f. Walser 1993, ch. 1-2 for a more detailed critique of this approach).

New musicology—as it is laid out by Kerman, Fink, and Walser—is fundamentally a critique of the Kantian aesthetic, which is still prominent (if not dominant) in contemporary American music theory. At the heart of this critique is the Adornian view that music and social meaning are inextricably linked. Walser characterizes this view as follows:

Adorno's musical analysis posited a homological relationship between dynamic processes in music and those most central to society at the time. For him, musical and social structures were metaphorically linked, and musical and social criticism were thus inseparable (Walser 1993, p. 35).

To a new musicologist, any musical utterance has fluid meaning which is bound up in the social context in which the utterance is sounded, and any analysis or use of words to talk about music is a political act. Specifically, the Kant-based analytical methodologies of disinterested observation of the work 'in itself' and the 'subjective universality' of beauty (Kant 1790/2000, p. 97) are political tools for the reinforcement of the interests of the bourgeoisie in Enlightenment Europe. As such they have no place in the academy (c.f. Kerman 1980, Fink 1998, and Walser 1993).

Putting aside the Kant critique momentarily, the stress on the social and political meaning of both works of art and works of art criticism are incredibly valuable for the study of music in general, especially contemporary popular music, which plays such a significant part in the daily lives and social/political/economical relations of so many people. The question is not 'Is this music good in itself?'; the question is 'What does this music mean to these people?' or 'Why does this music mean so much to these people?'. The question becomes much larger than the work itself. The good news for analysts, though, is that for new musicologists the question 'How does this music work?' is still part of the larger question of music's meaning. Musical analysis can and should be part of a new

musicologist's study of a work, genre, or repertoire. It hasn't gone away, though the agenda behind it has changed.

In my analysis, I take the issue of context very seriously (though I tend to hone in on a smaller context and remain closer to the sound material than most new musicologists, not delving quite as deeply into the social relations in question). However, I also value the 'formalist' (Fink 1998) analytical methodologies of traditional music theory and am not willing to give up the Kantian ideology lock, stock, and barrel. It still has some usefulness, if we are careful. Kant's description of beauty and the sublime were representative of an era, and a number of composers of that era (and following) subscribed to those ideas. Formalist principles were part of their training. Thus an analysis of their works on formalist terms is valid and has value. So does a critique of the values and practices of the culture in which those works were composed. Neither negates the other.

Further, there are times in which telling a purely technical or formalist story—even about a piece of popular music—is both helpful and appropriate. For instance, a Lewinian analysis—which typically does not offer the 'solution' to the problem of a piece, but rather offers a pedagogy of a way of hearing a work—has value 'in itself,' as long as our understanding of the work and the composer does not end with the transformational network (and Lewin would, of course, never argue that it should). Or an analysis such as Dave Headlam's explication of the technical details of Cream's transformation of a number of African-American blues songs into the rock style has value in itself (Headlam 1997). It is a formalist analysis that focuses on 'the music itself,' but he lays his work out in such a way that it is clear that the formalist narrative is not the whole story. Such purely formalist analyses have immense value, I believe, and can continue to have value if we are careful not to claim a monopoly on meaning when producing them.

The problem, as I see it, with all three of these ideologies is that each one unnecessarily privileges some part of the work or its context *a priori* over others. Text-based analysis privileges text, denying the autonomy of the music to the point that its power to signify is all but absent. New

musicology also diminishes the autonomy of the work more than is necessary, privileging the aspects of the music and its structure which most strongly correlate to salient social and political meanings. Traditional music theory overemphasizes the autonomy of the work, diminishing the social and political nature of the acts of making music, listening to music, and analyzing music. It also privileges melodic, harmonic, and formal considerations over timbral, orchestrational, or technological. My ideological position, then, is somewhere between these three ideologies, though closer to the approaches of traditional music theory and new musicology than cultural studies et al. My methodologies will draw on all three where I find them to be of the most value, but given their limitations in dealing with the sound material, my analysis of 'Like Spinning Plates' will—by necessity—incorporate extensions to these methodologies in order to satisfactorily approach and interpret this material. In general, I will address the way that the sound material, abstract structure, and text of 'Like Spinning Plates' work together to create the affect of the song and communicate the song's meaning.

