Coding *OK Computer:* Categorization and Characterization of Disruptive Harmonic and Rhythmic Events in Rock Music

by

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To Laura Hope

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Abstract

The band Radiohead, while popular and highly successful, is known for writing “difficult” or “challenging” music. After making a name for themselves with their grunge-inspired debut, *Pablo Honey* (1993), and similarly mainstream-friendly sophomore album, *The Bends* (1995), Radiohead began a trend of experimentation, irony, and genre-shifting with 1997’s *OK Computer*. *OK Computer,* and most of the music Radiohead has written since, is characterized by musical events and techniques that challenge the normative expectations for rock songs, disrupting or ironicizing the listening experience.

In this dissertation I develop a method of analysis that involves establishing a set of norms or expectations appropriate for the music in question and measuring the music against this set, making note of significant conformity and departure. This approach is ideal for the music of Radiohead, the interest and difficulty of which is due to the disruptive musical language the band employs. This approach also has potential for use in the music-theory classroom, as it does not at its heart rely on advanced theoretical concepts and analytical techniques, and is adaptable to a wide range of music, popular and otherwise.

In Chapter 1, I will introduce the music and my approach. In Chapters 2–3, I will analyze the songs on *OK Computer* in relation to the listener’s expectations and in the context of Radiohead’s musical language. In Chapter 4, I will discuss

the ways in which the events and techniques isolated in Chapters 2–3 evolve over the course of Radiohead's following albums. Chapter 5 includes my closing remarks.

My thesis is twofold: first, that Radiohead's music is characterized by, among other things, a marked interaction between normative expectation and the actual realization of Radiohead's songs (and the experience of their listener); secondly, that these characterizations, and further analytical observations of significant depth, can be isolated and identified through my approach, which does not require the student-analyst to have had extensive background in conventional music theory (beyond the knowledge of fundamental concepts and terminology, and a familiarity with the given idiom or style).

Chapter 1

Introduction

1.1 Background of project

When I, as an undergraduate, attended an upper-level seminar on the analysis of popular music, the professor casually predicted to the class that our first research project would inevitably be about our favorite band. He meant this prediction to be assuring; we should not feel awkward about what we chose to focus on, because to him it was completely appropriate for us to start wherever we were most comfortable, with whatever kind of popular music we enjoyed the most. Anxious to please and to prove myself, though, I took it the wrong way, and became paralyzed by the challenge of figuring out *exactly* what my favorite rock band was. My tastes at the time were perhaps too broad. Whenever I tentatively settled on one artist, I could not muster up the confidence to defend that choice against any of the other choices that I liked just as much (not that the professor actually had the intention of critically judging my taste or grilling me on why I had chosen one musician over another as the topic of my essay).

Eventually I was able to shrug off the anxiety and arbitrarily select one artist in whom I was experiencing momentary interest (though I still, needlessly, made a point to the class of disclaiming that while I liked the music of Elliott Smith very much, I was not committing to him being my favorite), but over the course of the decision-making process I spent a great deal of time thinking about why it was I liked certain bands more than others, and why some seemed worthier of scholarly attention than others. I was looking for very technical reasons: surely, this group of artists and bands between which I was choosing were all doing *something* similar, even if they did not all sound the same. It was difficult to isolate any specific common techniques, though, especially in the absence of the kind of universal rules, conventions, and expectations that go along with the canon of classical music, and I came to no conclusions about the precise nature of the "x-factor" that made some music more interesting to me than the rest.

Later, in graduate school, after deliberating upon the options of an artist or rock group to select for my dissertation research, I settled on Radiohead; not because they were my favorite band (four years after that earlier assignment, it was no easier determining a favorite), but because more so than any other one musical group they seemed to be an object of general fascination to my colleagues and students in music school.[1] When I began studying the music of Radiohead, I was looking for some musical signature that distinguished their music as their own, and made the result so intriguing to their fans, and

[1] For that matter, few rock bands in the past twenty years have achieved such high levels of both critical and popular acclaim as Radiohead.

particularly to musicians. Some musicians, composers or performers, have a specific musical signature, like a theme, gesture, or technique; for example, there is a certain vocal gesture used by singer-songwriter Ben Folds (most notably on his early records with Ben Folds Five) that tends to occur at the ends of phrases (scale degree $\hat{5}$ falls to $\hat{3}$, and then leaps up to $\hat{6}$). It may seem like a coincidence, or not directly relating to the singer himself, but in Ben Folds Five's cover of the Buggles' classic "Video Killed The Radio Star" (released as a bonus track on the 2005 reissue of BF5's 1997 album *Whatever And Ever Amen*) Folds interpolates the $\hat{5}$–$\hat{3}$–$\hat{6}$ gesture at the end of a phrase that, in the original version, was simply a repeated dominant tone. Whether deliberately putting his stamp on the cover or inadvertently improvising a gesture so natural to himself that he did not realize he changed the original melody, the presence of a gesture traceable to his other work makes it a signature. That would be an example of literal thematization of a musical event, where a specific gesture or technique is associated with a composer or performer, like one's accent or cadence in speaking.

While I discovered no literal event that could be identified as a unifying stylistic signature for Radiohead, what I did notice was a constant stream of small idiosyncratic details. In other words, while Radiohead did not do the same specific thing over and over again, the music maintained a behavior of frustrating expectations in various ways (some more noticeable than others). Multifarious examples of, say, unusual chord placement or irregular meter that reappear over the course of several songs can be heard on a small scale as recurring themes or motific events in the context of an album; but then all together, across albums,

these examples characterize the style of Radiohead's entire corpus of music. I determined that perhaps the best way for me to proceed was to figure out what the expectations were that Radiohead seemed to be frustrating (since I knew they were not the same as the tonal expectations of common practice music based on conventional music theory); and a brief introduction to the field of Grounded theory encouraged this approach.

Grounded theory is a method of conducting qualitative research first developed by sociologists Barney Glaser and Anselm Strauss in the 1960s, and is used almost exclusively in anthropological and sociological study (it has been used extensively, for example, in studying behaviors in hospitals and relationships between patients and doctors). More a set of guidelines and priorities for interacting with data and subjects than a rigid set of instructions for constructing theories, sociologists use it to categorize as much data as possible relating to the object of study from interviews and observation of behavior more than reviewing literature and preexisting theories. After collecting data they begin to formulate theories based on what the data suggests to them is most relevant.

Sociology professor and author Kathy Charmaz writes, "Grounded theory writing preserves and presents the form and content of the analytic work. Rather than spotlighting actors or authors, Grounded theory places ideas and analytic frameworks on center stage. In a sense, our concepts become 'actors' who create the analysis of actions in the scene."[2] In this dissertation, rather than

[2] Kathy Charmaz, *Constructing Grounded theory: A Practical Guide Through Qualitative Analysis* (London: Sage Publications Ltd, 2006): 151.

spotlighting Thom Yorke and his fellow band-members and their compositional process, my focus is on the music itself, and, as Charmaz describes, I hope to treat aspects of the songs themselves as the “actors,” and to study the potential interactions between these “actors” and the listener.

The principal utility of using Grounded theory as a guideline for musical analysis is its constant anchoring in the object of study and the facts at hand, rather than relying too heavily on preconceived models and categories. Because conventional harmonic analysis sometimes has little direct connection to popular music, it can be helpful to follow an approach like Grounded theory and its “open coding” (establishing emergent categories based primarily on the data as initially collected and received), to avoid being blinded to essential material by preconceived notions, and failing to build a theory that most appropriately reflects the individual object of study. The “open coding” process is followed by “selective coding” once the analyst has, through open coding, settled on a focal issue or emergent pattern, and begins to structure the analysis around this issue. I do not mean to suggest that no theorist has accomplished similar goals, but there has thus far been extremely minimal, if any, specific application of this research technique to theoretical analysis of musical objects, and I believe such application could be fruitful and constructive, especially for this particular topic of rock music analysis (to which many current sociological issues closely relate).

With popular music in particular, the use of Grounded theory can be advantageous in the classroom for the instructor who wishes to approach the problems and points of interest in a song without getting too mired in technical

quantitative elements (namely, those most crucial to the definition and analysis of common-practice music), which can support findings but a) are not always as immediately identifiable as in pieces of classical art music, b) are not always relevant to the music in question, and c) might be too complicated to explain to a classroom of undergraduates with minimal or mixed background in music theory. One of my greatest hopes for the work outlined in this dissertation is that it proves useful not only for traditional music theorists, students, and scholars (starting on a plane of knowledge precluding them from a need for extensive explanation of fundamentals), but also for "alternative" music theory education: for students (or even modest enthusiasts) outside the music-major curriculum, as a way for them to get at the problems and attractions of rock music in a direct manner, with the help of a theorist or theory text but without the full four semesters of a music major's theory curriculum.

Indeed, the more I began to develop this project, the more committed I felt to laying the foundation of an approach that could be immediately applicable to classroom teaching. The problems I aim to focus on in this dissertation are problems that can be appreciated by both the Schenkerian and (with the help of my Grounded theory-informed perspective) the student armed with fewer analytical tools and concepts. The analysis that follows is the product of my initial take on how Grounded theory can best inform the pedagogy of rock music analysis; namely, through the combination of liberation from precedent systems of theoretical organization and thought and responsibility on the analyst to

maintain object-centric perspective through close reading and emergent categorization.

1.2 About the band and the album

Radiohead's music is singularly rich and satisfying, to both the casual listener and the scholar. Not only is their music well crafted and, for the most part, pleasant-sounding, it conveys a distinctive voice; something about their songs can be recognizable as sounding in their own musical language. I posit that Radiohead (as a collective composer) has accumulated for themselves this distinctive musical language through their use of disruptive melodic figuration, harmony, and rhythm, by drawing from a musical palette that is characterized by a problematic relationship with mainstream convention and expectations. This musical language is recognizable to their audience, and a significant part of Radiohead's appeal as creators and performers of music is experiencing their use of said musical language. Tracking the events that form associations for the Radiohead-listener with similar events in a single Radiohead song or album, or multiple songs and albums (under the cognitive umbrella of "Radiohead's musical language"), is a vital part of engaging with their music—comparable to, and perhaps of equal importance as, tracking the treatment of themes and progress of thematic and harmonic development in a classical sonata-form movement—and is, therefore, worthy of analysis and commentary.

Radiohead formed in Oxford (the band members grew up and went to secondary school in Oxfordshire) but were influenced by American indie and alternative rock as much the Britpop and punk that surrounded them locally. Their first two albums in particular (1993's *Pablo Honey* and 1995's *The Bends)* owed a great deal to the style of grunge-rock associated with the Pacific Northwest in the 1980's. On the whole, their early style is characterized by a loud, expressive, garage-band affect, like that of the American grunge bands of the early 90's (e.g. Nirvana, Pearl Jam, and Soundgarden); this early music is rocking and punk-ish, but rather mainstream, and conforming to stereotypical pop-music norms and expectations.

The absence of the provocative esotericism that has come to be associated with their later work makes their first two studio recordings seem primitive in retrospect. *OK Computer* marked a significant paradigm shift for the band, generally artistically and specifically musically. Tim Footman writes:

> "At the time of their first album, *Pablo Honey*, and the successful single, 'Creep,' Radiohead were lumped together with Nirvana and Pearl Jam in the then-current grunge movement (for no better reason than that they looked unhappy, and sounded as if they might have listened to Sonic Youth when they were young). By 1995, with the release of *The Bends*, Radiohead were often classified as Britpop (see Oasis, Blur) because they were British and had guitars… …Now, [with *OK Computer*], as well as the articulation of self-loathing to which fans and critics had become accustomed, the band seemed to be striving for a bigger picture, concocting a critique of modern society stumbling towards the new millennium, dazzled by the banal neon of global capitalism."[3]

[3] Tim Footman, "Hyperreally Saying Something," in *Radiohead and Philosophy: Fitter Happier More Deductive*, edited by Brandon W. Forbes and George A. Reisch (Chicago and La Salle, IL: Open Court Publishing Company, 2009): 253–254.

During *OK Computer*'s composition, recording, and production (which the band handled on their own, with help from friend and producer, Nigel Godrich, frequently compared to "fifth Beatle" George Martin for his critical role in the band's work), they isolated themselves from exposure to contemporaneous mainstream music and focused on honing an original sound. The resulting album was both a critical and commercial success, as have been all of five of their studio albums released since.

It is not easy to point to any one moment when the music of Radiohead changed (indeed, it has been a gradual evolutionary process); but as much as precedents and foreshadowing of their later work can be heard on *The Bends* (and even *Pablo Honey*), *OK Computer* seems to be the consensus pick among scholars, music critics, and fans for Radiohead's paradigm-shifting moment from juvenilia (for lack of a better term) to works of legendary status (and several reasons to support this argument will be given in Chapters 2 and 3), and this album will be the primary focus of my dissertation.

In a recent article for avclub.com, Steve Hyden writes about Oasis and Radiohead in the 90s, and invokes one of the most commonly held reactions to Radiohead's music: that it is "difficult."

> It's a testament to how influential *The Bends* ended up being on British and American bands that it now sounds like one of Radiohead's more conventional records. When it was released, *The Bends* became the first in a long line of 'difficult' Radiohead albums, purposely constructed to confound the expectations of those who enjoyed what the band had previously done… …On *OK Computer*, Radiohead didn't deconstruct *The Bends*—as it would later do with popular predecessor records whenever it

> re-entered the studio—so much as use it as a rough draft for achieving a grandly ambitious vision…[4]

Nitsuh Abebe, writing for *New York Magazine*, puts an even finer point on the same observation (that there is in an actively problematizing element in Radiohead's music that is close to their overall artistic identity):

> The funny part is that they basically trained the world into this, by spending their career moving in the opposite direction from most of their peers. Most bands like this start off as something marginal, then grow into popularity. Radiohead kicked off by proving they were a good big rock band — then started pulling their many fans, some of them kicking and screaming, off into new places. They taught people how to enjoy that. They made music good enough to satisfy their left-field music-geek peers and their everyday fans at the same time. Their main emotional register — which sits somewhere between abject world-weariness and a kind of itching, wriggling-in-your-skin discomfort — has turned out to be more relatable, to more people, than anyone would have guessed. And their election as the arty rock group of consensus means we get to watch something really rare and amazing: A band that can do whatever it wants, and do it really well, and have it matter on a big scale. Maybe it's a little arbitrary that this band is Radiohead, who are far from the only musicians doing things that are high-minded or sonically inventive — but it's a very cool thing to have one act like this be "big."[5]

So it is common knowledge that a significant part of the spirit of Radiohead's music is a degree of challenge or difficulty, but at the same time it is not necessarily easy to articulate which parts of a given difficult Radiohead song

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[4] Steven Hyden, "Whatever Happened to Alternative Nation? Part 8: 1997: The ballad of Oasis and Radiohead," *avclub.com* (January 5, 2011): http://www.avclub.com/articles/part-8-1997-the-ballad-of-oasis-and-radiohead,50557/1/ (accessed March 31, 2011).

[5] Nitsuh Abebe, "Radiohead's *The King of Limbs:* What Happens When 'Serious Listening' Is Your Brand," *NYMAG.com* (2011): http://nymag.com/daily/entertainment/2011/02/radioheads_king_of_limbs_revie.html (accessed March 31, 2011).

make it so challenging, or why, without some fluency in music theory (the music critic's descriptive adjectives and metaphors will only get one so far). It is not only difficult to articulate the characteristics of technical surface-level problems in the music of Radiohead, or album-level themes and problems, it is apparently difficult to articulately categorize their music at all. The image shown in Figure 1.i is the work of graphic designer Jamie Gurnell, as an attempt to graphically represent the combination of various styles and influences on Radiohead's music. It is not the result of analytical or scientific study, but it still reveals the overwhelming effect Radiohead's music can have on a listener, amateur or scholar, through its resistance to definition.

Marianne Tatom Letts addresses several aspects of Radiohead's difficulty in her 2005 dissertation, "How To Disappear Completely." In it, she focuses on Radiohead's *Kid A* (2000) and *Amnesiac* (2001), discussing those albums' shared role as experimental concept albums. While she explores much of the music that I do in Chapters 2–4 of this dissertation, her thesis concerns Radiohead's role in capitalist culture. Letts includes musical issues and problems as part of her analysis of Radiohead's balance between success and progressive experimentalism in the context of society. I, on the other hand, am primarily interested in the music and its relationship between paradigmatic space and syntax, and in the linguistic analysis of Radiohead's musical style in the context of rock and popular-music idioms.

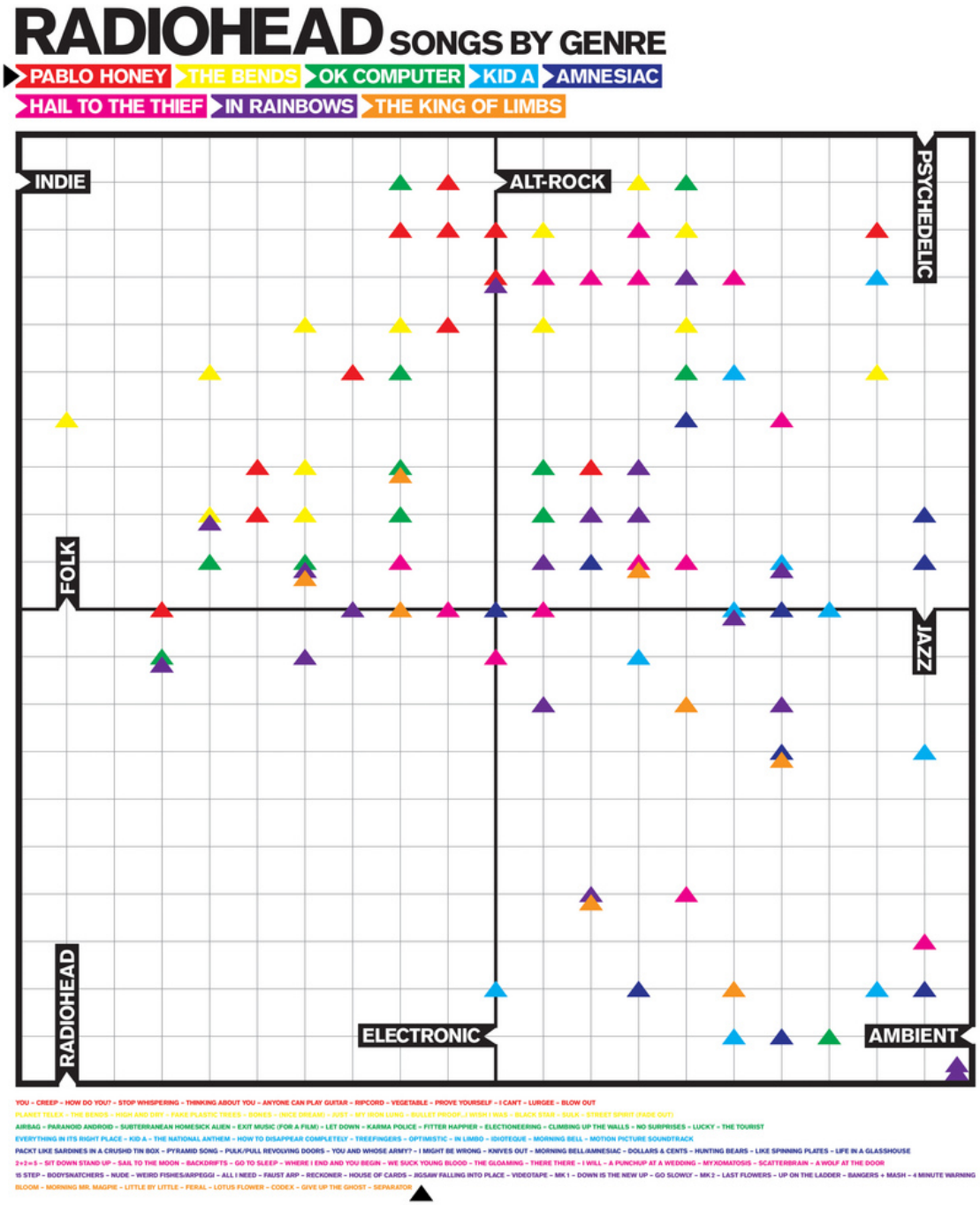

Figure 1.i. “Radiohead songs by genre” graphic.

1.3 Methodology

Much wonderful and successful scholarship has been done adapting Schenkerian analytical techniques to popular music. This can be tricky for several reasons; obviously those models and methods of analysis were constructed for a very specific genre of music, a genre specific in its cultural function, its format, its mode of performance, and (not the least) its obligation to a certain musical tradition and style and all the rules and conventions that go with it. That being said, popular music is not necessarily completely foreign to the tradition of classical tonal music. While “popular music” is much too broad a term to accurately generalize, the majority of Western popular music owes a great deal to the tonality of the “common practice period,” or at least to the same cultural and folk traditions of music upon which the common practice itself drew. In addition, even when the harmonic rhetoric of popular music differs from that of common practice models, enough of the fundamental concepts of countrapuntal relationships and basic functional progressions are shared between the two that Schenker’s tools are usually easily transferrable.

By using Schenkerian methodologies to analyze examples of popular music, it is possible, just as with the study of classical tonal pieces, to reveal large-scale tonal unity in cases where the surface might obscure it; or to clarify, through reduction, the relationships between apparently disparate formal sections, progressions, or key areas. Frequently, such conventional analysis

posits how surface-level progressions that might seem unconventional or unusual actually do relate to traditional models, but using different chord substitutions or grammar than are found in common practice music, or by not adhering to the same rules and trends of voice leading, part writing, and stratification that “classical” composers prioritize.

While this tonal-harmony-focused method can be quite useful and enlightening, it also has the potential to ignore the crucial saliency of a given song’s musical events, or fundamental aspects that have less to do with conventional harmonic structures while being more relevant to the listener, consumer, composer, or performer. Voice-leading analysis might do wonders for revealing structural harmony and counterpoint, those factors of utmost importance in most common-practice music analysis, but because popular music is such a different genre than common-practice music, analysis that prioritizes those aspects above all else can be like judging apples on a scale that values a fruit’s orange-ness. There is also a fair amount of popular music for which Schenkerian analytical methods reveal very little, except perhaps the simple fact that the object in question is fundamentally resistant to the Schenkerian methodology.

The basic premise to my approach is to start with a context-informed set of expectations, or criteria of normality, with which the listener compares the given object, taking note of its salient conformity and/or deviation. Analysis of popular music can start from a number of different places. One might begin by musically quantifying the object, judging it based on its inherent characteristics

(key, meter, tempo, or other technical bits) as a entry to analysis (this is perhaps a more conventionally *theoretical* approach); or, one might begin by addressing all the potential meanings of the song, either literal meaning of lyrics, or topical meaning present in the tone/affect/gestures of the song (a more sociological or musicological approach). Both are valid, and of course they both exist on a wide spectrum of analytical approaches—no one is better than another, except inasmuch as one particular approach might be more elegantly suited to one's end goal than the others.

My goal here has less to do with proving the validity of the initial guidelines of analysis (the set of expectations) than with establishing a methodology that is both a) suitable for application to popular music like Radiohead's and b) suitable for classroom music theory pedagogy, in that it is feasible for a broad college-level audience (though easily customizable for any group's skills), and provides an accessible introduction to "alternative" music theory analysis (that requires less formal knowledge of and experience with conventional analytical methods than would be the case in typical university music theory classes) in addition to the direct reward of deeper knowledge of the particular object.

I do not like dealing with the concept of a "naïve listener" when determining the most basic norms with which I want to start; the dichotomy of the educated theorist and the completely ignorant student is as impractical as it is unrealistic. Instead, I imagine a position somewhere in between the infallible scholar and the *tabula rasa* subject: a "streetwise listener," who is familiar enough with the music in question to participate in some level of analytical

engagement with it, but armed with only basic theoretical concepts and expectations of tonal convention. The streetwise listener might play a little guitar or piano, or at least have enough instrumental fluency to reproduce pitches and understand how they are organized and performed to create a song, and have unconsciously developed an understanding of harmonic grammar and voice-leading conventions. The most essential pieces of music theory for them to be moderately fluent in are scales, chords, and rhythm/meter; but they need not be consciously familiar with all the idioms and prescriptive conventions of counterpoint, classical music, or classical music analysis. The concept of counterpoint might need to be explained or recontextualized, but the concept of long-range voice-leading, while perhaps not out of conceptual reach, is not always practical as an entry-point for their analysis (and, depending on the music, potentially not even relevant enough for an educated theorist).