'Like Spinning Plates' begins with 15 seconds of sound material which has neither melody, harmony, meter, or text. However, this material is crucial to the general affective quality of the song, and it is loaded with potential meaning. The sound in question, which persists throughout the entire song, is derived from the sound of a drumstick hitting something metallic and resonant, probably the rim of a cymbal. That sound is looped, and the resulting track is played back in reverse with erratic accelerations and decelerations of playback speed. This playback can be easily performed in a digital audio workstation (DAW) like ProTools or Digital Performer by right-clicking and dragging the mouse pointer across the audio track (scrubbing) from right to left at variable speed.

There are a number of contexts in which a listener may experience this sound, and the particular context influences its potential meaning. Most listeners are unlikely to know the source of this sound material as I have explained it. I only figured this out after carefully studying a reverse

recording of this song, which I created in Digital Performer (accompanying CD from first paper, track 2). But this material can function as a potent symbol in a number of ways. First, apart from any intertextual references, the purely sonic properties of the sound material and its musical implications have meaning. Musically speaking, this material is disorienting, or at least resists orientation around a particular tonic or other referential pitch material or a stable metric pattern. This disorientation contributes significantly to the general affect of the song.

In terms of sonic properties, I find two potential interpretations of this sound particularly compelling. First, the temporal arrangement of this material is such that it resembles an engine starting up. After a couple loud bursts at the beginning, the reverse cymbal hits are grouped into several small spurts at low playback velocity. Then they gradually increase in length and intensity (due to a higher playback velocity) until they reach a point upon the entrance of pitch material where they can sustain a relatively static pattern. In a sense, then, these sounds represent the motor of the piece starting up. Second, each clip of a drumstick hit in reverse sounds much like an object flying past one's head at a high speed. Taken as a whole, the number and persistence of these sounds lend a circularity or recursion to the sound. That is, one could hear these sounds as a small number of objects rapidly circling around one's head, or whirling about in the nearby vicinity (as if the listener were holding one end of a short string with an object tied to the other end and were spinning the object at a rapid but irregular speed, and that sound were multiplied several times over).

One can invoke the title and text of the song in order to support such a hearing. I will reserve more detailed discussion of the text until later, but the general notion of spinning plates—that is running around frantically trying to keep wobbling plates from falling off their poles by keeping their spinning velocity up—is rather well captured by this sound material. Further, the starting of the engine, so to speak, in the temporal arrangement of this material presents the static state of spinning as a desired goal, albeit a state which is not at all free from its own tension and desire.

Intertextual references can also open up potential meanings for this sound material. For instance, it is quite common for Radiohead tracks to slowly build up their motor through additive layering. ‘Packt Like Sardines in a Crushd Tin Box’ (*Amnesiac*) begins by establishing the meter and two primary rhythmic motives, followed by the entrance of the Rhodes piano which establishes the tonality and primary harmonic progression, and finally the voice. ‘Pyramid Song’ (*Amnesiac*) establishes the harmonic progression first, but with uneven rhythms and enough rubato that it resists perception of an unambiguous meter until the drums enter two minutes into the song. However, ‘Like Spinning Plates’ is unique in that in almost every other Radiohead song, the tonality or the meter (if not both) is established quickly, even if various parts are added gradually through layering. Thus the resistance to tonal and metric orientation is a marked phenomenon within Radiohead’s broader repertoire.

This marked phenomenon can draw the listener’s attention away from ‘musical’ elements of the song—i.e. melody, harmony, and rhythm—and toward ‘technological’ elements of the song. Such elements are commonly of structural importance in Radiohead’s work, particularly beginning with the 2000 album *Kid A*. I will go into greater detail about the structural importance of technology in this song later. For now it is significant to note the way that the opening material may be drawing listeners’ attention toward the more technological elements of the song’s composition.

One intertextual reference can help illuminate how this is so and how it may serve the meaning of the song. The opening of ‘Everything in its Right Place’ (*Kid A*) establishes the meter, tonality, and primary harmonic progression in the keyboard. However, the voice enters much the way that the reversed cymbal hits do in ‘Like Spinning Plates.’ Two tracks of fragments of the vocal verse material (one in the left channel, one in the right) gradually fade in over the introductory keyboard material, leading into the statement of the first chorus. These two tracks are created in a similar way to the track of reverse cymbal hits: a performer uses the mouse to scrub over the recorded vocal track of the verse—this time at full speed and scrubbing both forward and in reverse—to gen-

erate a digital version of turntable scratching. (This technology is actually not DJ-derived but is a digital version of a tape-studio practice of scrubbing the tape head back and forth along a section of tape in order to pinpoint the desired location for a cut, which was literally a cut of the magnetic tape.) The timbral artifacts of the technology are rather different (somewhat smoother and less protruding) than scratching on a turntable. However, I think the reference is readily audible.

This song is the first on the concept album *Kid A*, which comments on the idea of human cloning. I do not want to engage in a detailed analysis of this song, but both the musical structure and the verse text of ‘Everything in its Right Place’ are constructed to give the idea that everything is, indeed, *not* in its right place. First and foremost of these out-of-place elements is the scrubbed verse text over the introduction. But not only does it represent such an idea, it also draws the listener attention from the very beginning to the problem of technology and its relationship to humanity, by putting forward a technological deconstruction of the human voice (accompanied solely by electronic instruments, and followed by a robot-like monotonous voice in the chorus and verses). Thus, not only is technology a theme of the text, the use of technology in the production and performance of the song is motivic.

If we are to take the reverse-scrubbed cymbal hits in ‘Like Spinning Plates’ as an intertextual reference to ‘Everything in its Right Place’ (surely not the only interpretation, but a valid one), this encourages the idea that it draws the listener’s attention to the technological elements of the piece’s construction, production, and performance. But aside from this reference, the relationship of humanity with technology is a recurring trope in Radiohead’s music, and the juxtaposition of human manipulation of digital technology to generate inhuman sounds and digital manipulation of sounds created by humans is a common technique they use to draw attention to the question of humanity, technology, and their recursive relationship. Given the potential intertextual reference between the openings of ‘Like Spinning Plates’ and ‘Everything in its Right Place,’ the relationship of these reverse-scrubbed cymbal hits to the larger Radiohead theme of humanity and technology, and the

salient use of similar technology throughout the rest of ‘Like Spinning Plates,’ it seems reasonable to interpret the opening of ‘Like Spinning Plates’ as highlighting and drawing listener attention to the technological elements of the song, in addition to its affective significance.

I obviously cannot proceed through the entire song in the same detail as the opening 15 seconds. But I chose to address this opening passage in such detail in order to demonstrate the importance and meaningfulness of compositional elements other than melody, harmony, rhythm, and text in this song. In particular, the sonic aspects of the opening gestures contribute to the general affect of the song—both by evoking aural images and psychological states—and suggest the structural significance of the technologies used to create these sonic gestures. In the remainder of this analysis, I will explore the structural significance and affective power of other sonic elements in this song, and how they work together with the text in order to generate meaning.

Fundamental to the structure and affect of ‘Like Spinning Plates,’ and building on the use of reverse-scrubbed cymbal hits in the opening seconds of the song, is the use of reverse waveforms (compare the song on CD track 1 to the reversed version on track 2). These reverse waveforms contribute to the aural/psychological sense of spinning, a more general psychological tension through temporal disorientation, or simply manifest the structural motive of reverse playback. Most notable are the reversed MIDI harp, whose running eighth-notes constitute the rhythmic motor of much of the song, and the reverse-scrubbed cymbal hits of the song’s opening. Radiohead also plays in reverse waveform a number of notes and chords on a synthesizer which plays a predominately even tone, with no decay. In order to make the reverse waveforms detectible on an even-tone sound clip, Radiohead applies reverb to the soundclips *before* the waveform is reversed, giving the onset of the reversed clip a retrograded decay.