My streetwise listener has, based on their past experiences of listening to a variety of rock music (and on at least an awareness of what the music of other styles and eras might sound like), a set of expectations for how a rock song will be realized. Just as the classical theorist might have expectations of, for example, a Mozart Piano Sonata in a major key so that after the initial theme appears, a contrasting theme will appear in the dominant key, and that through development and recapitulation the two themes will be reconciled in the original tonic key, my streetwise Radiohead listener has basic ideas of the behavior rock songs tend to exhibit, whether they have been aware of these expectations or not. These basic ideas for rock songs are not nearly as complicated and nuanced as the

expectations involved in conventional sonata form, and some might even seem so basic to be taken for granted—but studying music, like Radiohead's, that manages to flaunt such a variety of conventions makes it important to systematically confirm what one's boundaries are, in order to isolate how and when the music crosses those boundaries.

This streetwise rock-music listener has default expectations of rock songs like the following:

- *Basic diatonic space will be used.*

Multiple diatonic modes—or even multiple tonal centers—might be in play, but it is noticeable to the listener when the pitch-collection is non-diatonic or unusually chromatic in its makeup. Modes besides major and minor are just as feasible as possibilities for a given "tonic" (dorian, aeolian, and mixolydian, for example, are quite common in most genres of popular music).

- *Triadic harmony will be used.*

This might seem like a trivial point to bring up, but Radiohead (like several other experimental or progressive rock and pop bands) has written several songs in which triads are *not* the primary structural harmonies, and again, it is noticeable when they are not.

- *Rudimentary function will be used.*

Depending on the listener, this could be as specific as saying "conventional tonal function will be used;" but more broadly, it means that some

kind of consistent harmonic syntax will be in play, whether it is one based on precedent convention, like the system of tonal function and authentic cadences, or a unique one, taught to the listener by the song. The more unique the syntax is, though, the more difficult it is to establish itself as normal, while the more traditional the syntax is, the easier it is for the listener to assimilate and then successfully isolate any idiosyncrasy.

- *A key (or mode) will be maintained.*

This is simply to say that modulation and modal rotation are noticeable events, by their disruption of whatever key had been established. There is *not*, however, any strong expectation that the song will end in the same key in which it began; because of a long tradition of progressive tonality throughout the history of rock music, the perspective of this listener is much more focused on surface-level connections than key relationships in a background. It would probably be helpful, in determining the establishment and modulation of key, to refer to Daniel Harrison's discussion of Sensing Tonic in Chapter 3 of his *Harmonic Function in Chromatic Music,* in which he explains how to discover the key of a given excerpt through two ways.[6] The first, "position finding," is essentially just counting pitches to discover what the diatonic collection is, and then inferring the key by its collection (obviously this relies on consistent diatonicism in the excerpt). The second, "position assertion" (designed to deal more helpfully with chromatic music) involves locating the tonic key based on analysis of the excerpt's syntax:

[6] Daniel Harrison, *Harmonic Function in Chromatic Music: A Renewed Dualist Theory and an Account of Its Precedents,* Chicago: The University of Chicago Press (1994): 73–90.

a kind of musical exegesis. “Position assertion” allows for keys to be recognized based on their being the first harmony heard, or being incessantly repeated, or any other way in which rhetorical weight could be seen as being given to that harmony. Both of these techniques are useful for analysis of popular music, depending on the excerpt in question.

- *A tempo will be maintained.*

As Dai Griffiths points out in his contribution (on *OK* Computer) to the *33 1/3* series, “Speeds tend to be consistent once a track is underway, and this is true of pieces of music in general.”[7] Like the previous point, this expectation is included to rationalize the saliency of tempo changes, whether the change in question is momentary *rubato,* gradual acceleration or deceleration, or direct change from one tempo to another. Again, the final tempo of the song need not be the same as the initial tempo; once it has changed, the expectation changes correspondingly, so that at any given point the current key and tempo are the ones that are expected to be maintained.

- *Voice leading will be smooth.*

A Radiohead listener might not require contrapuntal rules as strict as Fux’s, but the standard rules of tonal counterpoint are a good framework with which to judge the smoothness of a melody (e.g. compensating for leaps with opposite stepwise motion, etc.).

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[7] Dai Griffiths, *OK Computer.* 33 1/3 Vol. 15. (New York: Continuum International Publishing Group Inc., 2004): 35.

- *Simple meter will be used.*
- *Phrase groups and hypermeter will be regular.*

Simple meter (namely 4/4) is the condition most commonly encountered in rock, so it is noticeable when mixed meter is used (it is even noticeably unusual when 3/4 is used instead of a duple meter). Correspondingly, the listener assumes that the hypermeter will remain consistently square as well, and that phrase groups will be of the same numbers of measures.

Now, these are not expectations in that I claim the listener requires or even necessarily want a song to follow them exactly; they are not guidelines as much as a framework against which it becomes easier to see why events that sound unusual do. The word “expectation” is actually misleading here, because I mean to refer more to the perception of paradigmatic space than literally what we expect or want out of a song. When Radiohead steps out of these boundaries, it can be to the delight of the listener, while still recognizable as an unconventional event.

The events I will isolate in this analysis are those marked by their problematic relationship with the suggested list of expectations given, and with their immediate context (which can potentially adjust those expectations, or create new ones, based on the situation). With the music of Radiohead, for the most part, these kinds of events stand out because the surrounding context is still relatively conventional: it is music that is still close enough to the mainstream that it can be defined by its occasional resistance to mainstream norms, but not

so far removed from those norms that it truly builds its own system. A couple of Radiohead's songs really are rather bizarre from start to finish, at least in, say, the harmonic aspect; these are songs whose chord palette is so varied (or at least nonsensical to tonal ears) that almost every change from one chord to the next is confusing or functionless, numbing the listener to the disrupted expectations that would be easier to isolate if the context was more accessible. It is far more typical for the element of idiosyncrasy to be just present enough to challenge our subconscious preconceptions of song behavior, but not so great that it overwhelms and turns the table on normalcy.

My approach is influenced by Grounded theory in a number of ways. Grounded theory encourages qualitative analysis, relies on organization by emergent categories, and emphasizes the relationship between the object (in this case, Radiohead's music) and a given subject (the streetwise listener). Charmaz lists the following in a summary of the "defining components" of the qualitative analysis involved in Grounded theory as outlined by Glaser and Strauss:

- Constructing analytic codes and categories from data, not from preconceived logically deduced hypotheses
- Using the constant comparative method, which involves making comparisons during each state of the analysis
- Advancing theory development during each step of data collection and analysis
- Sampling aimed toward theory construction, not for population representativeness.[8]

[8] Charmaz, 5–6.

These components were my primary guidelines in developing an analysis of Radiohead's music. In this case, my "preconceived hypothesis" was the assumption that there were literal themes or leitmotifs hidden in the music of Radiohead that made it sound like Radiohead's music. The theory that emerged instead was that the combination of multifarious but similarly idiosyncratic techniques in Radiohead's music creates a problematic relationship between normal expectations of rock music and the realization of this band's songs. This dissertation will illustrate examples of these techniques. There are many other ways Grounded theory could potentially be applied to musical analysis, some of which are mentioned in Chapter 5. It is a flexible and easily adaptable methodology, and my project demonstrates one possible way Grounded theory could influence modern music-theory analysis and pedagogy.

My thesis is twofold: first, that Radiohead's music is characterized by, among other things, a marked interaction between norms/expectations and compositional/performance-based choices; secondly, that these characterizations, and further analytical observations of significant depth, can be isolated and identified through my approach, which does not require the student-analyst to have had extensive background in conventional music theory (beyond the knowledge of fundamental concepts and terms, and a familiarity with the given idiom or style).

1.4 Note on the musical text

One of the great difficulties for classical music theorists in the analysis of popular music is the ambiguity as to what constitutes the text; there is very rarely a performer's score to work from, and in many cases whatever score exists is merely a contracted, retrospective transcription of the studio recording (of an often dubious quality), so the recording is left as the sole practical text to which the analyst may refer. There is, in fact, a published "Guitar/Tablature/Vocal" score of the songs on *OK Computer* (as there is for all of their studio albums), but the musical material it provides is both minimal and sometimes arbitrarily chosen, and seems more of a guide to crudely recreating (or following along with) principal lines than reflecting how the music is actually performed on the recording. For these reasons I do not consider these published scores (of *OK Computer* and Radiohead's other albums) the text-object of my study, but rather a semi-adequate reflection thereof. Rather than including the published scores in facsimile, or full transcriptions of my own, I will rely on concise transcribed excerpts for examples and illustrations. Full instrumentation is not indicated in these excerpts, but they include salient lines or reductions of parts, maintaining at least an iconic relationship to the recorded songs, for ease of following the discussion.

In addition, for each song on *OK Computer* I will provide a table indicating the formal sections of the song and the timings of those sections on the recording,

and the governing key or mode for those sections. For key/mode designations, I will abbreviate major as “M,” minor as “m,” dorian as “do,” phyrgian as “ph,” lydian as “ly,” mixolydian as “mix,” and aeolian as “ae.” The formal terms used are based on the work of John Covach, as is outlined in his essay “Form in Rock Music,”[9] and Walter Everett, in his text “The Foundations of Rock.”[10]

[9] John Covach, “Form in Rock Music: A Primer,” in *Engaging Music: Essays in Music Analysis,* edited by Deborah Stein (Oxford: Oxford University Press, 2005): 65–76.
[10] Walter Everett, *The Foundations of Rock: From “Blue Suede Shoes” to “Suite: Judy Blue Eyes,”* Oxford: Oxford University Press (2008).

Chapter 2

OK: Coding, Categorizing, and Characterization

What's that?

- "Paranoid Android," *OK Computer* (1997)

In this chapter I will discuss the disruptive events that occur on *OK Computer* through a song-by-song survey. Though the songs vary in their levels of idiosyncrasy, they all contain some combination of expectation-disrupting musical factors. (Figure 2.i shows the track listing from the back cover of the CD.)

Figure 2.i. *OK Computer* track list.

2.1 “Airbag”

Verse-chorus

Time stamp	*Section*	*Metric length*	*Key*
0:00	intro	9mm	AM
0:27	verse 1	12mm (6+6)	“
1:01	chorus	6mm	“
1:18	interlude	5mm	“
1:32	verse 2	12mm (6+6)	“
2:06	chorus	6mm	“
2:24	break	12mm	“
2:58	chorus	6mm	“
3:15	chorus	6mm	“
3:32	break	14mm	“
4:12	coda	8mm	“

Table 2.i. “Airbag” form.

“Airbag,” the first track on *OK Computer*, is not too far removed stylistically from Radiohead’s previous record, their more conventional sophomore effort *The Bends*, at least in terms of the style of vocals, harmony, and guitar-centricity; but from the very start there are subtle shifts away from their earlier output. The track opens distinctively in the middle of a sound: the attack of the guitar riff’s upbeat is clipped off, creating a split-second of surprise and disorientation to the listener (even one familiar with the recording) who enters the song’s inner temporality

suddenly, without the benefit of experiencing a natural sonic attack.[1] This effect not only draws attention to the riff that it initiates, by means of its element of surprise, but is the first of several sound effects used throughout the album, heterogeneous in category, that thematize problems with mechanicity or technology.

In this case, the effect suggests some technological barrier in the recording or editing process, like an accidental (or intentional) sound glitch, between the performance of the riff in the studio and the experience of listening to the song. The riff in question (see Figure 2.ii), even before the sense of tonality is conveyed harmonically, immediately exhibits chromaticism: namely an alternation of the minor and major mediant scale degree (C and C-sharp).

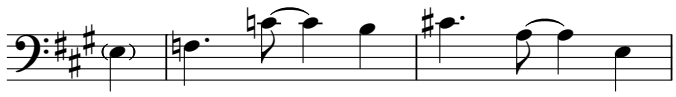


Figure 2.ii. "Airbag" riff.

[1] There is a similar effect in "Exit Music," where the use of a Mellotron creates the sound of a grotesquely uncanny choral accompaniment, and while the Mellotron chords fall rhythmically on relatively strong metric beats, the lack of natural attack conveys marked abruptness, and either some kind of error or, conversely, a too-perfect accuracy caused by the inhumanity of artificially produced sound. There is room for both enjoyment and bemusement in these moments; "glitch" effects like these are able to both generate a particular kind of beauty by relying on unconventional sounds (or sound effects), and comment on the use of such sounds (and sound effects) and the process of composition by provoking the listener to question the meaning, intention, and production of such sounds.

The minor submediant (F-natural) is also present, but the tonality is conveyed as being primarily major by a) the C-sharp's metric placement on the downbeat, b) the presence of C-sharp in a heterophonic counterstratum played simultaneously on another guitar, and c) a strong and stabilizing resolution to A major before the verse begins.

There is a wide spectrum of kinds of counterpoint used in popular music, and it is not too difficult to explain to the streetwise listener the difference between strict note-against-note counterpoint (homophony), and more florid (and sometimes chaotic) polyphony and heterophony. Even where note-against-note counterpoint appears to be absent in this music, however, there are almost always concurrent strata of one kind or another present, which can prove consonant or dissonant either within themselves or with the overall sense of tonic or harmony. Such is the case in "Airbag," where additional layers are added to the introductory guitar riff (and consequently reappear on their own, later in the song), which are not necessarily consonant with the riff and its implied harmonic oscillation between A and F, at least on a note-to-note basis (see Figure 2.iii).

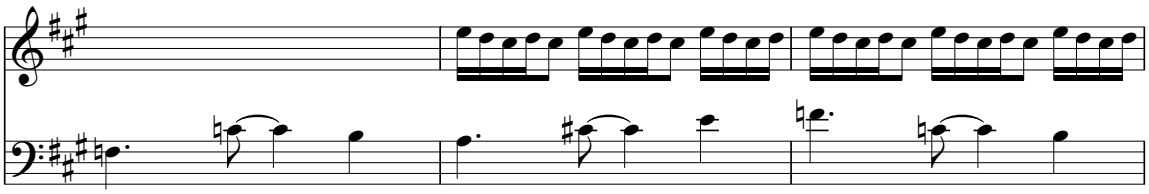


Figure 2.iii. "Airbag" heterophonic guitar strata.

The result is rich and chaotic, but there is not a strong sense of dissonance conveyed, per se; rather of heterophonic dialogue between two or more parties who agree with each other but add individually particular points to an argument (in this case, the argument of A-major harmony as being central). In the intro to “Airbag,” C-sharps in the upper stratum occur at the same time that C-natural is sounded in the riff (reminiscent of a Renaissance-era false-relation), but this is not heard as being as dissonant as it would be in the context of strict note-against-note counterpoint; rather, the combination of these nominally aligned but non-parallel strata characterizes the intro as being heterophonic, whether the listener realizes it or not. In the context of stricter note-against-note harmony, where chords are adjusted to support melodic tones as consonances (and vice versa), such dissonances would stand out as being particularly disruptive. In this case, however, there is more disruption caused by the heterophonic context itself.

The conventional explanation of the previously mentioned chromaticism in the song’s intro is “modal mixture,” which is defined as the “borrowing” of a tone from one of the two tonal modes (major and minor) for use in the other. (Music in major might borrow the flat submediant from the minor mode, for example, and music in minor almost invariably borrows raised seventh scale degree from the major mode.) This is often a perfectly adequate method of explanation, even at the early stages of a student’s music theory education, but makes less sense in the context of a musical genre (“pop,” broadly, or more specifically “rock”) that

lacks any obligation to be defined by a single mode in the way that much common practice music is.

Even when a given rock song is definitively in one key, modal mixture is such a common feature, and definition by mode is so unnecessary in rock, that "modal mixture" is perhaps a cumbersome way of conceptualizing the music at hand (not to mention the fact that the term traditionally refers to a dichotomy of only two modes, major and minor, while rock is not limited by those two, and frequently draws on chromatic tones beyond those offered by the parallel mode). Instead, one might conceptualize (and explain) as follows: first, we presuppose (based on the majority of canonic and mainstream music in the genre) that a scale will contain seven (or sometimes five, but not more than seven) steps; further, that the default landscape of those steps will be that of the diatonic scale. "Chromaticism" occurs when any pitch is used as an alternative to one of the *default* steps (which must be determined subjectively by the listener); but when a song is not defined by one single governing mode, the apparent chromaticism might not necessarily be less true than the first version of the step. Indeed, even in common-practice tonality, music in the minor mode uses the leading-tone freely as a "true" seventh degree that needs not be "corrected" by the subtonic.

So, in cases like "Airbag," instead of assuming that the flat mediants and submediants are simply inflected versions of the true major mediants and submediants, we could think of the tonality of being like a spread-option offense in football, in which the exact play is not called in advance, but the ball has more than one potential carrier, which is determined based on the context (the

"defense" in the football analogy, without the antagonistic implications). In the paradigmatic space of the song in question, before any one version of a scale degree is iterated, multiple versions of a given scale degree are equally possible and hypothetically interchangeable (and in the temporal, syntagmatic space of the song, one version will be chosen and have a given relationship with its context). With the help of this option-offense understanding of chromaticism, we can imagine the submediant, say, as structurally existing in both its major and minor embodiments, while on the surface it will only be one or the other at a time. This situation is not unlike the paradox, in quantum mechanics, of Schroedinger's cat (which is considered in the abstract simultaneously dead and living until actually viewed, at which point its state is clearly one or the other).[2]

In Figure 2.ii, F-natural and C-natural are used first, implying a flat submediant triad; then C-sharp is used instead of C-natural, adjusting the implication to that of a major tonic triad. In the case of "Airbag"'s introduction, the use of both versions of the mediant seem closely tied to the harmonies used to support them, just as the traditionally taught "harmonic minor scale" is formed as the result of using the chords minor I, minor IV, and major V(#). Alternately, these chromatic-option scales can also be created by the surface-level tendency of the melody, without direct regard for any particular expected harmony, just like the traditionally taught "melodic minor scale" (which is constructed around the priority of the major-mode version of ascending $\hat{5}-\hat{6}-\hat{7}-\hat{1}$, not around any need for the

[2] Erwin Schrödinger, "The Present Situation in Quantum Mechanics: A Translation of Schrödinger's 'Cat Paradox Paper,'" translated by John D. Trimmer, *Proceedings of the American Philosophical Society*, Vol. 124, No. 5 (1980): 323–338.

major-quality subdominant triad that results from raising the submediant tone). In other words, a song might or might not have a tonal center, but to the extent that it does not follow a single diatonic set it could be thought of as having these "chromatic options," activated by either melodic or harmonic context.

What I am not intending to do by isolating these kinds of chromatic events is to suggest that they necessarily cause or are related to any sort of background tension; while, for example, a Schenkerian analysis of a Romantic character piece might demonstrate a relationship between such chromatic tones and the tonal organization of the entire work, or that a certain chromatic tone foreign to the diatonic space of the home key might introduce a level of tension that cannot be relieved until the tone is "corrected" at a later descent of the fundamental melody, I am simply saying that such play with harmonic norms, even as slight as a chromatic alteration, truly characterizes the music of the band.

"Airbag" is very solidly and unambiguously based in an A tonic (A-major harmony predominates and is the goal of all structural cadences). I propose thinking about the song as being primarily in the regular A-major diatonic mode, but with chromatic options: F-natural can be used as an alternative for F-sharp, forming a half-step upper neighbor for scale degree $\hat{5}$ and the root of the flat-mediant triad; C-natural can be used instead of C-sharp, forming the fifth of the flat mediant triad, and an alternative for scale degree $\hat{3}$ in the cadential third-descent of the guitar riff; and, as seen in the chorus, D-sharp can be used instead of D, in a moment of lydian inflection. C-sharp and F-sharp are used

(instead of the flat versions heard in the riff) exclusively in the verse, so the modal profile even helps delineate formal sections.

The concept of the chromatic-option scale is especially useful here, as the D-sharp is *not* actually used as the leading tone in an applied dominant of V, as we would assume in a common practice tonal context (at least, no resolution to the dominant E major from the major supertonic chord is harmonically present; the melody does briefly resolve up to E over the same chord, hinting at the expected authentic resolution and obscuring the potential interpretation of the D-sharp as a chromatic passing tone). It appears in the foreground as a chromatic lower neighbor to the E, and then is replaced by D-natural as an upper neighbor to C-sharp. Neither "modal mixture" nor "harmonic tonicization" adequately explains the D-sharp, but the chromatic-option theory covers both the cases of flats in the introduction and the raised D in the chorus, so we can characterize the song as having a stable tonal center of A, with chromatic options for the mediant, submediant, and subdominant (for a combination of melodic and harmonic factors). In the melody of the verse, only the natural D is used as scale degree $\hat{4}$, although D-sharp is heard in the second chord of the verse, B^7/A. Again, the B-major chord does not resolve as an applied dominant would, tonicizing E, but is simply a chromatic option, in this case existing as a chromatic passing tone in a voice-leading strand from E (in the tonic chord) to D-sharp (in the B^7/A) to D.

Both the verse and chorus of "Airbag" are six measures long, containing three relatively strong measures (the first, third, and fifth) and three weaker

measures (the second, fourth, and sixth), suggesting a hypermetric organization of 3/2. The interlude that bridges the chorus to the second verse is only five measures, though; it repeats the introductory riff's oscillating progression, but by starting on F, the flat submediant, it requires an odd number of measures for the A-major resolution to correspond with the first measure of the second verse. The interlude could either sound like it continues the hypermetric 3/2 until a measure is abbreviated before verse 2, or like the 3/2 hypermeter is rebooted at the interlude, which starts with an upbeat-measure. In either interpretation, the hypermeter is interrupted. The interruption occurs at a deep enough level, however, that it is not too disruptive to the surface flow of the music, but sets a precedent for vague metric disorientation that Radiohead begins to exploit more on the following track ("Paranoid Android").

The immediate and explicit use of multiple variants of scale degrees in "Airbag" challenges the listener's expectation of diatonic space, and demonstrates the first uses of chromatic options on the album. The heterophonic inter-dissonance of intra-consonant guitar strata sets a textural precedent that is not necessarily normal (and at the same time reinforces the sense of tonic and develops the motivic gesture of $\hat{5}$–$\hat{4}$–$\hat{3}$). The asymmetrical phrase rhythm challenges the expectation of uniformity in hypermeter and phrase groups.

All of these disruptive musical events specifically set precedents for compositional and performance-related techniques that are used throughout the album. They also more generally set precedents for the kinds of effects that are caused by these and other techniques throughout the album—effects of subtle

dissonance, ambiguity, and uncanniness or nonconformity. Editing effects, like the clipped attack at the onset, and the pounding mechanical artifice of the drum track, in combination with these other unsettling (or at least unusual) musical effects, exhibit also a gradual step away from their less-experimental earlier work, towards more deliberately progressive musical techniques and forms.

2.2 "Paranoid Android"

Irregular

Time stamp	*Section*	*Metric length*	*Key*
PART I			
0:00	intro	6mm	Gm
0:18	verse 1	10mm (6+4)	"
0:47	refrain	7mm	"
1:08	verse 2	10mm (6+4)	"
1:37	refrain	7mm	"
PART II			
1:57	intro	8mm (4+4)*	Am/CM
2:20	verse 1	8mm (4+4)*	"
2:42	verse 2	8mm (4+4)*	"
3:04	break	9mm (4+5)*	"
PART III			
3:33	intro	8mm	Dm
4:04	verse 1	8mm	"
4:35	verse 2	8mm	"
5:05	verse 3	8mm	"
PART IV			
5:36	coda	16mm (8+8)*	Am/CM

*unequal bars

Table 2.ii "Paranoid Android" form.