These reverse waveforms contribute to the song’s general affect primarily in two ways. First, these waveforms often sound like an object is spinning or whirling rapidly through the air near one’s ear. This phenomenon was detailed above concerning the reverse cymbal hits, and the reverse MIDI

harp ostinato generates a similar effect, this time with discernible musical pitches. Second, reverse waveforms, particularly of instruments whose notes decay after articulation, generate rhythmic and metric disorientation, even when the reversed notes are played at a regular metric pulse. Rhythm is predominately a phenomenon of the *onsets* of musical events, their articulations. When the onset of a time-span, in which a particular note or harmony is active, is the quietest point in that time-span, the discernment of rhythm is extremely hindered, causing metric disorientation on the part of the listener. Throughout ‘Like Spinning Plates,’ the placement of beats in the synthesizer parts and especially the MIDI harp, and thus the transitions from note to note and from harmony to harmony, are blurred by the reverse waveforms.

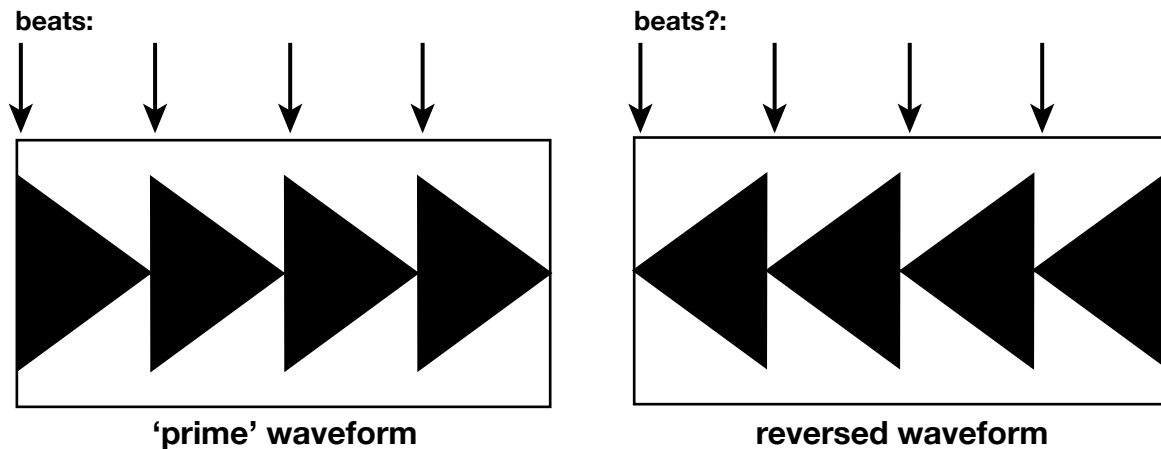


Figure 1. Beat discernment with ‘prime’ and reversed waveforms.

While you make pretty speeches
 I’m being cut to shreds
 You feed me to the lions
 A delicate balance

And this just feels like spinning plates
 I’m living in cloud cuckoo land
 And this just feels like spinning plates
 Our bodies floating down the muddy river

Figure 2. Text of ‘Like Spinning Plates’

The metric disorientation caused by these reverse waveforms is exacerbated in places by a clearly articulated pulse at a different tempo from the one laid down by the harp and harmonic

rhythm. At 0:47, a glockenspiel and ride cymbal quietly enter (in ‘prime’ form, not reversed waveform), playing a clock-chime-like figure at a noticeably slower tempo than that of the harp. The metric pulse of this figure is co-prime with that of the harp; that is, the two pulses do not share a unit pulse articulated in the song (grouping the same 8th or 16th-note pulse into different metric structures). The resulting temporal state, then, is not one of a simple grouping dissonance (Krebs 1999, p. 23), as in the gamelan-like metric structure of ‘Let Down’ (*OK Computer*, 1997), but a disorienting state of metric flux. This clock-chime-like figure is no doubt meant to foreshadow the text of the second verse, ‘I’m living in cloud cuckoo land.’ This figure, in its metric juxtaposition with the harp, draws attention to the temporal organization of the piece, which is appropriate given the clock imagery, and both the clock imagery and the issue of keeping time seem to appear in reference to the ‘cuckoo’ of verse 2. While the abstract metric relationship between this figure and the harp ostinato is one which serves the general affect of the song, Radiohead also employs this specific sound in order to draw a tighter connection between the music and part of the text other than ‘this just feels like spinning plates.’ Ultimately, though, the fact that its meaning is dependent on its relationship with the harp ostinato demonstrates the structural importance of that ostinato and reinforces the significance of the digital audio transformation (reverse waveform) which generates that central sound.