In his 2009 article “Sectional Tonality and Sectional Centricity in Rock Music, ”Guy Capuzzo tackles the problem, identified by Walter Everett and others, of rock songs whose multiple sections are not all governed by the same tonal center, and for whom, therefore, it is difficult to assign a single key or tonic. He proposes a “continuum of tonality gauges”:

> At one end of the spectrum is Schoenberg’s Monotonality and Schenker’s Tonality, in which “all pitch content, including every modulation, no matter how distant, is ultimately subordinate to a single tonic” (Anson-Cartwright 2001, 234). In Implicit Tonality, “a [single] key is invoked but not actually confirmed (Stein 1997; Baker 1980). In Double Tonality or Tonal Pairing, “two [unequally weighted] keys alternately occupy the highest position in a tonal hierarchy” (Krebs 1996, 18) and “either [tonic] triad of the pair can serve as the local representative of the tonic complex. Within that complex itself, however, one of the two elements is at any moment in the primary position while the other remains subordinate to it” (Bailey 1985, 121-22). In Modified Directional Tonality, two unequally weighted keys appear in succession (Anson-Cartwright 2001, 238; Krebs 1981). In Directional or Progressive Tonality, “one key functions as an opening tonality; and after the first key is clearly established as a tonic, a transformation occurs whereby the initial tonic becomes a nontonic function within a second tonality. The piece then concludes in the second key. The overriding factor is the coexistence in directional tonality of two equally weighted tonal centers within one musical work” (Stein, 1985, 143–44). And in [Sectional Tonality], no weighted relations among keys and sections factor into the analytic process.[3]

This final category, created by Capuzzo, is of the most relevance to “Paranoid Android,” the second and perhaps most striking track on *OK Computer*: not only are there three different keys without any shared tonal center, the second section is a fair example of “implied tonality” itself, as both A minor and C major/minor are hinted at as tonics and there is not enough evidence to

[3] Guy Capuzzo, “Sectional Tonality and Sectional Centricity in Rock Music,” *Music Theory Spectrum,* Vol. 31, No. 1 (Spring, 2009): 158.

confirm one over the other. By labeling the song as being “sectionally tonal,” though, one both allows for the possibility that there are multifarious keys and tonal centers to explore within the one song, and implies that, unlike other normally tonal songs that contain multiple tonal centers, the relationship between the keys will not be clear, or even necessarily functional or sensible in any way. One ramification of this unusual tonal organization, reflected by additional problems and events discussed below, is a forced, almost Brechtian, distance between the listener and the music. By making the music more difficult to comprehend, even on a large-scale level, Radiohead encourages a more ironic interpretive or listening experience. This is only emphasized by surface-level and middleground events.

One of these events occurs in the third part of “Paranoid Android,” towards the end of the six-and-a-half-minute song, in the midst of a passacaglia of sorts: an eight-measure phrase with a descending lament-like bass-line, which repeats for a total of four iterations, each repetition adding another layer over the progression (see Figure 2.iv). The voice leading is smooth, and the progression seems functional and syntactically conventional. As much as it might resemble a classically informed lament, the passage contains an ironic twist: as the end of each phrase, after the [apparent] local dominant A major, is prepared and one might expect resolution to tonic D minor, the phrase restarts with a C minor chord. This chord change sticks out of the otherwise functional and smooth context—a bump in the road that crops up exactly where tonic assertion would be expected.

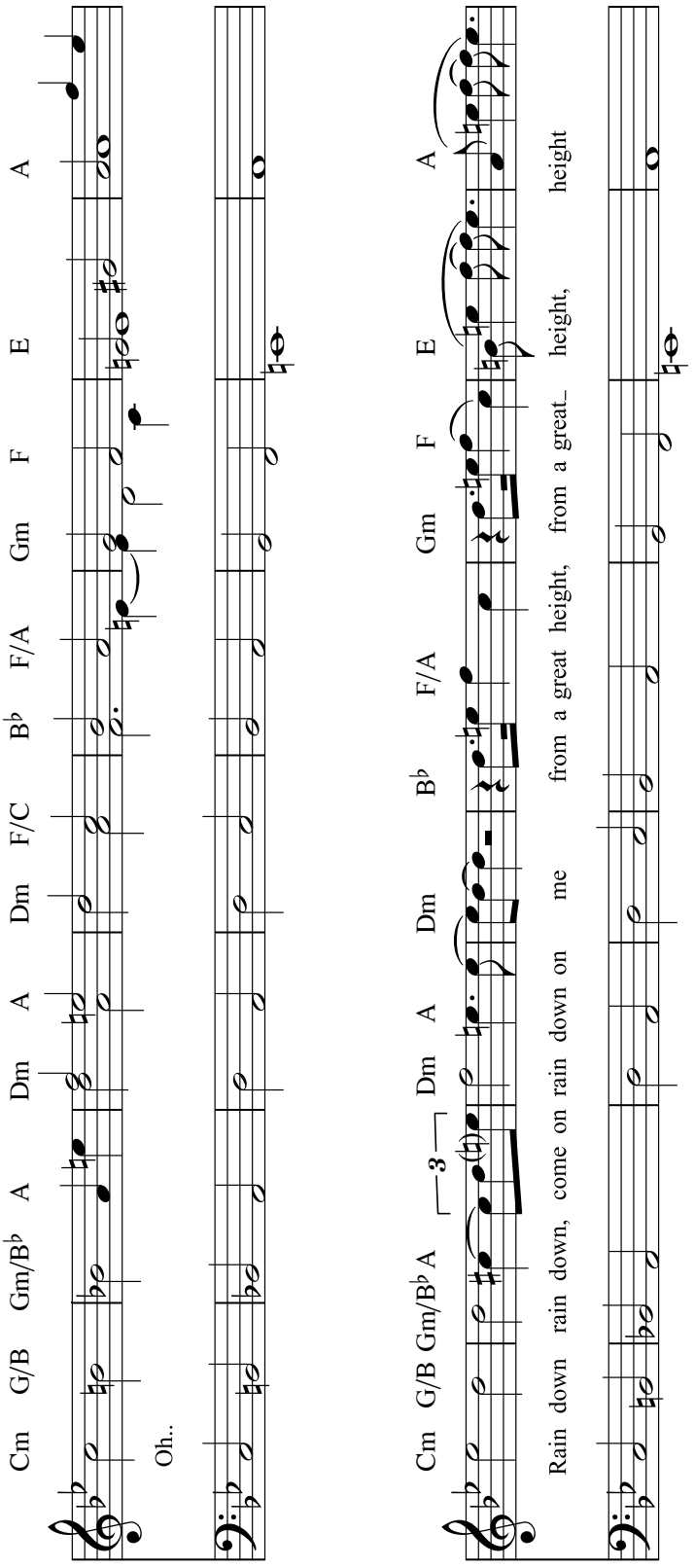


Figure 2.iv. “Paranoid Android” passacaglia (Part III).

D minor might still be implied, but the trouble-making C-minor chord, as fluidly as it might work in the context of the implied voice leading, frustrates potential tonal closure. This event a) happens to reflect the nature of the song itself, which is full of seemingly functional gestures stitched together from different keys, and, being *sectionally tonal* itself, has no overruling tonic (nor, for that matter, any one tonic firmly established at any point); and b) hints at what I will argue is an essential part of Radiohead's voice: namely, an ironic relationship with conventional musical language.

In the case of "Paranoid Android," the austerity and formality connoted by the neoclassical lament-bass[4] is twisted and mocked by the not-quite-perfect counterpoint, the thwarted cadence, and the nasal, spaced-out vocals; more specifically, the progression lulls the listener into a false sense of security, by conforming, for the most part, to a classical idiom before *ironicizing* the phrase with the interrupting Neapolitan chord and the violent context of the outer sections (with, as I mentioned earlier, the potential for such irony already prepared by the background confusion of the song's sectional tonality).

While a classically minded music theorist might approach this phrase from the perspective of one who deals with art-songs containing long-range voice-leading implications, with the theorist's reductive analysis at the ready, my listener is unburdened by a curiosity for tracing voices and harmonies anywhere

[4] Even the lyrics contribute to the potential classical references: Thom Yorke sings "Rain down, rain down, come on rain down on me," and falling rain has plenty of classical associations like grief, redemption, etc.

but the foreground, and, tuned into the same disruptive surface events that would challenge a Schenkerian, is more interested in what the immediate syntactical effect of the event is, and how it was achieved. The two approaches are not contradictory or mutually exclusive, but merely represent two different perspectives of the musical events and how to engage them.

The most striking aspect of the epic and grotesque “Paranoid Android” is probably its form; and not its particular form, either, but simply the fact that it is made up of multiple sections that have frustratingly little to do with each other (especially in terms of any kind of musical thematization or repetition), with the exception of the coda-like Part IV, which brings back the themes from Part II, without vocals.[5]

Part I of “Paranoid Android” opens with two verses (each with a refrain) in a chromatic G-minor key-base. This pair of verses is followed by a starker, more aggressive and tonally ambiguous section (Part II) characterized by distorted electric guitar and tuneless vocal interjections that almost resemble sing-song chant more than sung melody. A minor and C major are peripherally implied, but

[5] Since its release as a single, “Paranoid Android” has drawn comparisons to various older multi-section rock songs, particularly of the progressive-rock genre. It is also, interestingly, often compared to Queen’s popular epic, “Bohemian Rhapsody.” “Bohemian Rhapsody” and “Paranoid Android” are quite different, in terms of their actual music and their character, but the technique of including multiple contrasting sections in a rock song, along with ironic references to classical music (which Queen employs especially blatantly in “Bohemian Rhapsody”) is remarkably apparent and important to casual listeners who might not even be aware of the tonal discrepancy between the sections.

with significant enough chromaticism, metric asymmetry, and loud, rough timbre that nothing sounds particularly stable.

The tone shifts drastically, to something softer and slower, with Part III, containing the odd passacaglia (set in the vicinity of D minor). At the conclusion of this section, the music from the faster and more aggressive second section returns, and then abruptly cuts out to end the song. While the three sections are set in different keys, with different affects and different kinds of chromaticism, all contain similarly disruptive events of some chromatic nature, and all but the passacaglia section contain some kind of disruptive rhythmic or metric problem. The combination of having multiple sections at all with the exponential syntactical problems and disruptions contained within each of the sections gives “Android” a remarkable perceived depth for any analytically minded listener.

The introduction of “Paranoid Android” features an example of what one might describe as “wrong-beat meter,”[6] or, perhaps more accurately, “wrong-beat hypermeter”: after an instrumental introduction that presents a four-measure progression (which foreshadows or prepares the verse), the last two measures of the four are repeated, dragging the otherwise square phrase out by fifty percent with an echo, an extra (and awkward-feeling) hypermetric step or limp (see Figure 2.v).

[6] Analogous to the colloquial designation of “wrong-note tonality” commonly associated with neoclassical music by composers like Poulenc and Stravinsky, whose adaptation of classical forms and gestures was accented by a freer use of dissonance.

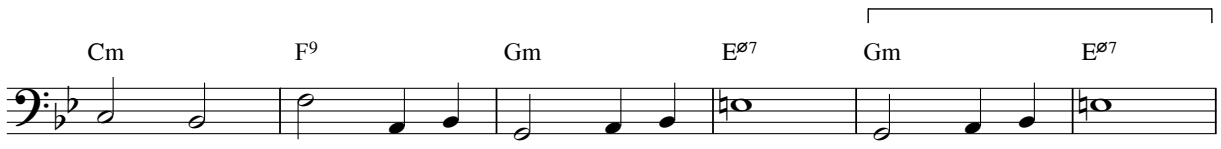


Figure 2.v. "Paranoid Android" intro (Part I).

The use of such an echo is not too terribly unusual in classical music, although in most cases the echo in question repeats a functional cadence or extends a structural harmony (for example, Schubert's *Der Doppelgänger,* in which the piano echoes the singer's cadential gesture to extend the dominant harmony). In the case of "Paranoid Android," the "echo" extends a harmony of ambiguous function or structural weight; like the structural A^{add9} in "Airbag" that existed as part of the structural harmony, the seventh of the E half-diminished is not treated as a suspension that resolves, but as a consonant common-tone with the preceding chord; in fact, the E half-diminished might be better thought of as an inverted G minor with an added dorian sixth, arrived at by way of 5-6 motion). Simply the move from G minor to E half-diminished is unusual and destabilizing enough as it stands, and the "petite reprise" of the bizarre *de facto* cadence just amplifies its tonal ambiguity. In any case, by frustrating the presumptive expectation (an expectation that seems at first to be confirmed by the opening measures) of symmetrical phrases in simple meter, the echo-phrase stands out as a disruptive metric event.

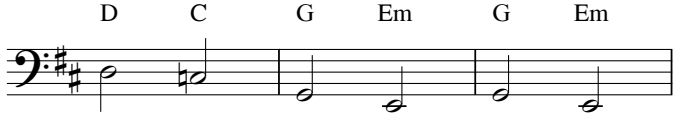
The pair of repeated chords, G minor and E half-diminished seventh, might on its own imply the diatonic area of F major or D minor, but that would

contradict the two-flat diatonic space used in the preceding two measures; besides, those two chords do not convey enough function in either F major or D minor to support one as a proposed tonic or center. So, the awkward and potentially disorienting "plus two," or extra step, that occurs as a metric event is reflected by an awkward and potentially disorienting harmonic move (the lack of function contributes to the sense of delay or extraneous time that the extra two measures create).[7]

The bass line's leap up to F in the second measure almost encourages a hearing of II–V in B-flat major before it resolves deceptively to G minor in the third measure. The context of the voice leading, however, makes the F sound more like an inner-voice tone, with A instead inferred as the bass note, creating a stepwise bass descent of a fourth from C down to G (supported by the harmonic progression IV–VII–I in G minor, a modal version of the conventional S–D-T, subdominant–dominant–tonic authentic cadential paradigm).

The verse, which opens with the same chord progression as the introduction, brings out the juxtaposition of the E-flat submediant with the dorian-

[7] Compare the phrase in "Paranoid Android" with Pavement's "Cut Your Hair" (from their 1994 album *Crooked Rain, Crooked Rain)* which is unusually built around a repeated three-measure phrase (2+1):



The falling-third root motion is the same, as is the lack of clear function implied by the repeated chords (I–VI in the case of "Paranoid Android" and IV–II in the case of "Cut Your Hair"); both examples result in a marked asymmetry in the hypermeter, like a limp.

option E-natural found in the first two measures by including both in the melody (see Figure 2.vi).

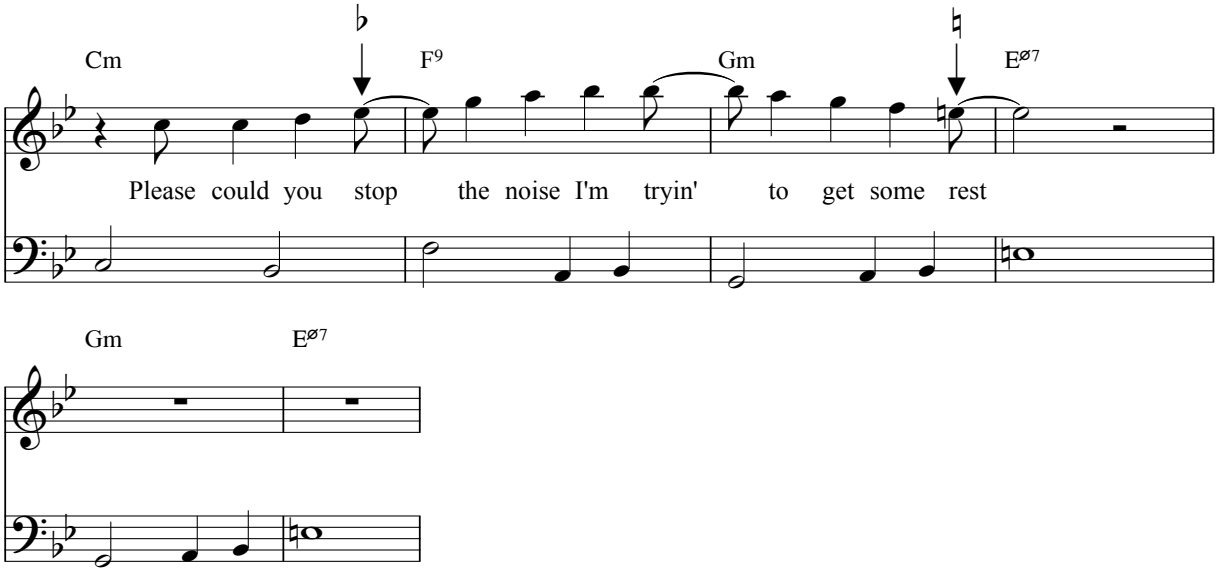


Figure 2.vi. "Paranoid Android" verse (Part I).

The dissonance (as part of an unstable seventh chord) and foreignness (relative to the original diatonic space) of the chromatic option seems to be used as uncertain punctuation at the end of the phrase, the temper of which modulates from stable two-flat diatonic space to an unstable ambiguity with the introduction of a new tone (the E-natural) and a new, unstable sonority.[8] E-natural continues

[8] Another noteworthy aspect of this melodic line is that the descent from B-flat to E-natural is later incorporated into the bass descent in the passacaglia of Part III (illustrated earlier in Figure 2.iii): in measures 5–7 of the eight-measure phrase, B-flat descends as scale degree $\hat{6}$ down to $\hat{2}$ (rather than $\hat{3}$ down to $\hat{6}$, as in the verse). Since the implied tonality in Part III is D minor, the pitch E is not a surprise for the same reason it is in Part I (which is in G minor, with the precedent of a melodic E-flat), but a similar disruptive effect is achieved by the major quality of the E's harmony (the major supertonic functions as V of V).

to be singled out as a point of interest as the next phrase expands the pitch's already notable lack of harmonic stability with an even stranger progression while Yorke sings E-natural: Dm/F–E^7–Gm, Dm/F–E^7 (Figure 2.vii).

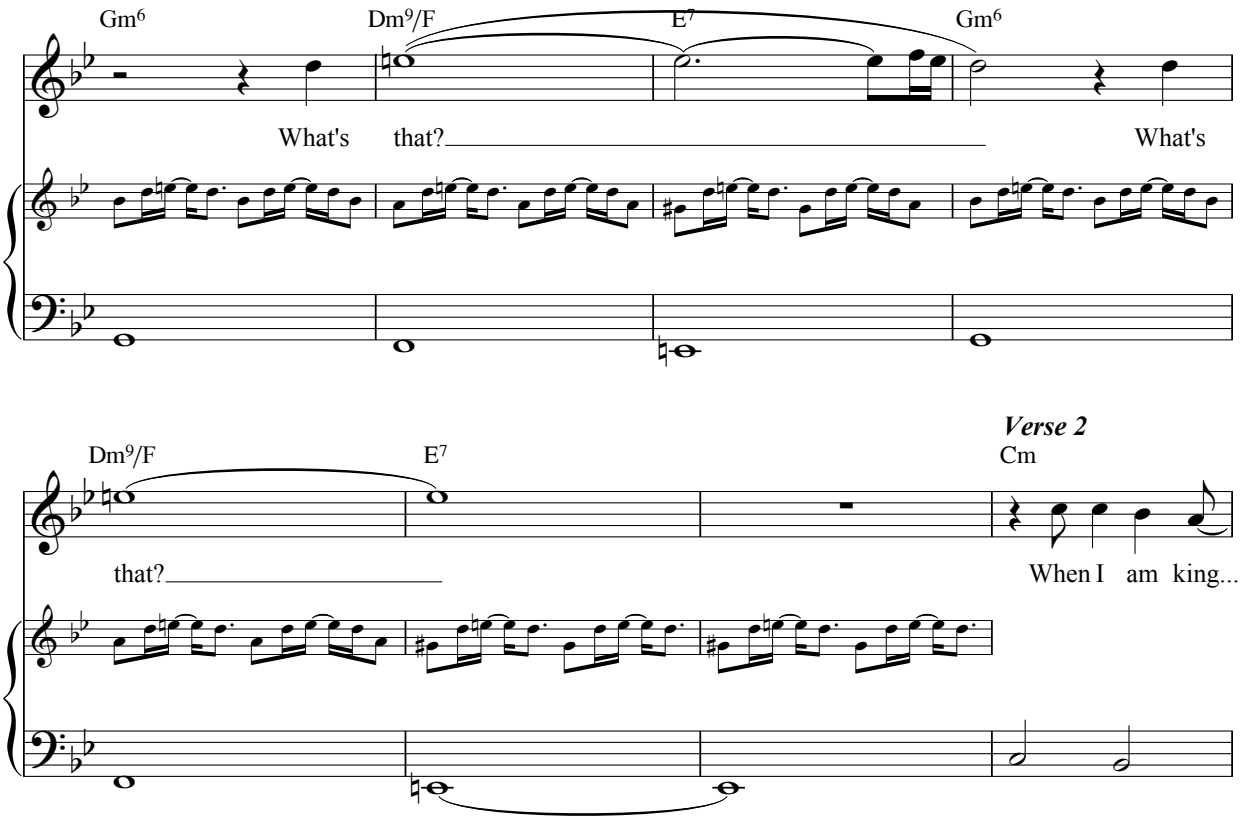


Figure 2.vii. "Paranoid Android" refrain (Part I).

Particularly of note is resolution from E to G minor. The progression is unusual enough that the two chords probably would not even be heard as being related if not for being syntactically bound together by the clear cadential gesture in the melody. The triads are a minor third apart, like the G minor and E half-

diminished chords of the earlier phrase, but their qualities betray their diatonic incompatibility. In Neo-Riemannian terms, the chords are related by PRP (E major to E minor by P, E minor to G major by R, and G major to G minor by P). It is a dissonant progression (the lyrics at this point are, appropriately, “What’s that?”) that calls attention to itself by its chromatic complication and sets a precedent for eerie, chromatic chord changes as another method by which Radiohead can challenge the musical expectations of the listener (even as the listener paradoxically infers the “rule-breaking” as part of the band’s paradigmatic space). The shift from the sustained E major chord back to the C minor of the verse is even stranger: PLP, an eerie reflection of the PRP—but this shift, lacking any melodic or syntactic bridge that would encourage hearing the two chords as a pair, is more easily understood as being a disruptive seam between two discrete harmonic units.

The angry second section starts with the following guitar riff (see Figure 2.viii) without any chords or supporting harmony:

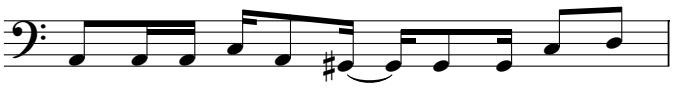


Figure 2.viii. “Paranoid Android” riff (Part II).

Though the theme hints at functionality by seeming to elaborate a simple unfolding of $\hat{1}$ and $\hat{3}$ to $\hat{7}$ and $\hat{4}$, the absence of other pitches or chords and the

nonfunctional dissonant leap from G-sharp to C emphasize the chromatic aspect of the pitches present, and suggests just as strongly an octatonic collection, and/or one where rather than the A–G-sharp conveying tonic–leading-tone (as in Figure 2.vi), A–A-flat is heard instead, conveying a chromatic transformation of the tonic itself (as in Figure 2.ix).

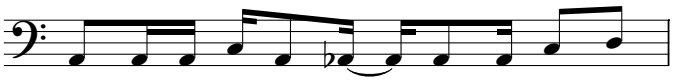


Figure 2.ix. “Paranoid Android” riff (Part II), enharmonic spelling.

The potential for hearing G-sharp as A-flat is realized by this section’s second cellular theme (see Figure 2.x), which revolves around C rather than A through a modal aeolian cadence (A-flat–B-flat–C, or ♭VI–♭VII–I). What before was only potentially inferable as an A-flat, is, in this second cell, placed at exactly the same position in the bar, undeniably A-flat, with harmonic support and everything, albeit functioning as the root of the submediant in C major/minor (we might say the scale for this theme is C major with optional flat $\hat{6}$ and flat $\hat{7}$ or C-minor with optional major $\hat{3}$).

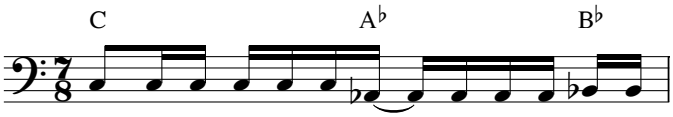


Figure 2.x. “Paranoid Android” aeolian cadence (Part II).

At the same time that this new cadential cell is introduced, the measure is shortened by one eighth note, giving the already frenetic sound a new sense of urgency, with the music almost tripping over itself from one 7/8 measure to the next. While the metric instability in the opening section was caused by an extra two measures, here a similar misstep-effect is caused by a measure being too short. The effect is alike enough in category for an association to be made between the two events, and makes a strong case for metric manipulation being a key aspect of Radiohead’s challenging music.