It is interesting that both the MIDI sounds (MIDI harp and synthesizer) and recorded soundclips (cymbal hits) are transformed by reverse *waveform*. DAWs which incorporate MIDI typically contain a ‘retrograde’ function for MIDI passages. This function reverses the sequence of notes but still performs them as any other notes, with standard articulation, much the way an instrumentalist would perform both the prime and retrograde forms of a 12-tone row. However, Radiohead takes the extra step of converting the MIDI material to an audio track (adding reverb if necessary to make the transformation obvious, as noted above) before retrograding. In other words, the DAW allows Radiohead to take an *abstractly composed* line, assign it to an instrument, and generate

musical effects based on the *sonic nature* of that instrumental line. The result is twofold: a distinct quality of sound in service of the text (e.g., spinning); and an obvious retrograde in spite of never hearing the ‘prime form’ (how would a 12-tone listener know a retrograde row is retrograde if he never hears the prime form?), due to the retrograded sound decays. In other words, Radiohead is drawing attention to the abstract transformation which was used in the creation of the sound, a transformation which itself becomes motivic.

The motivic nature of this transformation can further be seen in how Radiohead ‘develops’ this motive by employing it in ways which are more abstract and less directly serve the text. I have already mentioned the synthesizer parts which exhibit reverse reverb. While this particular sound does contribute to harmonic and metric destabilization, and in cases like the D-flat crescendo at 0:14 builds tension and expectation, it does not contribute directly to the listener’s sense of spinning. The sound is too different from any common spinning object, the fade-ins are too slow, and they often overlap with a sustained pitch at full volume on the same synthesizer. This minimizes the volume change of the figure—the instrument’s overall volume is still relatively static because of the sustained pitch—and draws attention instead to the increase in dissonance as the new note crescendos, and the resulting disturbance of the harmonic progression. Nor do these reverse reverb figures in the synthesizer directly correlate to any other potential image in the lyrics. This is even more the case with the MIDI ‘choir aahs’ which ‘sing’ a sustained chord periodically. The choir aahs are palindromic figures (‘non-retrogradable’ in the terms of Boulez’s teacher, Olivier Messiaen), fading in *and* out. This invites the listener to engage with the abstract formal aspects of the work, questioning the nature—specifically the temporal direction—of these ambiguous figures and their possible mediating role between the sound material which is obviously reversed or in ‘prime form.’

Further ambiguity and invitation to abstract formal speculation is presented by the vocals in the first stanza. Thom Yorke is not exactly known for his impeccable diction, but the text of the second stanza is clearly declaimed, particularly the line ‘And this just feels like spinning plates.’

However, the text of the first verse is very difficult to discern, even more so than many other Yorke vocal tracks. There are two reasons for this. First, this is the stanza containing the line, 'I'm being cut to shreds.' To portray this image musically, Radiohead cuts out 'shreds' of the vocal track's waveform. (This is paralleled in the CD jacket by numerous consonants being scratched out in the printed lyric fragments of a number of songs.) Some of these cuts leave all phonemes intact, merely inserting brief shreds of silence, as can be heard in the middle of the word 'cut.' However, other cuts remove consonants from the word, making it nearly—or sometimes completely—unrecognizable. Such is the case with the 'k' in 'make' and the 'r' in 'shreds.' Some other phonemes are simply omitted in Yorke's singing—the 'm' at the end of 'I'm,' the 'b' in 'being'—or altered by Yorke—the 'ch' in 'speeches' which is softened into something closer to 'sh.' The result is a text setting which is not merely difficult to understand, but has been 'cut to shreds' digitally (earlier electronic composers like Pierre Schaeffer or Steve Reich would have cut the tape to shreds literally).