Tonal instability (and disorientation) is exploited in the third section of the “Android” suite, which consists of the lugubrious passacaglia already mentioned. The second section ends with a surprising (and sustained) F major chord, which halts the proceedings and prepares the new and slower music. Were it not for the two chords in the first measure of the ground bass (C minor to G major in first inversion), the following progression would seem to be firmly rooted in D minor; indeed, the C-minor measure does not *prevent* the inference of a D minor progression, but at the same time its placement at the head of the progression is a surprising obstruction of D minor arrival every time around.

The surprising aspect of the C-minor chord is due mostly to its preparation, in all repetitions after the initial iteration, by the turnaround figure at the end of the progression: the phrase ends with a tonicized half-cadence, E^7 to A^7 (V/V to V in D minor), which, to any ears accustomed to functional tonality, practically begs to resolve to a D minor tonic, and that is when the C minor reappears instead. On the very local level, the C minor chord is startling enough that it can sound like a direct modulation by assertion. Interestingly enough, the move from A major to C minor is the same move as that from the E major at the end of the verse in part I to the G minor that begins the next verse, and it occurs at the same point between two phrases, a "foiled turnaround." The precedence of this motion by minor third (a "PRP" move in terms of Neo-Riemannian operations: E major to E minor by a P operation, E minor to G major by an R operation, and G major to G minor by another P) already occurring as a hijacked resolution earlier in the song does not necessarily make the instances in Part III any less jarring; if anything, the multiple uses of the technique in various contexts of key and section make a case for that progression existing as an identifiable musical device of Radiohead's: part of their musical palette, to use the analogy once more.

Smooth voice leading reorients the listener's sense of center from the momentary suggestion of C minor back to D minor, though on the middleground level it makes the placement of the tonic arrival slightly problematic and unusual. Figure 2.xi illustrates one possible graphing of the section, interpreting the whole phrase as in D minor, with the neapolitan C minor chord explained as a retroactive expansion of the dominant A chord to which it leads. On the

middleground level, the C and E-flat of the C-minor chord could be heard as chromatic passing tones between the C-sharp and E of the A-major chord and the B and D of the G-major chord, but I would argue that the listener has already been trained to notice and react to the immediately superficial disruption of the chromatic resolution, and their attention is drawn away from such middleground connections.

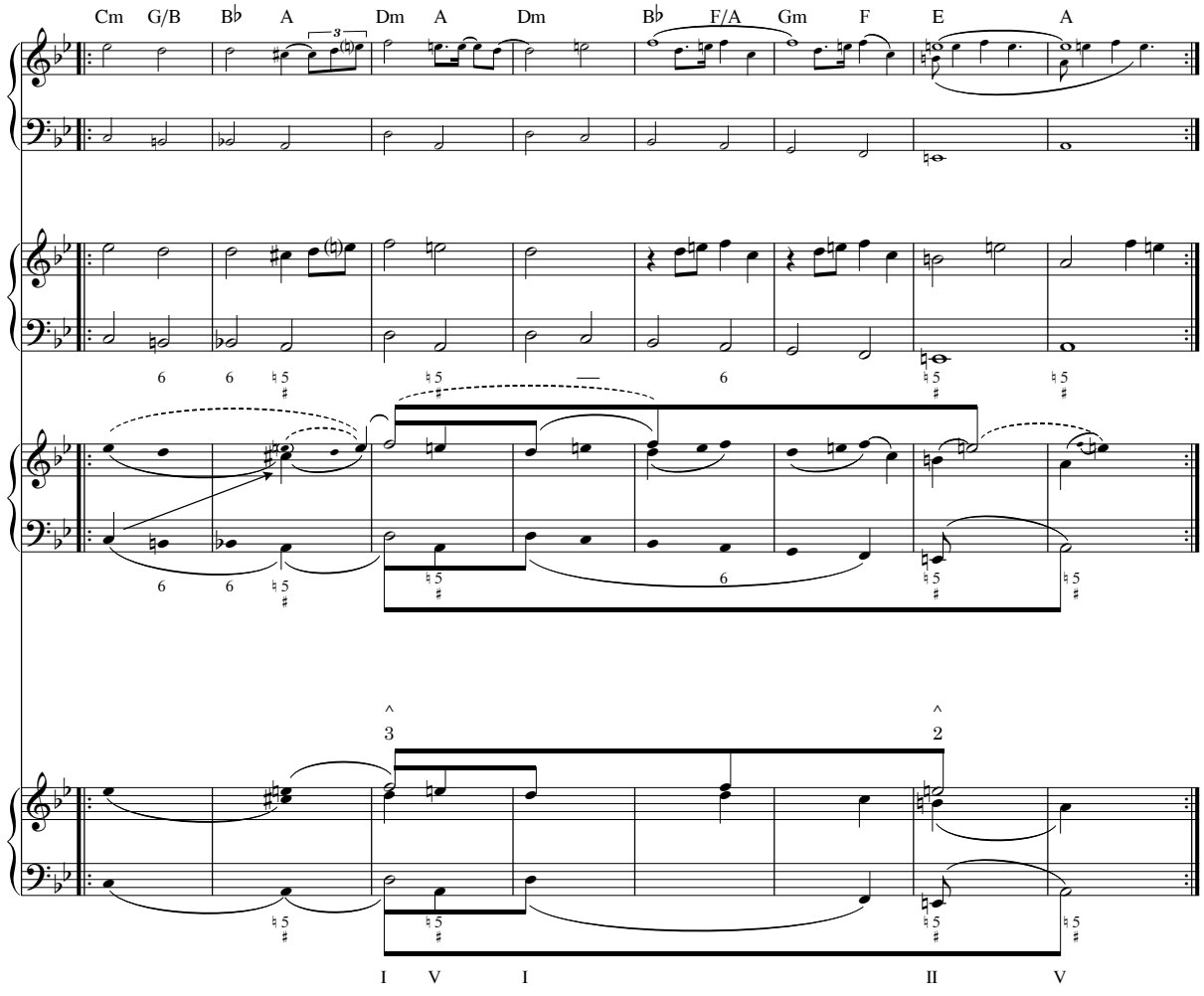


Figure 2.xi "Paranoid Android passacaglia (Part III), voice-leading graph.

On the background level, even determining that the entire section is some kind of expansion of D minor leaves the problem of how D minor relates to the other section's pitch centers of G minor and A minor/C major (as helpful as those designations are to their respective sections). Lacking key unity as the song does, its instances of both harmonic and metric "tricks" or "surprises" on the surface complement the mystery of large-scale key organization (potentially raising questions like "is this section in the tonic key? If not, in which key is it?"), and in a sense, those tricks and mysteries are as much parts of the motivic development employed by the band as are the literal associations between thematized melodic, harmonic, and rhythmic events.

"Paranoid Android," with its multiple sections that are not tonally unified by key in any conventional way, serves as an example (albeit an extreme example) of songs whose nonconformity to classical analytical models forces primary attention towards surface-level sections and associational tonality.[9] As is the case with much non-tonal music, if conventionally defined tonal prolongation of structural points is unreasonable in musical context (for some reason or other), the analyst should instead prioritize the awareness and examination of other kinds of structural associations. This is part of the point that Joseph Straus

[9] I am not arguing that these unusual key relationships are mutually exclusive with unifying tonality and large-scale voice leading. In the genre of common-practice music, though, the obligation (not merely an expectation) to begin and end in a unifying tonal key promotes the need to search for large-scale connections in chromatic music to account for the unusual key relationships (when they are present). Since, as I mentioned in Chapter 1.3's list of the streetwise listener's expectations, tonal unity is neither an obligation nor even an expectation, potential large-scale tonal connections are less important than surface-level events in this approach.

makes in his article “The Problem of Prolongation in Post-Tonal Music,” in which he discusses what to do in the face of music that does not necessarily meet criteria for tonal prolongation on one or more levels. The article encourages analysis that depends on associations of motives and small areas of musical material as fundamentally organizational. In his conclusion, he writes:

> The associational approach I am advocating in no way ignores the obvious tonal allusions in [Schoenberg’s Op. 19, No. 2]. Rather, it places those allusions in a theoretical framework within which we can make meaningful analytical assertions about them. A tonal/prolongational approach would use these allusions as its point of departure. It would view the idiomatic surface of the piece as a distortion or deformation of “normal” processes and would ultimately flatten out the rich details of the musical surface. A motivic/associational approach takes the opposite stance. It views the tonal allusions from the standpoint of post-tonal musical structure. It shows the power of this music not only to create coherence, but simultaneously to comment ironically on the conventions of the past…
>
> …But as we seek to understand the large-scale organization, the concept of prolongation will help us only for brief, isolated moments. This is not a pleasant realization, but if we cherish the concept of prolongation, we should not allow it to be watered down to encompass anything that just happens to look like a fourth-span or a bass arpeggiation.[10]

Straus is talking about the music of Arnold Schoenberg, but most of what he says is applicable to popular music. Obviously, the presence of triadic harmony and tonality is not the surprise in popular music that it is in Schoenberg’s twelve-tone works, to say the least, but it is also worth considering whether the tonality of a band like Radiohead is occasionally more allusional (as in the Schoenberg) than it is the primary mode of organization.

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[10] Joseph Straus, “The Problem of Prolongation in Post-Tonal Music,” *Journal of Music Theory,* Vol. 31, No. 1 (Spring 1987): 19.

I believe that Straus's points become increasingly true as one attempts to analyze or classify connections across an entire album of songs *not* composed in a specific order with harmonic plan in mind, or connections across an entire composer or band's corpus; there is no way to imagine prolongation occurring between two songs composed years apart, released on different albums, with no intended structural relationship, but studying motivic connections or associative rhetorical events of those two songs can reveal something about the composer or band's style or use of musical language.

OK Computer, which already makes a case for itself as a holistic concept album by its lyrical themes and topics (to be explored in Chapter 3), benefits from a method of analysis that highlights musical unity and development through associative surface-level events, rather than prolongation constant within songs that many not even have been composed with a key-plan in mind. Even though several of the songs on *OK Computer are* tonally closed and less ambiguous than "Paranoid Android," the diversity of tonalities among the songs gives Straus's and my associational approach the benefit of equitable applicability to all the songs (while the applicability of prolongational analysis would be less consistent from song to song).

2.3 "Subterranean Homesick Alien"

Verse-chorus

Time stamp	*Section*	*Metric length*	*Key*
0:00	tattoo	4mm	Dm/M
0:10	intro	8mm (4+4)	GMix
0:28	verse 1	12mm (4+4+4)	"
0:57	verse 2	12mm (4+4+4)	"
1:26	chorus	10mm (4+4+6)	"
1:59	interlude	4mm	"
2:09	verse 3	12mm (4+4+4)	"
2:37	verse 4	13mm (4+5+4+4)	"
3:18	chorus	10mm (4+4+6)	"
3:52	coda	8mm (4+4)	"
4:11	tattoo	4mm	Dm/M

Table 2.iii "Subterranean Homesick Alien" form.

"Subterranean Homesick Alien"[11] is much less dauntingly unusual than the preceding track, though it is not entirely without disruption. According to Capuzzo's terms, "Alien" could be categorized as sectionally tonal, in that the body of the song, a consistently static expansion of G-mixolydian, is surrounded by bookend-like tags, or "tattoos" that assert D ("tattoo" is defined by Everett as "a short, one-phrase [instrumental] unit that may reappear as if to bring the song

[11] A blatant reference to Bob Dylan's "Subterranean Homesick Blues," the first track on his album *Bringing It All Back Home* (1965).

back in focus"[12]). An argument could also be made for *directional tonality*, or for an interpretation that suggests the entire song is expressing a bizarrely tonicized half-cadence (in other words, the entire song would be thought of as V–I–V, with the vast majority of the song belonging to the middle tonic). The tattoo is three chords long: D minor, A-flat major, and D major. The syntax, gesturally, appears to be that of a typical T–D–T (tonic–dominant–tonic) cadential figure, although it is a variation of this paradigm with the dominant a half-step too low, resulting in two falling tritones. The A-flat chord eliminates any leading tone necessary for an authentic tonal cadence, but does almost evoke the sound of a whole-tone collection. In the moment, the A-flat chord stands out as being a *strange* cadential chord substitution; the suggestion of whole-tone harmony merely amplifies the relative exoticism of the chromatic chord.

When the D-major chord resolves to the G harmony that dominates the body of the song (it is swiftly tonicized through simple assertion and duration) the tag might be retroactively interpreted as D–S–D (dominant–subdominant–dominant), preparing an authentic resolution to the verse's G tonic, but it might also sound like a completely isolated event by the virtue of its strange chromaticism that contrasts with the rest of the song's simple static harmony. G only appears as a major-quality triad, but mixolydian is a more accurate label than major for the song's primary *mode*, because, aside from the tag at the beginning and very end, the G-tonic section lacks any leading tone (F-sharp),

[12] Everett, *The Foundations of Rock: From "Blue Suede Shoes" to "Suite: Judy Blue Eyes,"* Oxford: Oxford University Press (2008): 151.

relying solely on plagal cadences at its structural points, rather than authentic cadences (modal or otherwise).[13]

The G mixolydian section of the song is not without chromaticism: the four-bar chord progression it repeats over and over is G^7–G^{add6}–Cm/G–G, a progression built around the voice-leading strand $\hat{7}$–$\hat{6}$–$\flat\hat{6}$–$\hat{5}$. The non-diatonicism should attract the attention of the listener who expects a default diatonic set as a slightly disruptive event, but the strand's inherent directional pull makes the E-flat clearly a passing tone, not a threat or challenge to the sense of tonality (or even the sense of mode). The prominent juxtaposition of the two chromatic options for the submediant (E and E-flat) recalls the similar option alternation in "Airbag."

"Alien" uses only one other chord progression, found at the refrain of the verse: F–C–G, a kind of double-plagal cadence ([$\flat$]VII–IV–I) appropriate for the mixolydian mode. Between the static tonic pedal, the extensive repetition of the same relatively simple progression, and the picked arpeggio gesture that precedes each vocal entrance, the verse can be heard as a harmonic homage to the folk-rock of the music to which the title refers. Figure 2.xii shows the two structural progressions: the tonic-pedal verse progression and the double-plagal cadence.

[13] In this song, the structural plagal cadences are easily identifiable as IV–I (C–G); in songs with shifting tonal centers or rotating modality or any situation in which the use of roman numerals is not intuitive (or, as in some modes, leading tones are absent for [flat] subtonics), the difference between plagal and authentic cadences can be simplified by defining plagal cadences as those wherein the root of the second chord is present in the first, and authentic cadences as those wherein the root of the second chord is approached by step from beneath.

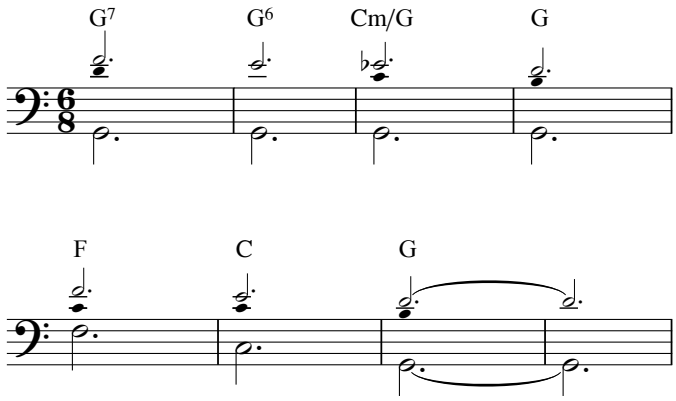


Figure 2.xii. “Subterranean Homesick Alien” progressions.

Another callback to the first track on *OK Computer* (in addition to the use of both major and minor submediant tones) can be heard in a decorative accompanying guitar gesture: D–C–B–C–B ($\hat{5}$–$\hat{4}$–$\hat{3}$–$\hat{4}$–$\hat{3}$, the same gesture heard in the introduction of “Airbag,” transposed down a step) (Figure 2.xi). This does not need to be interpreted as a direct reference to “Airbag,” but, when heard in any conjunction with “Airbag” and the other songs on the album (and in Radiohead’s repertoire), the gesture can be absorbed into the inferred paradigmatic space of Radiohead’s gestural style or melodic signature (like the Ben Folds gesture mentioned in Chapter 1).

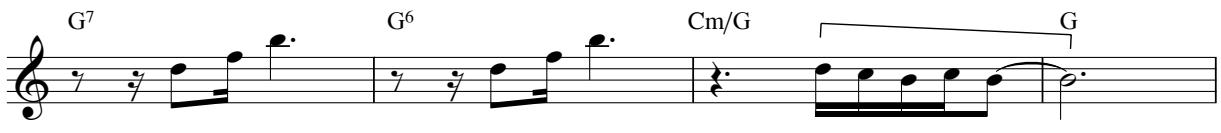


Figure 2.xiii. “Subterranean Homesick Alien” guitar gestures.

2.4 "Exit Music (For a Film)"

Simple verse
(contrasting bridges)

Time stamp	*Section*	*Metric length*	*Key*
0:00	Intro	6mm	Bm
0:23	verse 1	8mm	"
0:55	verse 2	6mm	"
1:26	bridge 1*	15mm (7+8)	Am/Bm
2:18	verse 3	8mm	Bm
2:50	bridge 2	8mm	"
3:21	break	16mm (8+4+4)	"

*unequal bars

Table 2.iv. "Exit Music (For a Film)" form.

"Exit Music (For A Film)" is much simpler than "Paranoid Android," being for the most part tonally closed and unambiguously centered in B minor, with a simple verse form interrupted only by two distinct bridges (each of which leads back to the verse). Composed for the Baz Luhrmann-directed 1996 film *William Shakespeare's Romeo + Juliet*, a modernization of the tragedy for the MTV generation, "Exit Music (For a Film)" is modestly placed at the end credits. It is therefore not directly tied to any particular action or aspect of the movie, and its lyrics (while less abstract that some Radiohead songs) are not explicit in their relationship to the story; yet a reference to the antiquity of the classic subject matter can be inferred from the relatively conventional treatment of a theoretical,

or implicit, descending chromatic bass line around which the verse is constructed.

The tonality of the phrase is clearly B minor, with optional subtonic and submediant scale degrees (A-sharp/A and G-sharp/G, neither of which functionally sway the sense of tonic away from B minor) (see Figure 2.xiv).

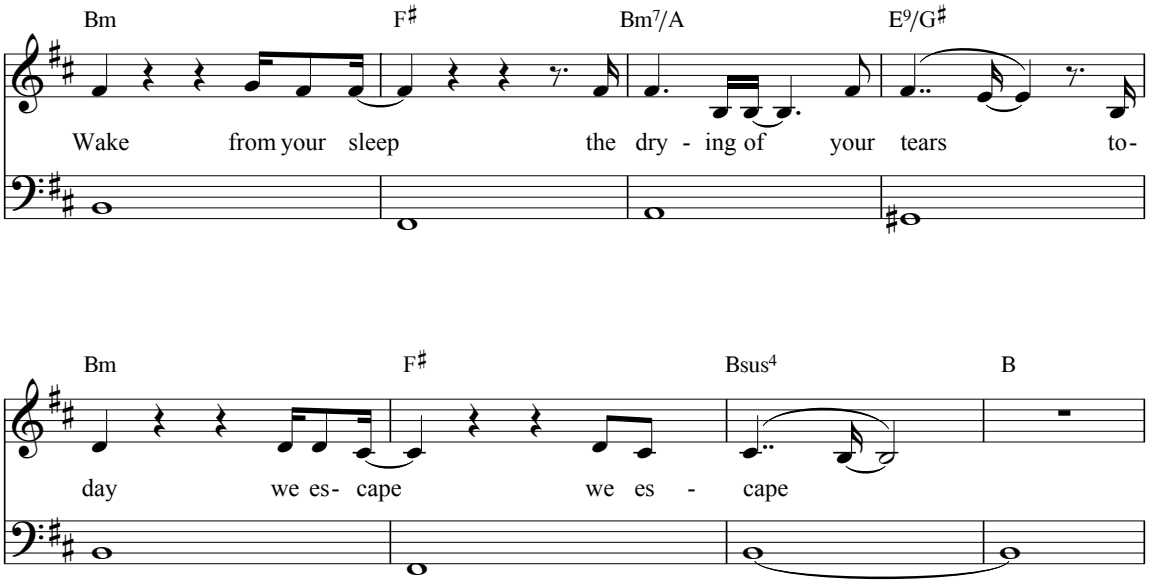


Figure 2.xiv. "Exit Music (For A Film)" verse.

If hypothetical chord inversions are substituted in the second and fourth measures, a completely stepwise bass descent to the dominant is revealed (see Figure 2. xiii). That line may not be explicitly present, but I believe that the progression strongly implies such a voice-leading line, binding the harmonic progression, like Rothstein's "imaginary continuo."[14] I would go so far as to argue

[14] William Rothstein, "On Implied Tones," *Music Analysis,* Vol. 10, No. 3 (October, 1991): 295–297.

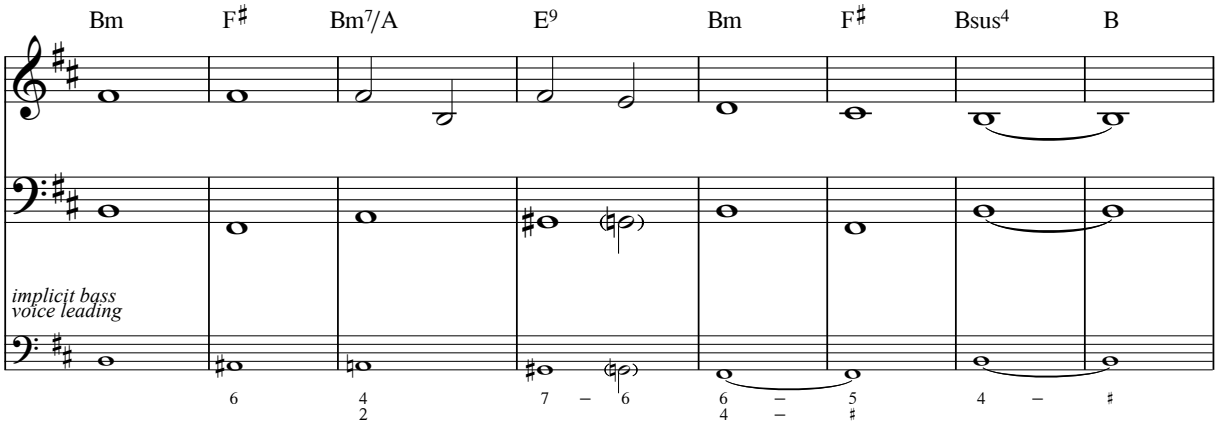


Figure 2.xv. "Exit Music (For A Film)" verse (reduction).

that the chromatic line is fundamental to the construction of the phrase, audibly so, even though the surface bass line seems to have "devolved" to non-stepwise root position chords. Implied stepwise lines are frequently used to build progressions and organize phrases, and they need not exist in any one voice as long as they can potentially be realized from the sounded chords. The combination of rock music's more spectral voice leading and primitivist use of root-position chords deprioritizes surface-level voice leading, or at least draws it deeper in level, away from attention,[15] but linear progressions can be just as structural in pop songs as in "art songs" (though they will probably manifest themselves differently).

The resulting chord progression is a normal tonal solution for harmonizing the descending chromatic tetrachord (far more so than the similar, stranger bass line in the third section of "Paranoid Android"), and the counterpoint is all

[15] One significant reason for this might be the development of various styles of guitar strumming, and, similarly, the guitar's inability to constantly maintain polyphonic counterpoint (compared to, say, a keyboard instrument or an ensemble of solo instruments).

reasonably idiomatic. In verses two and four, the implied descending tetrachord is completely chromatic (B–A-sharp–A-natural–G-sharp–G-natural–F-sharp); the first and third verses omit the G-natural. The inclusion of the minor submediant after the raised option in the consequent of each pair of verses creates a sense of emphasis or punctuation, with "extra chromaticism" (namely the use of the minor submediant, the "upper leading-tone") at every other repetition of the phrase. The marked use of the minor submediant is, of course, already a topic on the listener's radar, after all three songs previous to "Exit Music" have included chromatic options for the submediant (in both major and minor modes). Nadine Hubbs provides a detailed discussion of "Exit Music" (and calls attention to the Baroque connotations of the descending chromatic bass in this passage), using these musical events as a basis from which to explore topical associations and semiotic analysis of the song.[16]

"Paranoid Android" made considerable use of rhythmic and metric obfuscation, between its extraneous echo-measures in the opening section and interspersion of 7/8 measures among the normal 4/4's in the second section. Both the literal rhythmic theme of 4+2, demonstrated in the introduction to "Paranoid Android" by a four-measure phrase lengthened by an additional two measures, and, by extension, the broad and non-literal "theme" of including disruptively disconcerting meter in any way are revisited in "Exit Music."

[16] Nadine Hubbs, "The Imagination of Pop-Rock Criticism," in *Expression in Pop-Rock Music: Critical and Analytical Essays*, edited by Walter Everett, second edition (New York: Routledge, 2008): 225–229.

The basic harmony, conventional treatment of chromaticism, square phrase structure, and, consequently, the appeasement of the listener's expectations of normalcy in the verse are contrasted with the disruptive contents of the bridge, after the second verse. This bridge section provides another example of "wrong-beat hypermeter," like the phrase groupings in the introduction to "Paranoid Android." While the metric disruption in Part I of "Android" was caused by the appending of two extra measures to a four-measure phrase, here the problem might be thought of as a shortening of an element of the phrase to more quickly arrive at the next event, like the measures of 7/8 in Part II of "Android."[17]

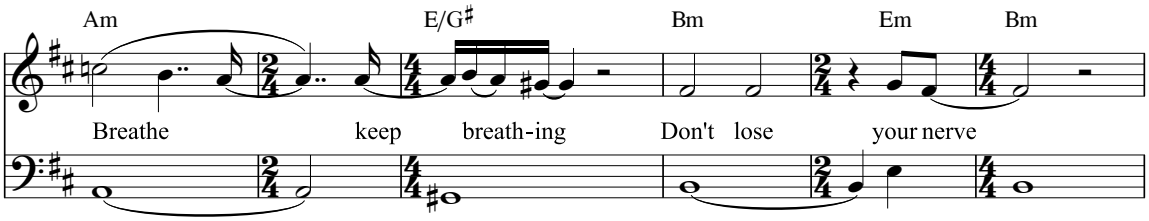
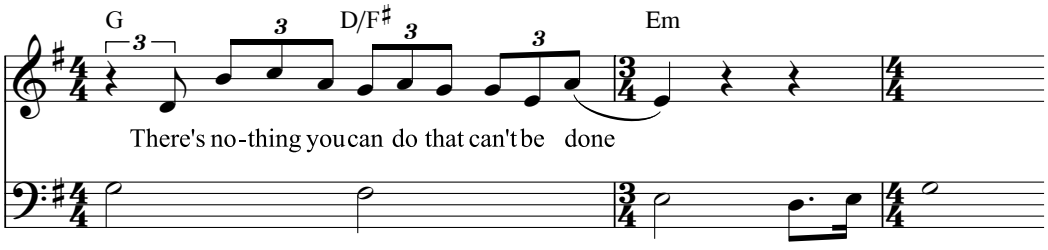


Figure 2.xvi. "Exit Music (For A Film)" bridge.

[17] This situation is comparable to the verse of the Beatles' "All You Need Is Love," in which 4/4 measures at the ends of phrases are cut a beat short in anticipation of the next phrase:



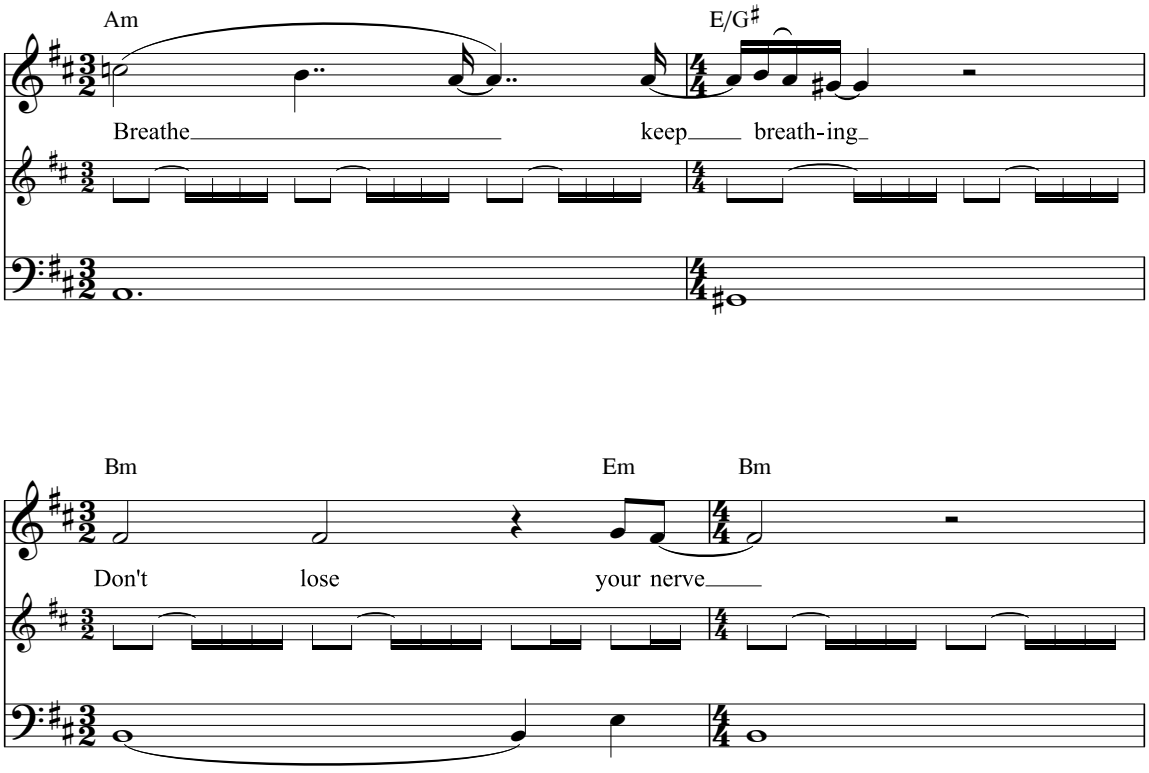


Figure 2.xvii. "Exit Music (For A Film)" bridge (alternative transcription).

Figure 2.xvi shows how the passage would look with the "shortened" measures. Figure 2.xvii demonstrates a different interpretation, starting with a long 3/2 measure rather than a 4/4 measure followed by a 2/4 measure. The problem with this solution is that when experiencing the song in real time, it is harder to tell if a measure is still going than it is to tell if a new measure has begun (it would be rational to assume that after four beats, a new measure starts, absent any evident to the contrary). In this bridge, a case could be made for 3/2 by highlighting the rhythm of the guitar strumming: note that in the third measure of the figure, the guitar rhythm is broken up, and does sound more like

fragmentation at the end of an extended measure than the start of a short one. Both the literal rhythmic figuration of the guitar and the change of harmony, which occurs after six beats, support the hearing of those six beats being in one measure, which is followed by measures of 4/4.

In terms of actual beats-per-measure, the bridge (divided in halves) is organized thus: (4+2(!)+4)+(4+2(!)+4+4) | (4+2(!)+4)+(4+2(!)+4+4+4). Even discounting the metric dissonance at the front of each phrase, the segments of the bridge are uneven. Each phrase quarter starts with the 4+2 step, but the second quarter is an extra measure (four beats) longer than the first. The fourth quarter of the bridge, in turn, is *two* measures (eight beats) longer than the first and the third (one measure longer than the second), so the asymmetry of the phrase halves is progressively wide. The four-beat disparity between the antecedent and consequent phrase halves is due to the former ending on an unresolved 4-3 suspension over F-sharp; the latter's extra measure is the resolution of the suspension, so, functionally speaking, one might better think of the antecedent as being too short rather than the consequent too long (essentially positing that the "sus chord" is a grammatically incomplete half cadence that is interrupted by the consequent phrase.

With the benefit of perspective, interpreting the first measure as a single bar of 3/2 is the most elegant solution (and most seemingly reflective of the performance), because each of the three groups of two beats is presented relatively equally. In the temporal space of experiencing the song, the 4+2 grouping makes more sense, because the listener, acclimated to the

nonthreatening metric world of 4/4, has no reason to suspect that the meter will change.[18] Only after the metric reassertion at “breathing” does the listener realize that some kind of metric chromaticism has taken place, at which point it might seem odd that no salient harmonic or rhythmic events have marked what should be the new downbeat. More likely, the in-the-moment listener would not realize that “metric chromaticism” had taken place until “breathing” is treated as the downbeat of a new measure, two beats too soon.

The hypothetical pairing of a 4/4 measure with a 2/4 measure would also involve the same ratio as “Paranoid Android”’s grouping of four measures plus two measures—although the specificity of the changing meter’s proportional resemblance to the earlier example might not be as discernible as simply the noticeable recurrence metric imbalance. The extra measure of 4/4 at the end of the second half of the bridge further disrupts any metric consistency, and increases the tension of metric uncertainty for the listener.

In addition to the metric imbalance, there are a few other marked musical events in the first bridge of “Exit Music.” The sound of the first chord, A minor, is striking when it first appears, because it is foreign in the key of B minor. At the beginning of the bridge, the A-minor chord is preceded by a complete cadence in tonic B minor, so the move to the modally altered subtonic is quite jarring, and appears to be a direct modulation by assertion; in the consequent phrase of the

[18] It might seem odd, in this interpretation, that the fifth beat of the phrase is not treated as a downbeat by either rhythmic emphasis or a change of harmony, but while the disruption is potentially salient, there is not yet enough information to clarify how the meter is different than the supposed 4/4.

bridge the return of the A-minor chord is preceded by a *half-cadence* in tonic B minor (in other words, an unresolved dominant-functioning F-sharp harmony).

The move from F-sharp major to A minor is also jarring, although in the context of the entire album, it is not unprecedented. Root motion up by minor third combined with a change of quality creates two cross-relations (A-sharp to A-natural and C-sharp to C-natural), just like the earlier examples of chord changes used in "Paranoid Android": in Part I of "Android" a dominant-functioning E^7 was followed by a G minor chord (G-sharp to G-natural and B to B-flat), and in the turnaround of the third part's passacaglia, a dominant-functioning A^7 resolved to a C-minor chord (C-sharp to C-natural and E to E-flat). The PRP move can be both considered a marked event by its chromatic disruption, and identified as being somewhat thematic, having precedence in another Radiohead song.

The A-minor chord's relationship by fifth to the following chord, E major, suggests either a I–V progression (half cadence) in the asserted key of A minor, or perhaps IV–I in E (an "applied subdominant," like the ♭VII chord in the sequential progression I–V–♭VII–IV, or in ♭VII–IV–I, the "double-plagal" progression). Either way, it is a weak cadence (plagal root motion by ascending fifth being considered weaker than authentic root motion by descending fifth) in a non-tonic key; rhetorically speaking, it meets the conventional criteria for half-cadence, but because it does not involve the dominant of the phrase's overall key, it could be termed a "quasi-half-cadence."

The second bridge utilizes chromatic voice-leading gestures (like the verse) and circle-of-fifth gestures implied by the harmonic accompaniment and sequential melody. The bridge could be seen as a "failed" or primitive attempt at a descending-fifths sequence or, like what I suggested earlier in "Paranoid Android," an ironic doppelganger of such a sequence. In any case, it has a strong potential to evoke classical tonal (and topical) idioms, but the authenticity of its resemblance to those idioms is denied by the "primitivist" realization of the models and the strikingly non-functional chromaticism of the minor subtonic in the bridge.

2.5 "Let Down"

Verse-chorus

Time stamp	*Section*	*Metric length*	*Key*
0:00	intro	10mm	AM
0:22	verse 1	16mm (8+8)	"
1:00	chorus	9mm (3+3+3)	"
1:21	interlude	4mm	"
1:30	verse 2	16mm (8+8)	"
2:08	chorus	9mm (3+3+3)	"
2:28	interlude	16mm (8+8)	"
3:07	break	15mm (8+7)	"
3:41	verse 3	16mm (8+8)	"
4:18	chorus	9mm (3+3+3)	"
4:39	coda	7mm	"

Table 2.v. "Let Down" form.

"Let Down" is unique among the majority of songs on *OK Computer* for its complete lack of chromaticism—it and the ninth track, "Climbing Up The Walls," are the only two tracks on the record that are completely diatonic in pitch vocabulary. There are no disruptive chromatic events to compromise the expected default pitch collection, but, when taken in with the rest of the album's music, the song might be marked in the listener's ear for its relative simplicity. In the context of Radiohead's earlier records, "Let Down" might have an audible affinity with the songs on *Pablo Honey* and *The Bends* for the same reason.

Not only is the pitch collection pristine and evident, the harmonic syntax is rudimentary and tonally functional, most strongly conveying A major. The distinct lack of chromaticism, however, along with two other salient features of the song that hint of minimalist music (namely the cyclic nature of the verse's chord progression and the accompanying ostinato played on guitar throughout the song) all suggest a sense of pandiatonicism (in other words, definition of the tonality by its fixed and limited diatonic pitch-space, without strong hierarchy or center to the scale steps or, by extension, chords of which the space consists) parallel to or instead of the A major tonality. Textural heterophony is used frequently by Radiohead, but in "Let Down"'s absence of chromaticism (or any harmonic disruption), the A-major diatonic space is hypnotically minimalist in comparison.

The mechanical and pandiatonic-leaning guitar part sounds like a gamelan or minimalist music like John Adams's *Phrygian Gates* or *China Gates* (based on heavy repetition of slightly varying fragments) (see Figure 2.xviii):

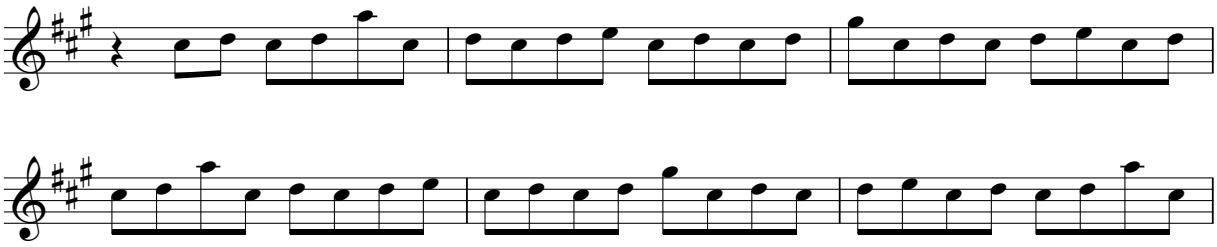


Figure 2.xviii. “Let Down” intro.

This accompaniment part resists meter even more strongly than it hints at any anarchic pandiatonicism. The notes sound almost randomly composed, but can actually be divided into pairs of ten eighth-note cells repeated over and over after one another (the first of the pair of cells, designated “x” in Figure 2.xix, is characterized by a leap up to A while the second, designated “y,” is characterized by an analogous leap up to G-sharp). The odd five-beat duration of each pair of cells and the fact that the first pattern starts on the second beat of a strong 4/4 measure makes the relationship between the pattern and the otherwise straightforward meter arbitrary and uneven (it is perhaps Radiohead’s own take on the old technique of composing isorhythmic motets, incarnated as obbligato guitar strata).

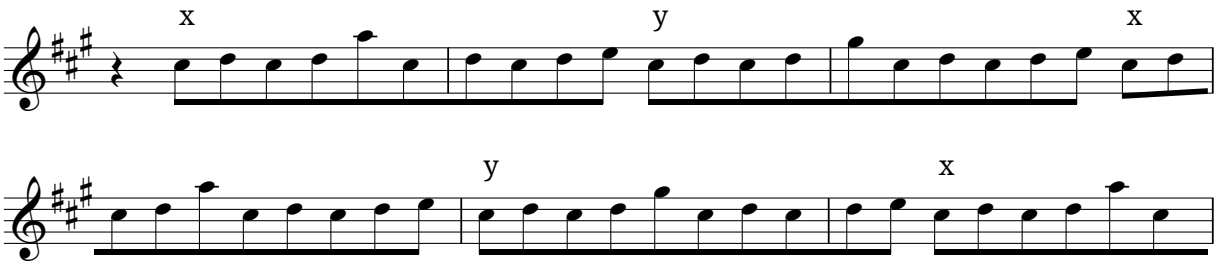


Figure 2.xix. “Let Down” intro (with pattern divisions).

The cells consist mostly of the notes C-sharp, D, and E; these are in fact the same notes that made up the similarly heterophonic accompaniment motive in “Airbag” (both songs are in A major). This close relationship of pitch levels between songs reinforces both a sense of continuity or cohesion in the album as an ordered sequence of songs, and the profile of Radiohead’s imaginary paradigmatic space of compositional techniques and gestures.

The introduction contains no harmonic progression, but sits complacently in the tonic A major, relying on the guitar stratum to maintain musical interest. Compare the course of events in “Let Down”’s introduction with those in the introduction to “Airbag.” Both songs open with a bare guitar riff of some character or other, and the delayed entrance of the drum set in both cases obscures some sense of meter: in “Airbag,” only the sense of hypermeter is temporarily ambiguous, while in “Let Down” the meter itself is opaque without the drumset.

While “Let Down” provides brief respite from the marked chromaticism and generally idiosyncratic tonal language that seems to pervade most of the rest of *OK Computer*, there are still elements of the song that can potentially form associations with the other songs. As previously mentioned, the guitar line in the introduction bears a striking similarity to the $\hat{5}$–$\hat{4}$–$\hat{3}$ motive first heard in “Airbag.” Although the contour is different, the use of the same scale degrees (at the same pitch level and the same key) is close enough to the previous theme for the listener to make an association between the two events.

Once the verse begins (22 seconds in), there is a functional harmonic progression, albeit a very basic, open-ended tonic expansion (that is, not ending

in the tonic but a half cadence): A, E(^{7}), F-sharp minor, E(^{7}), or I–V–VI–V in A (shown in Figure 2.xx).

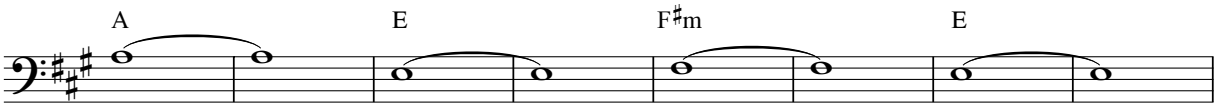


Figure 2.xx. "Let Down" verse.

As noted in "Subterranean Homesick Alien," the majority of "Let Down" is built using only two chord-progression "blocks": one to establish/expand the tonic, and another to close it, with a cadence. In both songs, plagal motion is a prominent part of the cadence "block." In "Subterranean Homesick Alien" there are no authentic cadences, but in "Let Down," while IV–I is the harmonic support for the refrain, an instrumental authentic cadence has the last word (and, if the song is being considered in terms of its long-range voice leading, provides the final $\hat{2}$–$\hat{1}$ of the melodic descent, supported by V–I harmonically).

The cadential phrase is iterated three times as the chorus of the song (appearing as shown in Figure 2.xxi for the first two iterations), including an intermediate submediant harmony that colors the plagal cadence and delays the sense of tonal closure.

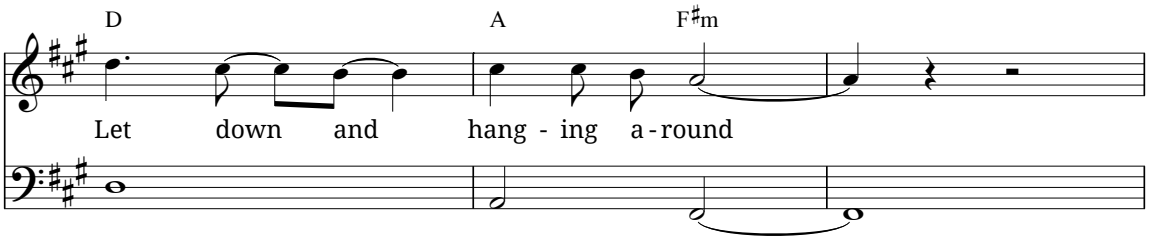


Figure 2.xxi. “Let Down” chorus.

The F-sharp minor submediant harmony can easily be interpreted as an “added root” of a 5-6 figure over the tonic bass. The first two times the fragment repeats, this elaborative harmony leads smoothly back to the subdominant D to repeat the phrase, and the third time it is followed by an E dominant chord, giving itself a new function as a pre-dominant. The dominant itself lingers before resolving to the introduction’s static tonic (this is followed by the next verses, but eventually serves as the final descent). Because the eventual dominant chord always occurs after the melody has finished, the listener must append the prominent $\hat{2}$ and $\hat{1}$ played by the guitar on the downbeats of the next two measures to the voice’s prolonged $\hat{3}$ in order to hear a conventionally complete melodic descent with functional support (Figure 2.xxii).

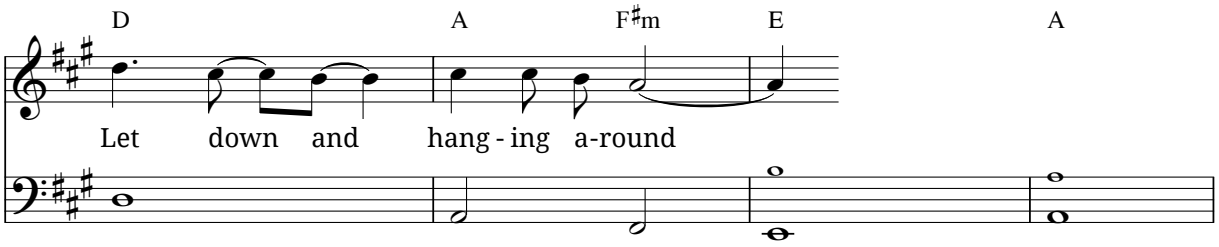


Figure 2.xxii. "Let Down" final chorus.

2.6 "Karma Police"

Verse-chorus (bridge; expanded coda)

Time stamp	*Section*	*Metric length*	*Key*
PART I			
0:00	intro	8mm	Em/ph
0:26	verse 1	8mm	"
0:52	verse 2	8mm	"
1:18	bridge	8mm	GM
1:43	verse 3	8mm	Em/ph
2:08	bridge	8mm	GM
PART II			
2:34	refrain	8mm (4+4)	Bm
2:59	break	4mm	"
3:12	refrain	8mm (4+4)	"
3:37	coda	9mm	"

Table 2.vi. "Karma Police" form.

Capuzzo, in his article on sectional form, designates “Karma Police” as “sectionally centric;”[19] in other words, the song contains multiple sections that possess independent centers—and these independent centers do not contribute to (or necessarily promote the hearing of) a functional long-range progression. But while there are *centers,* the sections might not possess clear *tonics*. In this case, the first section of “Karma Police (the verse) implies both A minor/dorian and E minor/phrygian (there is a chromatic-option dichotomy set up between F and F-sharp). Whichever of the two keys seems stronger in the verse, the bridge functionally tonicizes G major. G major is not incompatible with either of the tonic options of the verse, so the bridge does not signify a major departure (although Capuzzo does consider the bridge to be its own tonally autonomous section).

The second half of the song, the expanded coda, consisting of a repeated refrain over a four-measure progression (“For a minute there I lost myself”), asserts B minor, decisively (though not too drastically, considering the relative closeness between the two areas) changing the diatonic landscape with the incorporation of C-sharp in the stepwise bass line and inner parts. There is no actual cadence in B minor, though; there is plagal cadential motion in D in the middle of the refrain, and the phrase ends with a brazenly non-functional E major chord (giving this section both a sense of modal ambiguity and its own chromatic-step dichotomy) (see Figure xxiii).

[19] Capuzzo, 162–166.