There is a second reason for this unusual diction. The consonants removed or altered are all consonants which, when reversed, do not make English-language phonemes. On first reflection, this may not seem true of some of these phonemes, such as 'k.' One may assume the word 'kick,' for example, to be a phonemical palindrome, where 'k' has a reverse phoneme, the 'ck' at the end of the word. However, upon closer examination (either through speaking the word and carefully observing its sound and the physical activity that produces it, or through recording it and playing it in reverse), it becomes clear that the 'ck' at the end of the word is not the same as a reversal of the 'k' at the beginning. Indeed, there is no English phoneme that is a true reversal of that 'k' sound. The same is true for the rest of the phonemes listed as omissions in the preceding paragraph. The sonic effect of such cuts, then, is not only one of being 'cut to shreds' (especially since the smooth vocal omission of 'b' in 'being' and the softening of 'ch' in 'speeches' contributes nothing to that effect), but one in which this difficult to understand vocalization suggests the possibility of being a reverse waveform. Of course, this is an illusion, as a careful listening to the first stanza with a printed text

reveals. However, to the listener for whom the text is unintelligible (as it was for me for some time), in the context of a work full of reverse waveforms, and in contrast to the clear diction of the second stanza, the possibility of a reverse-waveform first stanza is very real, and one—it seems—which was intended by the composers. Thus, the diction of the first stanza in the context of this work as a whole demonstrates the high level of abstraction in the compositional design, as well as a sophisticated musical structure with which the listener is invited to engage repeatedly throughout the work, built from the relationship of the sound material and the means of sound production.

Another abstract tool of digital audio manipulation which Radiohead uses to expressive ends in 'Like Spinning Plates' is the juxtaposition of two tracks which are out of synch in terms of time or pitch. The first significant example of this is at 1:43, where Radiohead introduces the Kroogah tube, a corrugated plastic tube which whistles when spun. Increasing the speed causes the tube to be overblown, so to speak, and skip up to the next partial in the tube's overtone series. Thus, the instrument itself contributes to a sense of spinning for those familiar with the instrument; the properties of the sound are also similar to that of the reverse cymbal hits. However, Radiohead uses this material as the object of abstract relationships as well. In terms of pitch, the overtone series of the Kroogah tube used in this song maps onto the tonic triad (A-flat major) of the song (Radiohead never ascends beyond the fifth partial, and thus all the pitches played are members of the triad). This tonic triad is placed in constant harmonic tension against the plagal functioning B-double-flat and D-flat major triads (I say 'plagal' instead of 'subdominant' because these harmonies are not dominant-directed) which the harp and synthesizer articulate in the course of their harmonic progressions. The harmonic disorientation which results, however, is relatively mild. On the other hand, a stronger psychological dissonance is created by the use of multiple Kroogah tube tracks out of phase with each other. Much in the manner of Steve Reich's early phase music—such as *Come Out* or *It's Gonna Rain*—the Kroogah tube enters as a single voice. This voice pans back and forth between the left and right channels—another form of sonic disorientation. After about 15 seconds,

the track is duplicated, with the second track coming slightly later than the first. Like with Reich's phase pieces, these two tracks are only slightly out of phase at first, and with one track in each channel. However, as the piece progresses, the track becomes more active, the two grow more out of phase, the tracks pan between left and right channels more rapidly, and more tracks are added. (I could be wrong about this—it could be more rapid panning which makes it sound like more tracks are present than there really are. In any case, the added tension is clear.) This out-of-phase material develops the metric flux of the glockenspiel/harp juxtaposition, along with the metric irregularity and gestural shape of the opening cymbal hits. Thus it combines the setting of the text and the general affect with the development of abstract relationships of the musical material.