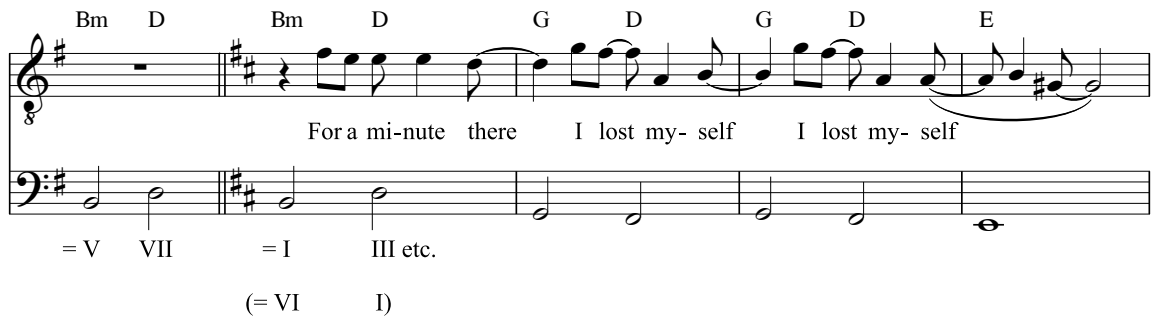


Figure 2.xxiii. "Karma Police" refrain (Part II).

"Because," states Capuzzo, "the song largely lacks functional harmonic progressions, I shall avoid the term 'key,' and shall substitute the terms 'collection' to identify pitch-class content and 'center' to identify the focal pitch-class of a given collection;"[20] hence, "sectionally centric." Capuzzo's centers are not tonics or even modal centers or finals per se, being identified not through any paradigmatic, out-of-time rule of the diatonic landscape. In other words, just because a song is in three flats does not necessarily mean its center is E-flat for the major mode, or G for the phrygian mode, etc). Capuzzo prioritizes the syntactical interpretation of melodic tones over the apparent diatonic collection in his consideration of what the center is.

Capuzzo argues for A as the center of the first section of the song; however, even with A minor being the first chord of the progression and the last note of the verse's melody being A, the lack of any functional cadence in A inclines me to hear the section as E minor. Compare the A minor–D/F-sharp–Em,

[20] Capuzzo, 162.

or IV–VII–I in E minor, to the opening of “Paranoid Android”: C minor–F^{9}–G minor, or IV–VII–I in G minor) (see Figure 2.xxiv).

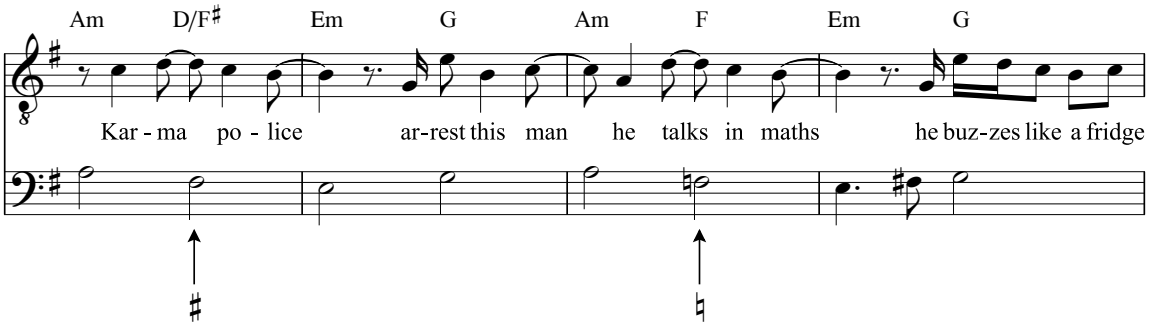


Figure 2.xxiv. “Karma Police” verse (Part I).

As indicated by the arrows, F-sharp is used prominently in the first half of the phrase, but in the third measure F-natural is used instead. If this F-major chord were to resolve to E major, it could easily be heard as a half-cadence, and support Capuzzo’s claim. Since F major resolves back to E minor, however, I do not hear a change of function, but rather an inflected repetition of the opening progression, which serves to strengthen the resolution to E in spite of its bizarre phyrgian form simply through its rhetorical emphasis (I say it is bizarre because it resolves to the tonic, not to the dominant; actual phrygian modality is rare in tonal popular music),

In contrast, the bridge (which Capuzzo considers a chorus) is much more tonally functional (see Figure 2.xxv).

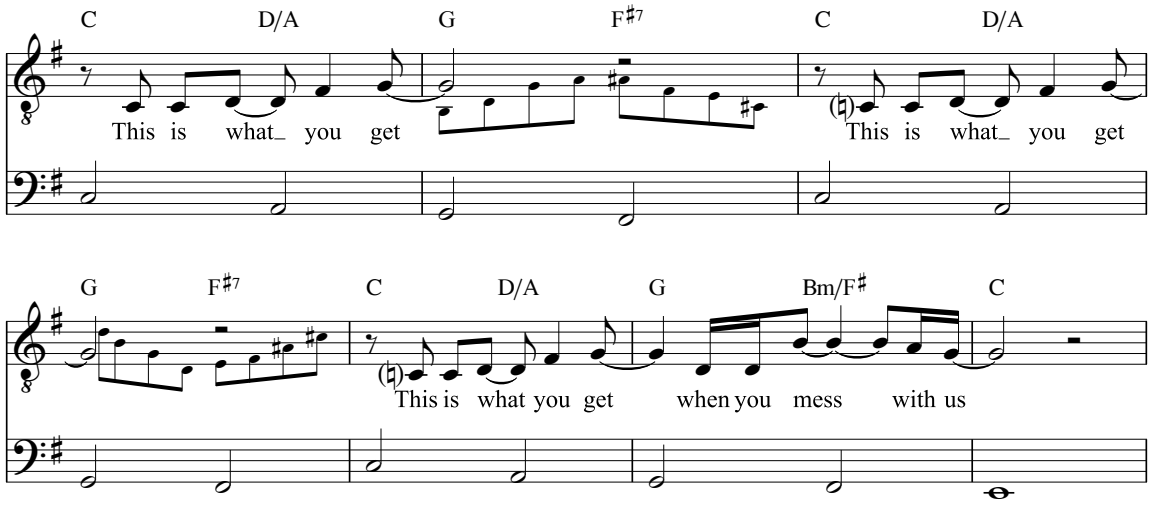


Figure 2.xxv. "Karma Police" bridge (Part I).

The progression is essentially IV–V–I in G major. The inverted dominant chord creates a certain parallel between this section and the opening, which began the same way in the relative minor (E). No chromaticism frustrates (or emphasizes) the functionality of this progression, unlike the earlier phrase, but it is colored by a strange major-quality leading-tone triad that bridges tonic-functioning G back to C, the head of the phrase. The chromatic chord is similar to one used in the verse of the Beatles' "Sexy Sadie," but the chord in that song does not resolve as strangely as F-sharp dominant seventh to C major. The leading-tone triad is not an applied dominant here, but rather a root-position harmonic support for the implicit voice leading that connects the two iterations of the progression: D–C-sharp–C-natural. This $\hat{5}$–$\#\hat{4}$–$\hat{4}$ strand is common in both classical and popular music, arising out of certain descending-fifth progressions (for example, VI^7–II^7–V^7) as well as the frequently used (but anachronistic in

classical idioms) I–major II–IV–V progression (which occurred in the chorus of "Airbag," as already noted).

Figure 2.xxvi shows the turnaround from the bridge back to the verse. B minor to D major can be heard as a modal expansion of E minor's dominant B, although the upwards-by-fifth resolution to A minor (going against the authentic-motion gravity that would pull it to either G major or E minor) makes for a result almost as jarring as those caused by the chromatic quasi-half-cadences mentioned earlier.

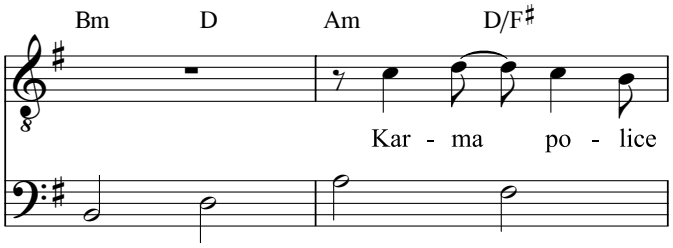


Figure 2.xxvi. "Karma Police" turnaround figure.

The same buildup occurs as the bridge leads into the second section, the expanded coda, but again, the reasonably anticipated authentic resolution is foiled, this time by a simple return to B minor (refer to Figure 2.xv). In fact, the entire B minor–D major progression is repeated, but now asserts a new diatonic space (two sharps).

D resolving to E, as is found at the end of this progression, suggests some kind of half cadence (that is the syntactical effect, and ascending by step from one major triad to another will tend to sound like IV–V in a major key); like “Exit Music,” though, this half-cadence effect lands on the subdominant, not the dominant, so it could also be considered a quasi-half-cadence.

Perhaps, like “Exit Music” and “Paranoid Android,” “Karma Police”—full as it is of pseudosequential gestures and familiar-sounding walking bass lines (but notably lacking any points of tonal closure, and containing chromatic “problems” that are set up but never conventionally resolved)—provides a level of interest for the listener by referring to basic tonal idioms but then not following through with them. Like the already discussed songs, the idiosyncratic relationship with conventional idioms can be heard not just as a “failure” to correctly emulate the model, but as a deliberate thwarting of the model’s associative expectations, or even as an ironic commentary on those expectations.

2.7 “Fitter Happier”

“Fitter Happier” does not belong to the same form or genre of song as do the rest of the tracks on *OK Computer*. An experimental-sounding track for instruments, sound effects, and computerized spoken text, “Fitter Happier”’s musical content is minimal and purely peripheral, not organizational. This track

will be discussed in greater detail in Chapter 3, which will examine its anomalous nature and lyrical topics in the context of the rest of the album.

2.8 "Electioneering"

Verse-chorus

Time stamp	*Section*	*Metric length*	*Key*
0:00	noise		
0:14	intro	12mm	Ddo
0:32	verse 1	20mm (8+12)	"
1:03	chorus	16mm (8+8)	"
1:28	interlude	8mm	"
1:40	verse 2	20mm (8+12)	"
2:11	chorus	16mm (8+8)	"
2:36	break	5mm	"
2:52	coda	37mm	"

Table 2.vii. "Electioneering" form.

"Electioneering" takes a step closer to the louder, garage-rock side of Radiohead's grunge influences, compared to the more sophisticated introspection that characterizes much of the rest of the album. (The second section of "Paranoid Android" ventured into this territory as well.) The tempo is quick and the meter is a driving 12/8. The track is more boisterous than the

surrounding songs, but harmonically is similar. The strongly-conveyed pitch center is D, with an exclusively minor-quality tonic; the lack of leading-tones gives it a modal feel, and the almost-exclusive use of B rather than B-flat suggests D dorian as the most accurate description of the key. Figure 2.xxvii illustrates the opening of verse 1.

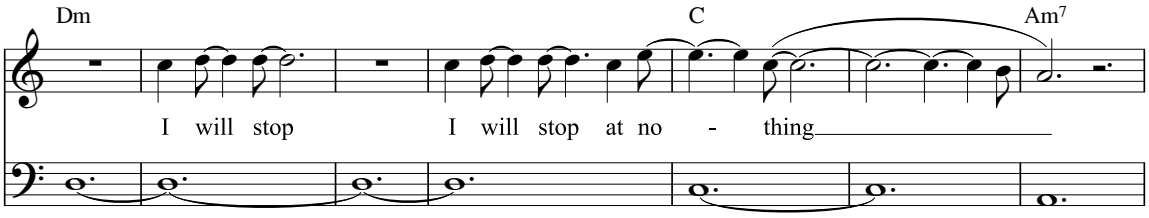


Figure 2.xxvii. "Electioneering" verse.

Previously in this chapter I have isolated moments of salient heterophony as being somewhat disruptive (or at least different enough from the expectation of more consonant counterpoint that they stand out or characterize a section). There is such an example in the chorus of "Electioneering," and the event is enhanced by some text painting in the lyrics: as Yorke sings "When I go forwards you go backwards / and somewhere we will meet," another voice joins, singing in contrary motion, easily representing the lyric's description of moving forwards and backwards at once (see Figure 2.xvii).

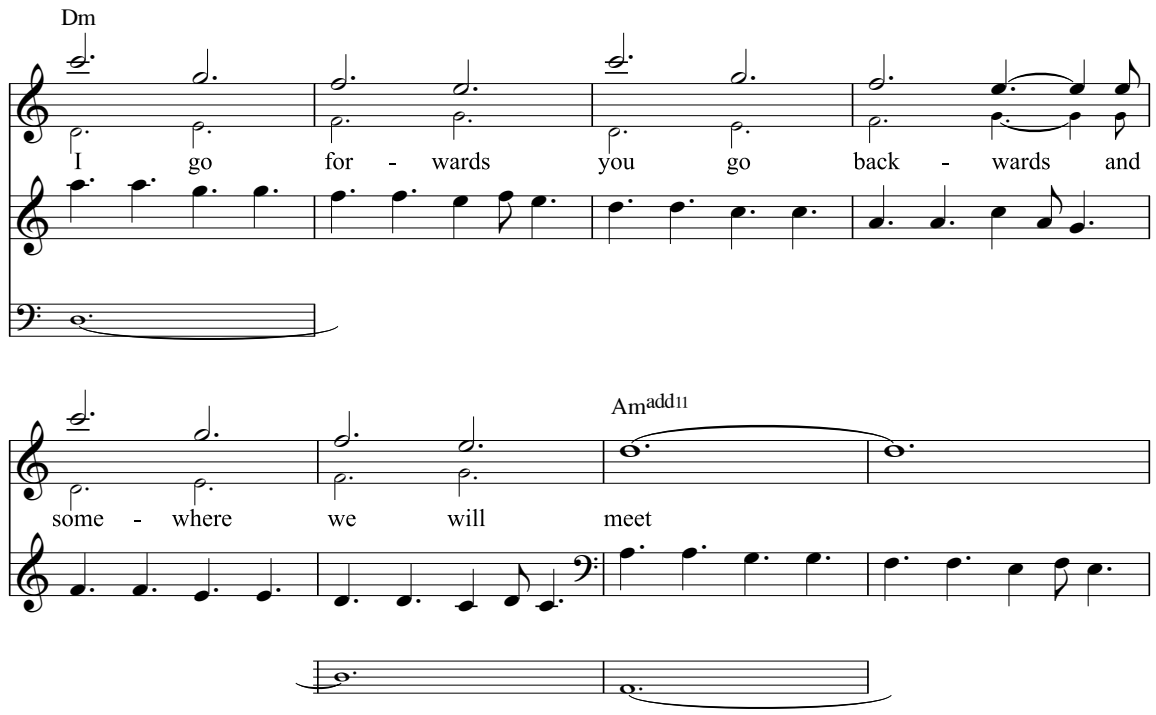


Figure 2.xxviii. “Electioneering” chorus.

The harmonic result of this counterpoint is not exceedingly dissonant (the only dissonant interval it creates with the melody line is the minor seventh on the downbeat of every pair of measures), but the relatively chaotic heterophony, when combined with the guitar part which descends in similar motion with the melody (generating new combinations of intervals each measure), over the static D pedal, sounds like a different kind of counterpoint than usually encountered (on the album, and in general).

Even though most of the intervals are consonant between the voices, the assertively consonant minor sevenths, the lack of function, and the prolonged D-modality makes the counterpoint sound like that of a particularly archaic

heterophonic motet. The tonic D sung through the A minor “V”, on top of the lack of a leading tone, gives the “dominant” a very distinctively clustery sound. The syntactic sense of dominant is maintained and encouraged by the guitar’s descent from $\hat{5}$, and, of course, the eventual fifth-cadential motion back to D-minor. The cluster-cadence is comparable the end of the chorus in “Airbag,” where a tonic pedal is sustained through a V^{4-3} cadential figure. (“Airbag” ends on a somewhat clustery chord as well: tonic A major with an added, unresolving, ninth.)

In the coda that follows the second chorus, a new chromatic tone is introduced and featured: G-sharp/A-flat, the raised subdominant/flat dominant. There is not a clear narrative set up to indicate a particular dichotomy between the chromatic tone and either scale degree $\hat{4}$ or $\hat{5}$, so it could be heard as either. In any case, it is used in the guitar line as both a lower neighbor to A (as in Figure 2.xxix) and as a chromatic passing tone between A and G (as in Figure 2.xxx).

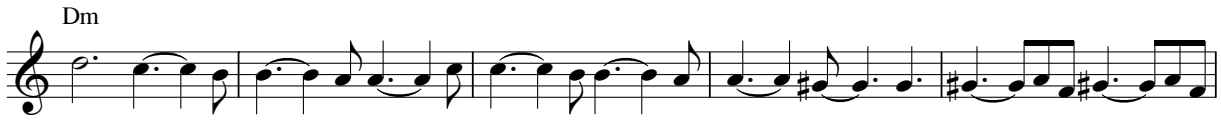


Figure 2.xxix. “Electioneering” guitar solo A.

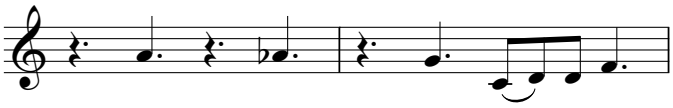


Figure 2.xxx. “Electioneering” guitar solo B.

The guitar part in the latter example elaborates a chromatic descent from A to F ($\hat{5}$ to $\hat{3}$ in D). Previously, in “Airbag” and “Karma Police” a similar voice-leading strand formed the basis of chord progressions, with the chromatic tones generating supporting harmonies. Here, there is no contrapuntal progression of harmonies, but simply the continued stasis of the D pedal. The strand is, however, then echoed a third higher, this time using both B and B-flat in the chromatic descent, utilizing the dorian (raised) option for the submediant (see Figure 2.xxxi).

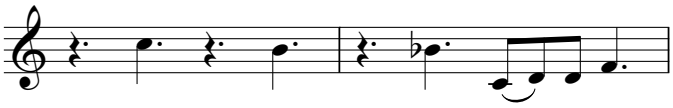


Figure 2.xxxi. “Electioneering” guitar solo C.

Again, there are no harmonic implications for these chromatic tones (especially no implication of a sequential transposition of harmony to match the sequential transposition of the melodic fragment); rather they are examples of

purely decorative melodic chromaticism over the completely (at this point) static tonic pedal. This track is both one of the most minimalist on the album, through its tonic-pedal pandiatonicism, and one of the most "rocking," through the aggressive and noisy guitar solos.

2.9 "Climbing Up the Walls"

Verse-chorus

Time stamp	*Section*	*Metric length*	*Key*
0:00	noise		
0:12	intro	8mm	Bae/Edo
0:36	verse 1	17mm (9+8)	"
1:30	chorus	8mm (2+2+4)	"
1:57	verse 2	17mm (9+8)	"
2:49	chorus	6mm	"
3:08	coda	20mm (4+4+4+8)	"

Table 2.viii. "Climbing Up The Walls" form.

As in "Let Down," and, to a certain extent, "Electioneering," there is no chromatic harmony in "Climbing Up the Walls," nor, for that matter, any change of or even threat to the diatonic space (two sharps). Unlike the preceding track, however, which was clearly centered on a D tonic, here there is a little modal

ambiguity: the melody suggests B aeolian (the absence of any leading tones means the music is modal, so it is aeolian as opposed to minor), but a lack of functional motion leaves B unconfirmed as a tonic. This ambiguity is helpfully demonstrated by the relationship between the melody and bass in the opening of the verse (see Figure 2.xxxii).

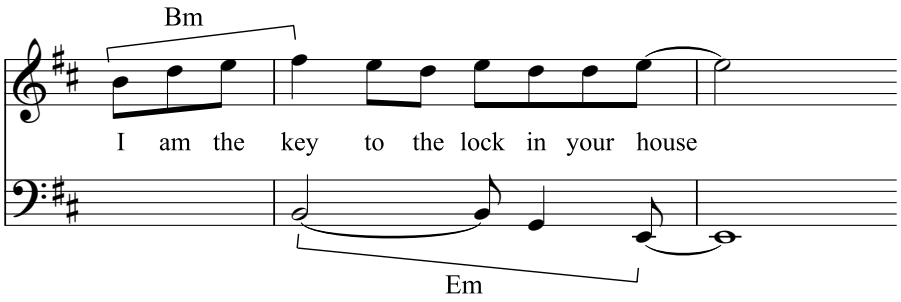


Figure 2.xxxii. “Climbing Up The Walls” verse.

The melody elaborates a B-minor triad (and generally operates within an octave’s range, from B below middle C to B above middle C), while the bass, almost simultaneously, arpeggiates an E-minor triad, suggesting two possibilities for the governing mode: B aeolian, harmonized by an expansion of the subdominant rather than of the tonic (like some “plagal” version of an “authentic” mode, to analogize Radiohead’s use of modes to the traditional organization of the *oktoechos,* the eight church modes), or E dorian, with a melody that does little to validate E as a center. The bass line essentially alternates between two cyclic progressions (like “Subterranean Homesick Alien” and “Let Down”: B

minor–G–E minor–(G) and E minor–F-sharp minor–G. In the diatonic context of two sharps, that would seem to suggest E dorian or G Lydian over B minor (or even, if both progressions were heard as expanding predominant harmony, a D major that is never actually attained). Interestingly, the verses in “Climbing Up The Walls” consist of phrases that alternate from ending on E to ending on B, so the hypothetical decision between hearing B and E as centers affects whether the pairs contain melodic implication of subdominant gesture to tonic gesture (in B) or tonic gesture to dominant gesture (in E), and accordingly whether the harmonic “foot” within the phrase, to use the analogy of poetic meter, is iambic (weak-strong) or trochaic (strong-weak). Regardless of this ambiguity, or perhaps because of it, the collection itself (not any central pitch) emerges as the definition of the key.

The counterpoint is strange, as the bass line in constant parallel organum at the fifth (further promoting the sense of pitch space as more important than pitch), and at times simply not agreeing (as at the end of the chorus, where F-sharp in the melody is supported by E in the bass (and *not* E minor with an added ninth).

For all the ascending motion that might be implied by the title of “Climbing Up The Walls,” the harmony is remarkably static and nonfunctional. Like “Subterranean Homesick Alien” and “Let Down,” there are two short, repetitive chord progressions used exclusively throughout the song (the two cyclic progressions mentioned earlier): Figure 2.xxxiii shows the verse progression, which would seem to be a tonic or modal expansion, and the chorus progression.

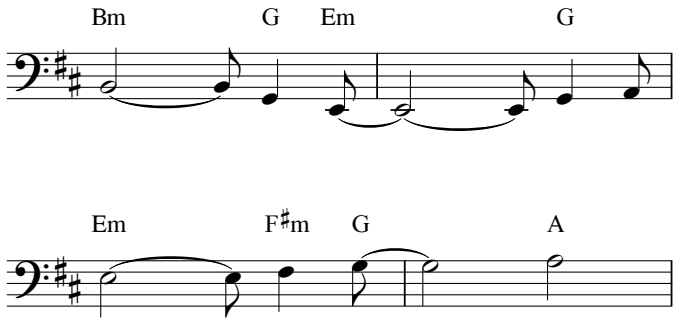


Figure 2.xxxiii. “Climbing Up The Walls” progressions.

As opposed to what we encountered in the two other songs (“Subterranean Homesick Alien” and “Let Down”) that relied on two basic cellular chord progressions, the first of which for each was simple tonic expansion and the second of which for each was plagally cadential, neither of the two progressions in “Climbing Up the Walls” suggests any kind of tonal cadence—rather, they both simply expand the diatonic modality with a remarkable lack of tonal harmonic function. If anything, the first progression *looks* like it modally expands E minor (or E dorian, if the later-sounded C-sharp is considered), although the melody’s expansion of B minor complicates that reading, as previously discussed.

Radiohead uses the homogenous pandiatonic atmosphere as an opportunity to experiment with timbre: lots of reverb, vocal filters (on top of particularly sloppy singing on Yorke’s part), and pointillistic guitar interjections giving way to a loud electric solo accompanied by swelling strings. At the end,

ambient sounds grow and then fade, leading into the angelic simplicity of the following track, “No Surprises.”

2.10 “No Surprises”

Simple verse
(instrumental bridge)

Time stamp	*Section*	*Metric length*	*Key*
0:00	intro	8mm	FM
0:25	verse 1	8mm	“
0:51	verse 2	8mm	“
1:16	verse 3	14mm (10+4)	“
2:00	verse 4	12mm	“
2:37	bridge	6mm	“
2:56	verse 5	12mm	“

Table 2.ix. “No Surprises” form.

“No Surprises” lives up to its titular suggestion of mundaneness, joining “Let Down” as a major-mode song that contains hardly any chromaticism, and certainly no threat of tonicization or departure from the home key (in this case, F major). The one chromatic tone of which the song makes use is the lowered sixth scale degree, first appearing in the introductory riff that exhibits the primary accompaniment figure of the song (see Figure 2.xxxiv)

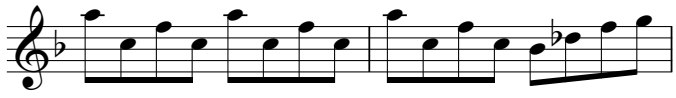


Figure 2.xxxiv. “No Surprises” riff.

The submediant functions as the third of the modally mixed minor subdominant triad—or, perhaps, the fifth of the half-diminished supertonic seventh, depending on whether the G at the end of the second measure is interpreted as a passing tone or a member of the harmony (although the metrically weak placement of the G makes it seem more like a passing tone). The submediant was, of course, presented as a marked term as early as the second note on the album, and, in fact, the motto-like chord progression that forms the introduction is an alternation between tonic and minor subdominant (or half-diminished supertonic) quite similar to the comparable progression in “Airbag,” an alternation between tonic and flat submediant (shown in Figure 2.xxxv). The metric placement is slightly different (depending on how one hears the hypermeter of “Airbag”), but the voice leading from upper-neighbor minor $\hat{6}$ to $\hat{5}$ and passing-tone (neighbor-tone in “Airbag”) activity from $\hat{2}$ to $\hat{3}$ is equally salient in the two examples (the “No Surprises” progression is shown in Figure 2.xxxvi). The timbre, key, and affect are different, but it is not a stretch to associate the two progressions based on their formal placement and the content of harmonic function.

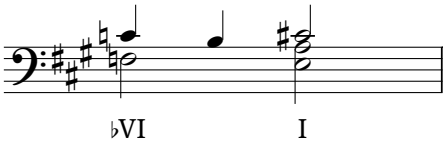


Figure 2.xxxv. “Airbag” riff (reduction).

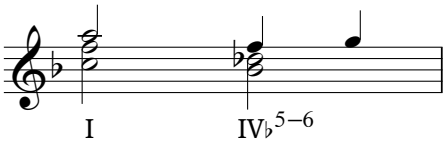


Figure 2.xxxvi “No Surprises” riff (reduction).

Overall, the simplicity of the harmony and the plaintive melody, both accompanied by a noticeable lack of harmonic or rhythmic disruption (compared to the other songs on the album), liken “No Surprises” more to the broader accessibility of Radiohead’s earlier albums than the burgeoning experimentalism that characterizes songs like “Paranoid Android” on *OK Computer.* Still, it is not anomalous enough to seem too out of place, and the use of chromatic submediant options ties it to the album’s similarly chromatic songs in spite of its lacking any other significant disruption or challenging event.

2.11 “Lucky”

Verse-chorus

Time stamp	*Section*	*Metric length*	*Key*
0:00	noise		
0:21	verse 1	16mm (8+8)*	Eae
1:11	chorus	8mm*	Em/do
1:39	interlude	4mm	Em
1:54	verse 2	16mm (8+8)*	Eae
2:44	chorus	8mm*	Em/do
3:11	coda	18mm (10+8)*	“

*unequal bars

Table 2.x. “Lucky” form.

“Lucky” is a song unambiguously based in E minor tonality, with a marked dorian-mode option in the chorus, shown in Figure 2.xxxvii (the submediant option continues to appear in the album’s major-mode and minor-mode songs). It offers two kinds of disruptive musical events: chromaticism in the chorus, and fragmentation of hypermeter in both the verse and the chorus. The verse is actually entirely diatonic, implying more E aeolian than E minor (because of the lack of leading tone). The chorus provides mode/collection-contrast through its principal motive, the aforementioned dorian gesture, and its final cadence (a half cadence, which is not necessarily as disruptive or surprising an event in rock as it

is in classical music): a German augmented-sixth chord that resolves, conventionally, to the dominant, B^7 (shown in Figure 2.xxxviii).

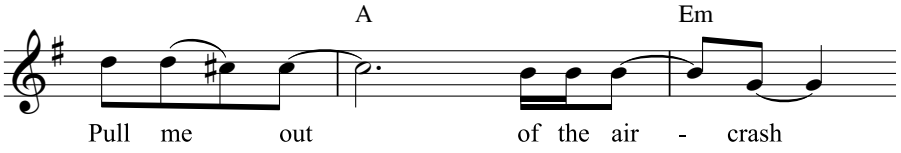


Figure 2.xxxvii. "Lucky" chorus.

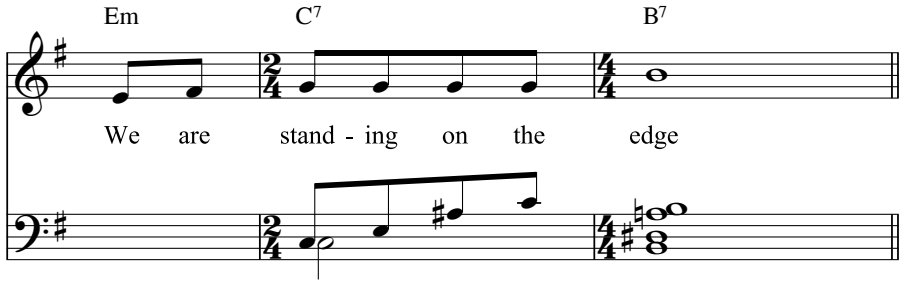


Figure 2.xxxviii "Lucky" half cadence.

The dorian chromaticism in the chorus (i.e. the raised chromatic option for the submediant) attracts the listener's attention by its transformation of the diatonic landscape—E dorian is diatonic itself, but the precedence of the aeolian verse section prevents dorian as being heard as the original default collection. The C-sharps, then, both embellish the chorus through their novelty, and help delineate the chorus as a separate formal section from the verse with its own

modal profile. The inferred tonic role of E is maintained from beginning to end, without any threatening modulation or recentering.

When the German-sixth half cadence closes the chorus for the first time, it is followed immediately by the second verse, which repeats the music up until that point with new lyrics. The B^7 is then followed by tonic E minor, but does not complete an authentic cadence. After the second chorus, an extended coda begins, which first simply expands static tonic harmony, so again the B^7 is not left completely hanging, but its syntactical effect as an open half cadence remains. After gradually building intensity through reiteration and expansion of E minor, the coda then recapitulates the plagal dorian harmonic motive from the chorus (IV–I, or A–Em), as an instrumental version of the chorus, before the final cadential tag is sung once more. There is no resolution, and the song closes with the half cadence, an effect that is rendered even more conventionally unstable by its dissonant seventh-chord quality.

This would be more significant a problematic event in common practice music—however, I have already determined that my imaginary "street-wise" Radiohead listener is primarily concerned with events that disrupt or call into question the status of the tonality or meter, and while the final chord here is not the tonic, it is also not a chord that necessarily challenges the tonic. Still, the dissonance of the seventh, and the strong *external* or *conventional* implication that a dominant seventh should resolve to a tonic, might be enough for us to mark the cadence as being unusually open-ended, even in a context of music

that tends not to rely on the supremacy of the authentic cadence, as much tonal music does.

The hypermetric syncopation of both the verse and chorus sections contributes even more to the song's quirkiness, although it is far subtler (or at least more passive) an effect than the song's blatant modal chromaticism. The verse consists of two 8-measure phrases. Each of these 8-measure phrases is in the overall meter of 4/4, except the second and sixth measure of each, which are each abbreviated to 2/4.[21] This unevenness, and the slow tempo that is realized with only sparse drums, obscures the sense of hypermeter, and forces the listener to constantly retroactively correct their impression of the too-short measures.

In the chorus, it is at the German-sixth half cadence where the metric adjustment occurs, and, as before, the adjustment is, in effect, an acceleration to the final chord by the diminution of the penultimate measure. This case is potentially more confusing to the listener, as the action seems to stop at the arrival of the B dominant seventh; musical acceleration leads to not just stasis but relatively unstable stasis, the resolution of which (when present) is more of a

[21] It is possible to interpret the 4/4+2/4 measure-pairings as being a single 3/2 measure; however, unlike the similar situation in the bridge of "Exit Music," in which the accompanying pattern was the same for each two-beat group (and therefore easier to hear as three larger groups of two), the guitar in "Lucky" seems to consistently play a quarter note on the downbeat of every measure, with decorative faster-note arpeggios and chord reiterations during the rest of each measure. The 2/4 measures in the verse of "Lucky" each contain a quarter note followed by an eighth and two sixteenths as the guitar's rhythm, strengthening the impression that the 2/4 measures are indeed their own measures, just cut short.

reset or a backtracking than an actually conjunct reaction to the dominant seventh harmony.

2.12 "The Tourist"

Verse-chorus

Time stamp	*Section*	*Metric length*	*Key*
0:00	intro	13mm (6+7)*	Bmix
0:32	verse 1	26mm (13+13)*	"
0:35	chorus	12mm (6+6)	"
2:03	break	6mm	"
2:17	verse 2	26mm (13+13)*	"
3:21	chorus	12mm (6+6)	"
4:04	break	18mm	"
4:32	chorus	12mm (6+6)	"
5:01	coda	6mm	"

*unequal bars

Table 2.xi "The Tourist" form.

The final track on *OK Computer,* "The Tourist," is a dreamy, slow rock-waltz colored by the typical characteristic surface-level chromaticism with which the listener is now familiar. Though the chromaticism is syntactically alarming by disrupting the established sense of modal diatonicism, it does not threaten the

overall sense of B modality (as most obviously evidenced by the lack of an authentic leading-tone) centricity: in this case, B mixolydian. Figure 2.xxxix contains voice-leading reductions of the two progressions that make up the verse and chorus, respectively, illustrating that the harmonic motion is minimal and not the most tonally functional.

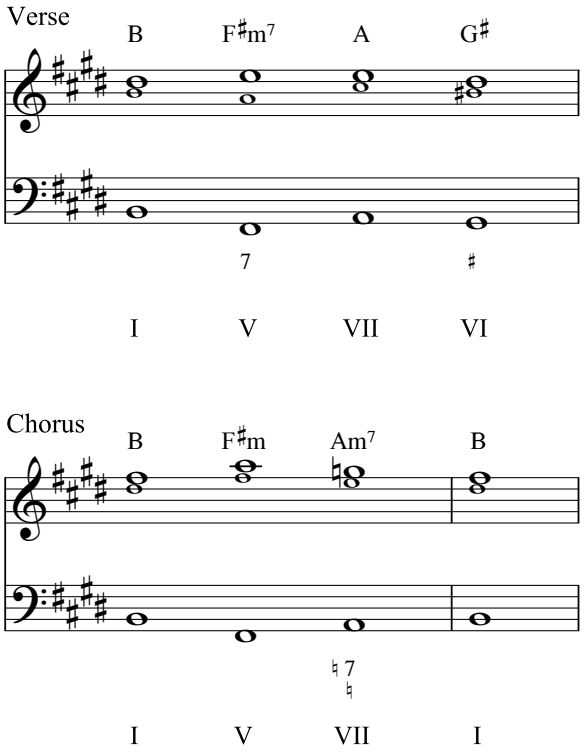


Figure 2.xxxix. “The Tourist” progressions.

The major submediant in the verse and the minor subtonic in the chorus are chords foreign to the mode, and indeed have a jarringly disorienting effect when heard in the otherwise static modal context, but both are merely parallel

transformations of triads built on diatonic roots, so even if, at worst, one's sense of center is frustrated in the moment by the intrusion of one of the two chromatic chords, the root motion still draws exclusively on the B mixolydian collection. The non-functional bass-line motion, which rests on the submediant at the end of the open-ended verse's progression, approaches the final tonic by ascending whole-step, and involves no descending fifths at all, only helps the establishment of a *modal* harmonic environment.

For this reason, in spite of its anti-tonicizing surface-level chromaticism, "The Tourist" is closer to the album's tonally closed songs like "Airbag" and "No Surprises," in which the large-scale harmonic motion functionally supports the song's sense of tonality, than to "Paranoid Android," in which there is no functional relationship between the multiple key areas and any sense of an overall tonal center. "The Tourist is also similar to "Electioneering" and "Climbing Up The Walls" because of its distinct modality, but while those two songs both convey unambiguous modal collections, the outer parts are pandiatonic stratifications rather than harmonic contrapuntal parts.

Each of the two sections contains one chromatic chord amidst the modal expansion of B. The verse ends with another "quasi-half cadence": a chromatic chord punctuating the phrase while conveying a non-tonic function (i.e., *not* tonicizing any harmony by assertion) in a non-tonic key. Here, the half-step slide that precedes the G-sharp chord in the outer voices more readily conveys a sense of dominant function than tonic, by its resemblance to the idiomatic (in classical music) phrygian half-cadence (here descending only to the submediant

instead of all the way down to the dominant). Inasmuch as this progression acts like a half-cadence, though, G-sharp would be the dominant of a different key, so this cadence resembles that of the middle of the first bridge in “Exit Music,” where A minor to E was treated as a brief half-cadence (ending on V of VII, one might say) before immediately abandoning A minor as a center and returning to the tonic of B.

The G-sharp chord recalls “Exit Music” for another reason, and “Paranoid Android” as well: both of those two songs contained unusual phrase turnarounds, where the tonic of a new phrase was asserted directly after an unrelated chromatic chord. In both cases, an arguably dominant-functioning chromatic chord (major quality) resolved up by minor third to a minor chord (PRP) to start the new phrase. In the verse of “The Tourist,” all those conditions are met except the resolution to a minor chord; instead, G-sharp major resolves less strangely to B major (a simple PR). The ability to differentiate between the two third-progressions is not necessary, however, to associate them in one’s mind, based on their non-functional third-based chromatic motion (which creates a distinctive sound, identifiable or not).[22]

The chorus begins with the same two chords as the verse, B and F-sharp minor, but instead of continuing with an A-major chord the following harmony is altered from the previous progression to A minor (with a minor seventh). The A

[22] In other words, I am positing that it is reasonable to expect the difference between ordinary tonal harmonic motion, even with some chromaticism present, and chromatic hexatonic progressions to be audible even to listeners unfamiliar with music theory, when the progression is presented in a familiar idiom.

minor has a subtly different effect than the chromatic G# chord of the verse, just by nature of its flatward rotation around the circle of fifths to accommodate the G-naturals and C-naturals, as opposed to the sharpward rotation that allowed for the earlier B-sharp. The presence of the minor seventh in the minor subtonic chord is relevant to this analysis because of its role as the optional submediant scale degree, like several of the examples of chromaticism earlier in the album (including the second note heard!).

In terms of option-chromaticism, the verse section has a harmonic option for scale degree $\hat{1}$ (the B-sharp in the G-sharp major chord). It is strictly a harmonic tone, however; that is, the B-sharp is not treated so much as an inflected melodic tonic, but rather as simply the third of the inflected submediant harmony. One of the two chromatic tones in the chorus is the flat submediant option, as previously mentioned; intriguingly, the other chromatic tone is technically the same pitch as that in the verse (C-natural/B-sharp), although parsed not as a sharp tonic but as the flat supertonic, or merely as the minor-quality third of the subtonic harmony.

Divorced as it is from conventional conceptions of tonal function and modal mixture, the option-chromaticism system allows the analyst or listener to consolidate the two distinct chromatic events as drawing on the same optional tone: if the tone between tonic and subtonic is available in an otherwise mixolydian scale, then so too are the formations of major submediants (as in the verse) and minor subtonics (as in the chorus). I do not, from a listening standpoint, imagine it to be at all feasible to actually recognize the C of the A-

minor chord in the chorus as being equated with or even specifically foreshadowed by the B-sharp of the G-sharp-major chord in the verse, but I do think it notable that Radiohead is able to efficiently utilize two very different chromatic chords with the addition of only one chromatic option to the “tonic” collection.

The chromaticism in the chorus is also significant for the parallelism it creates between the cadences of the two sections. I already remarked that the slide from A major to G-sharp major was unusual enough to the point of weakening even the potential of G-sharp being heard as a tonic (besides music in the phrygian mode, root motion down by semitone is much more commonly associated with approaching the dominant than the tonic, thanks to the strength of the “upper leading tone” (the flat submediant) that is idiomatic in so much tonal music).

The final approach of the tonic is surprisingly similar, however, as the three hypothetical upper voices C, E, and G naturally resolve down by semitone to B, D-sharp, and F-sharp, just like A, C-sharp, and E resolved down by semitone to G-sharp, B-sharp, and D-sharp in the verse. The crucial difference is the presence of subtonic A beneath those upper voices; while they resolve down, the A resolves up by step to tonic B, creating an authentic modal cadence (albeit with chromatic inflection and extension). The authentic modal cadence in the bass, combined with the fact that B is so centric and assertive throughout the song, make the chorus and final tonic arrival sound adequately definitive, while at

the same time subtly referencing the quasi-half cadence of the antecedent (relative to the chorus) verse section.

The preceding points have only concerned harmony and pitches, without regard for their rhythmic or metric position, but “The Tourist” is just as characteristically disruptive for its treatment of hypermeter as its chromaticism. To start with, the song is in triple meter. Triplet subdivisions are heard in the guitar and rhythm section, so a compound meter 9/8 might be more accurate, but I have simplified the meter here as 3/4 with triplet eighth-note subdivisions. This quality is not necessarily disruptive, but it is still unusual for a rock song (it is possible that there is something relatively “weaker” or more vulnerable about waltz-like triple meter to rock musicians, who tend to prefer duple or even irregular meter to 3/4). “The Tourist” is the only song on the record in triple meter, but it is linked with several of the other songs through its employment of “wrong-beat meter,” which appears first in the introduction and then the verse (the same progression is used for both). In the second half of this progression, one of the measures contains four beats instead of three, as shown in Figure 2.xl.

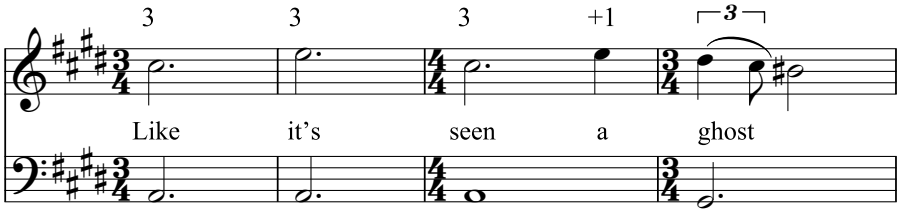


Figure 2.xl. “The Tourist” verse.

In terms of beats-per-measure, the two phrases of the verse in “The Tourist” together are: (3+3+3+3+3+3) | (3+3+4(!)+3+3+3+3). There is no obvious metric normalization of the second half of each phrase; if the 4/4 measure is heard as a regular measure with an extra beat, that would result in seven measures in the phrase, and if the 4/4 measure is heard as an abbreviation of two 3/4 measures (with two beats missing), the result would be eight measures in the phrase, neither of which lines up with the six-measure first half. Regardless, the effect is a definite sense of disorientation and lopsidedness; between this wrong-beat meter and the chromatic chord in the quasi-half-cadence at the end of the phrase, the entire verse is almost an uncanny parody of a conventional song’s phrase structure.

The first half of the verse is metrically consistent (all measures are the same length), although the hypermeter is somewhat unusual: the first phrase is six measures long (four measures of B major followed by two of F-sharp minor). On one hand, the implicit grouping of 2+2+2 in this six-measure phrase matches the 1+1+1 of the surface meter on a hypermetric level. Even in triple meter, however, measure-groupings of three or six can defy the expectations of a listener conditioned to hearing symmetrical and evenly balanced groups of predominantly four or eight measures. Groups of three and six measures are rare enough (especially in rock music) that they can create as provocatively idiosyncratic a metric effect as surface-level mixed meter (as found, for example, in the second and fourth sections of “Paranoid Android”).

The music of the chorus and coda, which lacks metric disruption and remains consistently in 3/4 (9/8), is also grouped into phrases of 6 measures. In the chorus, the 6-measure phrases are divided into three two-measure units: B major for two measures, F sharp minor for two measures, and A minor for two measures (resolving cyclically back to B) (see Figure 2.xli).

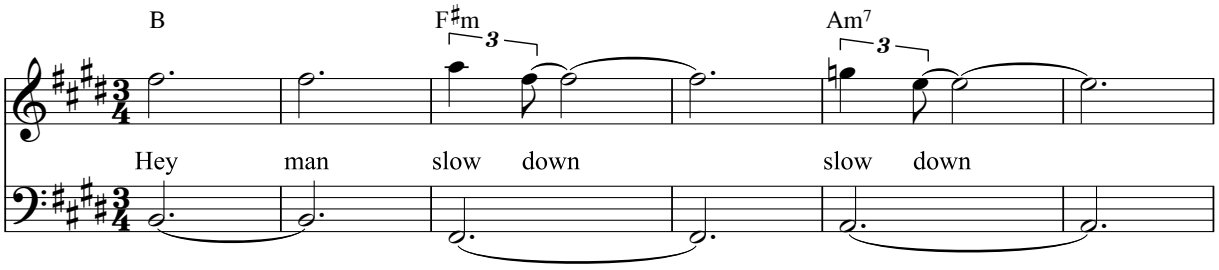


Figure 2.xli. "The Tourist" chorus.

The very close of the song is notable for a couple of reasons. For one, the final chord is a tonic with an added ninth, just like the final chord of the first track, "Airbag" (of course, "Airbag" is in A major, a step lower); and the two songs are the only ones on the album to end in this particular clustery fashion. Figure 2.xliii demonstrates that as the guitar chord fades out, the bass part becomes more prominent (its volume does not decrease with the harmony's decay), showcasing its syncopated tonic-pedal rhythm (characterized by accented anticipations of beats one and three, further ironicizing the potentially inferred reference to a waltz or some other classical dance in triple meter) (see Figure 2.xlii).

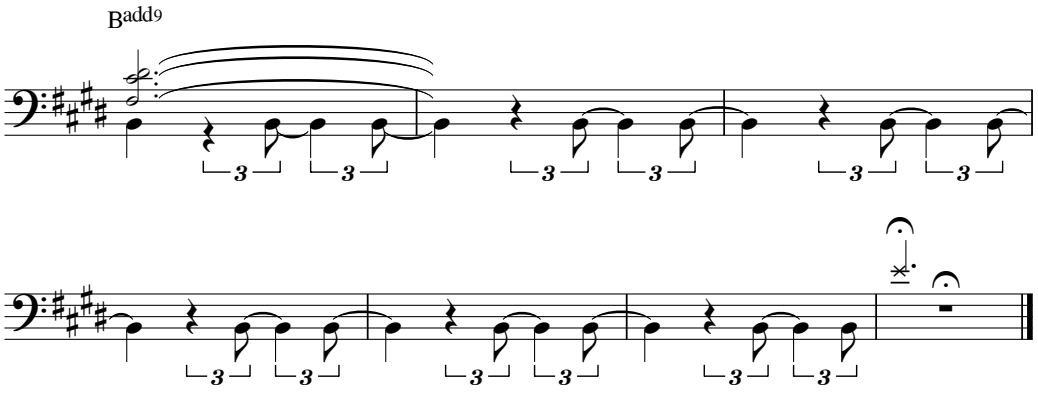


Figure 2.xlii. “The Tourist” coda.

The other notable effect in these last few measures is the final resolution; as shown in Figure 2.xliii, the bass (the only remaining sound besides the drum set) cuts out abruptly, clearing the way for a single chime-like sound. The pitch of this chime is an E, although it is high enough in register that its exact pitch is not particularly salient, so it is difficult to hear any authentic cadential motion between the bass B and the chime. Just the fact that it is a different tone than the previously static B creates a sense of disjointedness, contributed to by the sudden absence of the bass and drums. The chime itself resembles a typewriter’s carriage-return bell, which brings its own connotations of both finishing and starting over. In any case, as soft as the bell is, its effect is like being startled awake from a daydream (a daydream lulled into by the hypnotic cyclicity of the chorus).