A similar device is used in the voice beginning in 2:48. From here on to the end, much of the voice comes in two tracks of Thom Yorke singing the same text and pitches. However, these are not duplicate tracks one of which has been delayed in the production studio, in the manner of John Lennon (a technique Radiohead has used—c.f. 'Climbing Up the Walls,' *OK Computer* 1997). Instead, Yorke overdubs his own line, performing it again, with slight differences in intonation, diction, and especially rhythm. The effect (used in other Radiohead songs—c.f. 'Idioteque,' *Kid A* 2000) both disorients a listener which has been previously following a solo texture—the effect is neither that of a solo voice or of a duet and calls attention to the technical artificiality of this 'human' performance—and diminishes the intelligibility of the text; only the text 'spinning plates' is never masked and thus highlighted as particularly meaningful. The result is similar to that of the manipulation of the first verse, but it is achieved through different abstract transformations for different aesthetic or affective purposes.

All in all, the text, abstract structure, and sound material of 'Like Spinning Plates' present a unified affect. That affect is characterized by a literal sensation of spinning as well as the emotional tension and psychological state of uncertainty and panic which would prompt someone to say that an experience is 'like spinning plates.' Rather than reading the music in terms of the text, I have

read the music and text together in terms of this affect. While I find this to be a better approach in much of Western popular music in general, it makes particular sense in this piece, where the text is often unintelligible, and it is made so in order to create a particular sonic effect. It is this sonic effect that contributes most significantly to the meaning of the song.

It is also significant to note that in this song—and I would suggest in much Western popular music—not only are melody, harmony, form, and text not the primary bearers of meaning, but they are not even the primary domains of the song's abstract structure. Rather the most structural elements of 'Like Spinning Plates' are the concrete or abstract relationships between the general affect, the sound material which contributes to it, and the technological and performative aspects of the generation of that sound material. These are the relationships I have focused on in this paper and which I think are the most illuminating when exploring how this music works and why it is meaningful for those who listen to it.

This analysis also demonstrate the interdisciplinary, symbiotic relationship of the analysis of popular music's text, abstract structure, sound material, and meaning. No existing discipline or methodology has a monopoly on analytical fruitfulness, particularly with Western popular music where neither text nor music, surface nor structure, abstract association nor social symbol is fully autonomous in its ability to carry meaning. As these elements bootstrap each other into meaningfulness in 'Like Spinning Plates' and other popular works, so must the analytical methodologies of music theory, new musicology, and cultural studies bootstrap themselves into meaningfulness if they are to be relevant in the study of this music.

Bibliography

- Fink, Robert. 'Elvis Everywhere: Musicology and Popular Music Studies at the Twilight of the Canon' in *American Music* 16/2 (1998), 135-179.
- Headlam, Dave. In *Understanding Rock: Essays in Musical Analysis*, John Covach and Graeme M. Boone, ed. New York: Oxford University Press, 1997.
- Kant
- Kerman, Joseph. 'How We Got into Analysis, and How to Get out' in *Critical Inquiry* 7/2 (1980), 311-331.
- Krebs, Harald. *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann*. New York: Oxford University Press, 1999.
- Lewin, David. *Musical Form and Transformation: 4 Analytic Essays*. New Haven: Yale University Press, 1993.
- Meyer, Leonard. *Music, The Arts, and Ideas: Patterns and Predictions in Twentieth-Century Culture*. Chicago: University of Chicago Press, 1967/1994.
- Radiohead. 'Climbing up the Walls' on *OK Computer*. Capitol Records CDP 7243 5 32764 2 3.
- Radiohead. 'Everything in its Right Place' on *Kid A*. Capitol Records CDP 7243 5 32764 2 3.
- Radiohead. 'Idioteque' on *Kid A*. Capitol Records CDP 7243 5 32764 2 3.
- Radiohead. 'Let Down' on *OK Computer*. Capitol Records CDP 7243 5 32764 2 3.
- Radiohead. 'Like Spinning Plates' on *Amnesiac*. Capitol Records CDP 7243 5 32764 2 3.
- Radiohead. 'Packt Like Sardines in a Crushd Tin Box' on *Amnesiac*. Capitol Records CDP 7243 5 32764 2 3.
- Radiohead. 'Pyramid Song' on *Amnesiac*. Capitol Records CDP 7243 5 32764 2 3.
- Walser, Robert. *Running with the Devil: Power, Gender, and Madness in Heavy Metal Music*. Hanover, N.H.: Wesleyan University Press, 1993.