"Paranoid Android" might be thought of as the best candidate for the album's "poster-child," because of its harmonic, melodic, metric, formal, and timbral idiosyncrasies, but "The Tourist," though not particularly adventurous in terms of its form or timbre, is nonetheless a stereotypical Radiohead song, characterized by small disruptive events that challenge the sense of pseudo-conventional conformity, providing both interest or aural stimulation through the mere presence of the disruptive events and the opportunity for much deeper interpretation of the *relationship* between supposed norms and the actual music. Chapter 3 will comment further on some of these relationships, in the context of the themes and topics introduced by the lyrics, and discuss how the two kinds of topics (musical and lyrical) inform each other and reinforce the impressions of irony and distance hinted at by the disruptive music.

2.13 Summary of disruptive effects on *OK Computer*

The categories of prominently disruptive musical events and techniques that emerged from my analysis of *OK Computer* include the following:

- Option-scale chromaticism. This is the use of multiple inflections of a given scale degree in a song, i.e. the major and minor mediant, or the natural and raised subdominant (almost every song on *OK Computer* utilizes chromatic options of some kind or other).

- Cross relations and other surface-level dissonances as a result of heterophonic strata. Dissonances can occur between notes in discrete musical strata that are relatively consonant with each other (e.g. the two guitar lines in the introduction of “Airbag,” one of which contains C-sharp and the other of which contains both C-sharp and C-natural).
- Disorienting harmonic progressions as a result of chromatic chord substitutions. Chromatic chord substitutions create disruption not only through their appearance in place of the expected chord for which they substitute but through the potentially unusual voice leading or harmonic progressions they create with the following chords. These disruptions occur in the middle of phrases and at the turnarounds between phrases.
- Quasi-half cadences. “Quasi-half cadence” is my term for cadential gestures that either resolve to a dominant-functioning chord in the “wrong key” (i.e., not the overall key of the phrase) or to a non-dominant-functioning chord that still exhibits the rhetorical effect of a half cadence (e.g. the G-sharp chord at the end of the verse in “The Tourist,” which is VI of tonic B but appears as part of a gesture that functions like a half cadence.
- Imperfect (or ironic) realizations of classical idioms. Radiohead frequently uses chord progressions or voice-leading strands that resemble musical paradigms found in classical music, but do not completely realize them (e.g. the passacaglia in Part III of “Paranoid Android” or the chromatic bass descent in the verse of “Exit Music”).

- Unequal bar lengths. Radiohead rarely uses unusual or mixed meters for the entirety of a song, but many phrases of songs include bars of either shortened or lengthened duration that interrupt the metric flow. On *OK Computer* these idiosyncratic measures tend to occur at regular points within a phrase (as in the verse of “Paranoid Android”’s Part I, or the bridge of “Exit Music”).
- Inconsistent hypermeter. Whether the bars in a given phrase are of equal length or not, Radiohead frequently arranges measures into odd-numbered groups, frustrating the listener’s sense of consistent hypermeter (e.g. the five-measure interlude in “Airbag,” or the verse in “Climbing Up The Walls.”
- Multiple autonomous sections. “Paranoid Android” is the only song that contains contrasting sections with different tempos, but “Karma Police” is an example of a song that includes sections that are independent enough of the surrounding musical context that they can be considered autonomous parts, unrelated by strongly unifying thematic material.

In Chapter 4 I will trace the development of these trends in selected songs from Radiohead’s following three albums: *Kid A* (2000), *Amnesiac* (2001), and *Hail To The Thief* (2003). First, in Chapter 3, I will address the issues that emerge from study of the track I skipped in this chapter, “Fitter Happier.”

Chapter 3

"Fitter Happier More Productive," or Fred the Sphinx

> The character in "Karma Police" is troubled, and here comes the reason.[1]
>
> - Dai Griffiths

This chapter will examine the left-over track from *OK Computer,* "Fitter Happier," excluded from the previous analysis because of its limited musical content, its unusual form, and simply its presentation. Even the track list on the back of the CD (presented in the previous chapter as Figure 2.i) seems to dismiss the song, setting the title in small type, away from the other songs. "Fitter Happier" should not be ignored, however; it has the potential not only to open doors to broader realms of song analysis (precisely *because* of sort of the analysis its musical limitations forces), but to provide insight into lyrical themes and semiotic topics that pervade the song, and, for that matter, the entire album, adding a new dimension to the paradigm-building listening experience. The themes and topics in question happen to complement the characteristics of musical expectation and disruption discussed in Chapter 2, and contribute to the sense of artistic unity in the band's output and their collective persona.

[1] Griffiths, 64.

Christopher Lewis, in writing about romantic-era song-cycles, makes the following comment about the relationship between text and music, and how they can complement each other's efforts of conveying meaning:

> The poetry of a song has an independent meaning before being set, and the music of a song may exhibit certain coherencies independently of its text. So too for the cycle, the structure of which may be supported by a tonal design created by the key succession of the individual *Lieder,* by melodic or motivic recurrences from song to song, or by patterning of texture, register, and so on. Especially interesting, however are those works whose artistry turns upon a symbiotic reflection of text and music and *vice versa*. Some such procedures are familiar, perhaps even to the point of being taken for granted: simple tone-painting and poetic/musical cross-references…, literal or ironic reflections of the mood of the text in the mode of the music…, the realization of poetic voices through textural, tonal or registral contrast…, and so on.[2]

The procedures to which Lewis refers are not necessarily that different in rock music than in the context of common-practice art songs, in which Lewis does his analysis, as much as the music itself might be quite different in those two genres. In any case, his point is well taken, and in this chapter I mean to augment the analysis suggested in the previous chapter with focus on lyrics, affect, persona, and other non-musical factors that coexist with the harmonic and rhythmic factors already discussed; "Fitter Happier" is an appropriate gateway and crux of this discussion.

[2] Christopher Lewis, "Text, Time and Tonic: Aspects of Patterning in the Romantic Cycle," *Intégral,* Vol. 2 (1988): 39–40.

3.1 Problems analyzing “Fitter Happier”

“Fitter Happier” is a brief track (under two minutes) featuring a computerized voice mechanically realizing a hypnotically intoned list of increasingly ironic self-improvement clichés and slogans, accompanied by minimalist musical fragments, incoherent speech obscured by static, and ambient sound effects, mostly electronically synethesized. The text, as stylized in the liner notes, reads:

> fitter happier more productive
> comfortable
> not drinking too much
> regular exercise at the gym (3 days a week)
> getting on better with your associate employee contemporaries
> at ease
> eating well (no more microwave dinners and saturated fats)
> a patient better driver
> a safer car (baby smiling in back seat)
> sleeping well (no bad dreams)
> no paranoia
> careful to all animals (never washing spiders down the plughole)
> keep in contact with old friends (enjoy a drink now and then)
> will frequently check credit at (moral) bank (hole in the wall)
> favours for favours
> fond but not in love
> charity standing orders
> on sundays ring road supermarket

(no killing moths or putting boiling water on the ants)
car wash (also on sundays)
no longer afraid of the dark
or midday shadows
nothing so ridiculously teenage and desperate
nothing so childish
at a better pace
slower and more calculated
no chance of escape
now self-employed
concerned (but powerless)
an empowered & informed member of society (pragmatism not idealism)
will not cry in public
less chance of illness
tyres that grip in the wet (shot of baby strapped in back seat)
a good memory
still cries at a good film
still kisses with saliva
no longer empty and frantic
like a cat
tied to a stick
that's driven into
frozen winter shit (the ability to laugh at weakness)
calm
fitter, healthier and more productive
a pig
in a cage
on antibiotics

In his analysis of *OK Computer,* Dai Griffiths takes a close look at the string of slogans:

> The words of "Fitter Happier" are terrific, showing at its best Thom Yorke's knack of picking up phrases from real life and simply placing them in this arty context. Since the track is so very wordy, it plays a big part in the overall "image trail" of the album. One interesting feature of the words as laid out, like a poem, in the sleeve note, and kept in the sheet music, is the frequent presence of parentheses, making this a consistently two-voiced presentation, as well as making listening and reading slightly different things. Any possibility of actor-like "asides," to correspond to the brackets in performance, is cancelled by the electronic effect making the speech sound mechanical.[3]

Obviously, the speech does not just *sound* mechanical; it is quite literally a mechanical realization by a rudimentary text-to-speech computer program, some incarnation of Apple's MacInTalk program, which dates back to the original Macintosh computer of 1984 (the voice in "Fitter Happier" seems to be that of Apple's "Fred," one of the original voice settings provided for the speech synthesis program).[4]

The lyrics are unusual not only for being "spoken," as opposed to sung, but also for the disjointedness of their syntax. Griffiths categorizes the lines of the song's text into two groups: lines that consist mostly of nouns and adjectives (without active verbs, and not forming complete sentences), such as the first line, "fitter happier more productive;" and lines that do utilize verbs, in the present

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[3] Griffiths, 64–65.

[4] As an April Fools' Day joke in 2003, Apple news website tidbits.com published a satirical "interview" with the fictional "Fred Cooper" (http://www.tidbits.com/article/7140, (accessed March 31, 2011), as if such a man had actually provided voice work not only for MacInTalk, but personally for physicist Stephen Hawking who suffers from amyotrophic lateral sclerosis and requires a synthetic speech program for vocal communication. In any case, it is likely not a coincidence that a sound recognized both as mechanically generated and the "voice" of universally renowned physicist Hawking would be featured on an album titled *OK Computer*, especially on such a bizarre song-experiment as "Fitter Happier."

tense (though not necessarily forming complete sentences), "…which," Griffiths goes on, "are in turn largely concerned with domestic detail," such as "not drinking too much" or "getting on better with your associate employee contemporaries."[5] He does not come up with a resulting pattern to these types hidden in the lyrics, but observes that the alternation and balance of these two types provides a kind of traceable narrative in the absence of organizational euphony. It is a strange kind of poetry, but one oddly well-suited to a non-human performer.

The halting, cell-like, and static nature of the lyrics is complemented by the musical accompaniment, which consists of a single piano theme (really just a gesture), repeated with slight variation in two incarnations: first in B minor, then adjusted to G-sharp minor, then in B minor once more. Musically speaking, this accompaniment resists conventional analysis. For one reason, during the first several seconds of the track (which consist only of the first lines of computerized speech and some staticky, feedback-like noise) it does not seem like pitch or rhythm will even be a factor in the song. When the piano does enter, modestly, its late arrival (relative to the foreground character of Fred the computerized voice), combined with its minimal pitch-content and halting performance, relegates its role to that of subsidiary background accompaniment. Griffiths describes the accompaniment of the song as being "fairly straightforward… …like music to a French film, an effect added to by the technological effect on the piano

[5] Griffiths, 65–66.

part."[6] There is a similar effect in the Beatles' "Revolution 9," an experimental track (not unlike "Fitter Happier") from their eponymous 1968 release, familiarly known as "The White Album": the sound of piano music that opens the song is far removed from the rock music of the album, and seems to belong to some different context, unaware of its intrusion into the context of the track on which it appears.

In addition to uncannily inflected (or inflectionless) speech and soft piano playing, the track is filled with noisy sound effects as well a muffled recorded human voice, whose words are incoherent in the mix of other sounds (so there are really two speakers in the song: a clear but unnatural computerized voice, and a critically damaged recording of a natural voice, whose incomprehensible speech would probably be more human-sounding than Fred's if it were audible).

The meter of the piano part seems to be a slow 6/4, but the rubato or deliberately conveyed hesitancy conflicts with any assertion of steady tactus or groove. The mechanically obstinate persistence of the computerized voice at the foreground overrides any metric organization by the piano part, although after several measures it is easy to tune into the minimalist motive. The piano starts in B minor, repeating the same introspective gesture over tonic and dominant harmonies (gradually accompanied by string-like drones), as shown in Figure 3.i:

[6] Griffiths, 69.

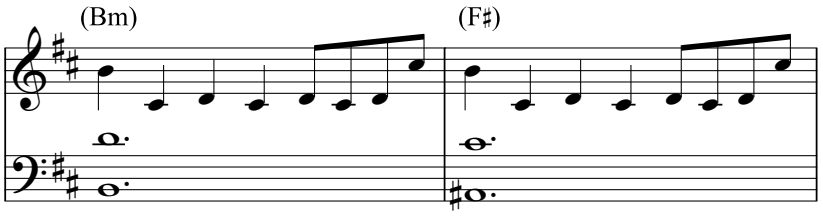

Figure 3.i. “Fitter Happier” piano A.

Midway through the song, a small sonic explosion-effect highlights a modulation to G-sharp minor (which creates, yet again, a chromatic third relationship: PR). The theme changes only minimally; the gesture is not transposed down a minor third, but rather the B is maintained as a head tone and the semitone oscillation is changed from the pair C-sharp and D (scale degrees $\hat{2}$ and $\hat{3}$ in B minor) to D-sharp and E (scale degrees $\hat{5}$ and $\hat{6}$ in the third-related G-sharp minor)(see Figure 3.ii).

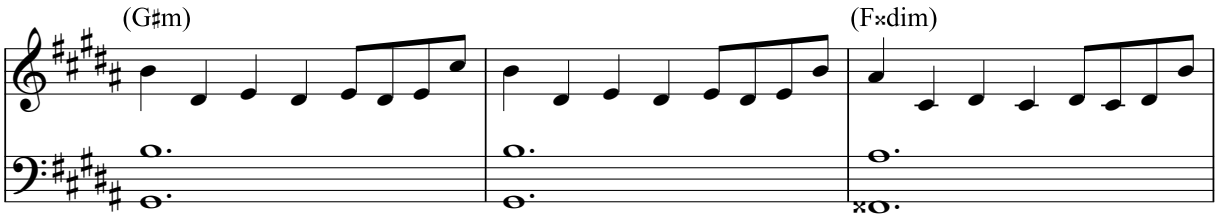

Figure 3.ii. “Fitter Happier” piano B.

The affect of the minor mode remains, but with a subtly different articulation, featuring the submediant scale degree as upper leading tone to the

dominant, hinting at a plagal reference, rather than the mediant with a lower neighbor, which suggests more of an authentic, dominant-tonic context. For the very last lines of text, the harmony of the music reverts to B minor (through RP transformation) and the original gesture, resolving decisively on a B minor sonority before clearing out of the way of the last words (which, like the first few words, are unaccompanied by any sound).

The combination of authentic harmonic function and direct modulation by chromatic third is certainly of note, considering what a common characteristic that technique is in many of the surrounding songs on *OK Computer,* but there is so little musical material that there is not much more to say about it alone; once isolated, the piano part (providing the only harmonic motion) is clearly just one part of the track which is unusual for not being organized primarily by harmony or rhythm.

As was shown in Figure 3.i, the B-minor gesture played by the right hand of the piano part does not properly change in the second measure, as one might assume it would, to account for the change of harmony from tonic B minor to dominant-functioning F-sharp major, creating a dissonance between the salient B in the right hand and A-sharp/C-sharp in the left hand. This obstinate heterophonic dissonance further undermines any sense of normalcy, and complements the effect of the speaking voice that does not seem to have adequately exegetical knowledge of the text it is reading, based on the awkward cadence and inflection of the reading.

When musical material is not the main organizational factor of a given song (like “Fitter Happer”), conventional theoretical analysis can be even more limiting. The way the music in “Fitter Happier” can essentially be reduced down to two repeating gestures is comparable to the sample-based music that, having arisen from hip-hop, R&B, and dance genres of popular music, currently predominate in Top 40 radio. Such minimalist, sample-based music discourages long-range voice-leading connections and draws focus to superficial foreground events and local characteristics, just as complex tracks like “Paranoid Android” do (the latter resists long voice-leading connections not through minimalism of material but through strange middleground key relationships and lack of tonal consistency on top of a strange form).

Another result of a song’s limited musical material is a heightening of focus on the timbre. As has been previously mentioned, *OK Computer* (though still primarily based in the guitar-rock idiom with which the band began their career) marks a decided change towards experimentalism with new timbres and sound effects. In “Fitter Happier,” timbre plays perhaps the largest role of any element: in terms of the song’s vocals, there is a constant contrast between the mechanical computerized voice and the muffled or distorted human voice; as for the accompaniment, the only discernible instruments are the aforementioned piano (muffled and slightly out-of-tune itself) and the single line of strings. The piano’s tuning, or lack of tuning (not universally below or above pitch, but rather exhibiting the unsettling and all-too-familiar-to-musicians sound of an instrument gradually falling into disrepair), adds another layer of frailty and instability on top

of the uncanny disquiet of artificial voices and the halo of ambient sound effects that surround them.

3.2 Themes, topics, and the role of "Fitter Happier"

As many of the quotations I have included thus far indicate, there is a common interpretation among most of the people who engage with Radiohead's music, be they scholar, critic, fan, or casual listener, that *OK Computer* is *about* certain things; it has topics and themes (not explicit musical themes, per se) that bind the songs together into a cohesive whole. The most prominent of these topics and themes is probably *technology*. The title of the album is the first signal of this theme, and while computers were hardly a new invention in the mid-90's, they were still in the early process of becoming the part of everyday life that they are now (along with their cousins and descendants: cell phones, digital cameras, mp3 players, video game systems, digital tablets, etc., as well as the ever-growing number of devices that perform the function of more than one of these listed). The relative novelty of the personal computer, along with the exponential growth of computer and internet technology in the 90's made a title like *OK Computer* a kind of synecdochical reference to *technology* at large, as well as to its, at times, threatening potential to infiltrate every part of our life, work, and culture.

Through *technology* and the Orwellian struggle of the integration of computers with our human society, along with the separate precedent of Radiohead's emotional, vulnerable, and sometimes quite dark songwriting, *alienation* emerges as another topic frequently associated with *OK Computer:* emotional alienation, and alienation caused or provoked by the ubiquity of technology alongside humanity in our culture. The inclusion of technological references, irony, and the lack of explicitly narrative or romantic lyrics in Radiohead's songs from *OK Computer* onward, however, prevent the alienation from becoming the cliché, "emo" self-pitying alienation that their early work threatened to resemble, and keep them in a metatheatrical place that encourages contemplative distance and intellectual thought when experiencing their songs (not just visceral, melodramatic affiliation).

Artificiality and *mechanicity* are themes closely related to technology that receive equal mention by most *OK Computer* interpreters. *OK Computer* was not as far a leap away from *The Bends* as *Kid A* would turn out to be, in terms of the production, performance, and technological factors in the songs' creation, but such elements as programmed drum loops, ambient noise, and other technology-aided sound effects make it difficult for the close listener to ignore the sometimes problematizing conflict between mechanicity and humanity in song. All of these themes, and others related, can be connected to "Fitter Happier," in a way that promotes the idea of the entire album being holistically related by them. In this section and the next I will explore in greater detail how "Fitter Happier" and other Radiohead songs exhibit references to these themes, and how, in doing so, they

help connect the albums on which they appear in ways besides (but parallel to) explicit and implicit musical devices.

Probably the most explicit manifestation of the theme of technology, mechanicity, and artificiality on the album *OK Computer* is simply the use of the robotic voice on "Fitter Happier." In his article "Radiohead, or the Philosophy of Pop," Mark Greif writes the following concerning "Fitter Happier" and its android protagonist:

> On the first mature album, *OK Computer*, a risk of cliché lingered in a song of a computer voice intoning: 'Fitter, happier, more productive'—as if the dream of conformist self-improvement would turn us artificial. But the automated voice's oddly human character saved the effect—it seemed automated things, too, could be seduced by a dream of perfection equally delusory for them; then the new commensurability of natural and artificial wasn't a simple loss, but produced a hybrid vulnerability when you had thought things were most stark and steely. The band was also, at that time, mastering a game of voices, the interfiling of inhuman speech and machine sounds with the keening, vulnerable human singing of Thom Yorke.[7]

Greif does not mention the earlier instance of humanoid computer character on the album: on "Paranoid Android," while Yorke wails the refrain of the first section's verse, the same computerized voice states "I may be paranoid, but I'm no android." For such a subtle moment, it can evoke some irony and even

[7] Mark Greif, "Radiohead, or the Philosophy of Pop." *n+1 magazine,* Issue 3 (2006): 29.

poignancy, as the speaker in question very clearly is not human, no matter how much it seems to want otherwise. As Greif describes the situation in “Fitter Happier,” even automatons can dream of an idealized human life. The appearance of the same android voice, our “Fred,” in two different songs on the album is perhaps more significant than the potential leitmotif-status of the recurring chromatic-third progressions and arguably similar guitar gestures. The categories of disruptive musical events characterize the musical language of Radiohead, but the computerized speech becomes a character in its own right, giving Yorke the opportunity to express ideas from a completely different persona, that of a computer or robot, after already beginning to experiment with the timbre and delivery of his own voice. Tim Footman extrapolates from the song thus, in a similarly philosophical and sociologically-minded essay:

> Delivered in an emotionless, computerized voice over a minimal backing track, [“Fitter Happier”] expresses the vacuity of contemporary consumer culture as a string of disjointed phrases. The emotional impact comes from hearing a non-human voice expressing sentiments of such all-too-human banality (“on Sundays ring road supermarket”) and poignancy (“like a cat tied to a stick”). It conjures up memories of the quietly deranged computer HAL, from *2001: A Space Odyssey* and the confusions between real and unreal, analogue and digital, raised by the virtual worlds that arose with globalized computer technology.[8]

[8] Tim Footman. “Hyperreally Saying Something,” in *Radiohead and Philosophy: Fitter Happier More Deductive*, edited by Brandon W. Forbes and George A. Reisch (Chicago and La Salle, IL: Open Court Publishing Company, 2009): 254–255.

The anomalous nature of this completely through-composed, amelodic track sets it far apart from the rest of the album, and yet its inclusion on the record helps found a sense of topical unity for the album through its lyrics (not to mention the *presentation* of its lyrics). Radiohead's lyrics are generally opaque, and while the lyrics of "Fitter Happier" are in no way narrative, they consist of relatively direct bite-sized taglines—and, without the presence of a foreground musical structure, the "spoken" words' prominence is only increased. The lyrics seem to comment on self-improvement, the contrivance of societal trends, and, towards the end, the paranoia of technology destroying or governing humanity.

While banal and humorous at the outset, and growing bizarre in the middle, the final three lines ("a pig in a cage on antibiotics," eerily anticipating the dystopian human-farms famously portrayed in the 1999 film *The Matrix*) betray the song's macabre cynicism; technology, and even harmless-seeming self-empowerment, is not necessarily to be trusted. The way that the text is produced mechanically, by a computerized method emblematic of the deceptively dehumanizing technology the song's lyrics ironically warn against, emphasizes the point through its reflexive reference, and tangibly provides a level of self-awareness that helps place Radiohead's voice or tone on the album on the scale of sincerity-to-irony.

"Fitter Happier" is the first of what can be viewed as a series of instrumental (or at least amelodic or unconventionally song-like) tracks that appear on *OK Computer, Kid A*, and *Amnesiac* (the others being "Kid A," "Treefingers," "Pulk/Pull Revolving Doors," "Hunting Bears"). All of these tracks

are not only so idiosyncratic in form and appearance that they resist standard song analysis (and sometimes even repel listeners impatient for more lively and accessible fare), but, by their inclusion on albums otherwise filled with songs that may contain disruptive musical events but are still more clearly recognizable as rock songs, change the form of the identity of the album itself (in other words, the album in question is not just a collection of rock songs, but an exhibition that includes both musically challenging songs and tracks that challenge our preconception of what a rock song sounds like at all, in turn challenging our preconception of what a rock *album* sounds like at all).

None of the songs resemble each other directly in many other ways, but, like “Fitter Happier,” “Kid A” and “Pulk/Pull Revolving Doors” both include unnaturally distorted speech. The voices in the later songs are not exactly the same as that of Fred, the android on *OK Computer,* but the effect is similar enough that one can think of the android (in general, as a character) as being a recurring guest vocalist in Radiohead’s discography.

In a special feature posted in November, 2003, the editors of Pitchfork Media (a notoriously narrow-minded and judgmental music criticism internet-publication primarily concerned with independent music and culture) presented their choices for the “Top 100 Albums of the 1990s.” Their choice for first place was *OK Computer.* Of the list’s champion, editor Brent DiCrescenzo wrote:

> The end of the 90s will be seen as the end of the album. The rise of MP3 technology and file downloading returned pop music consumption to a collective pre-Beatles mindset, where songs are judged as singles. Radiohead's *Kid A* and *Amnesiac* were shallowly criticized as B-side

> collections because they were downloaded and assembled as such on home computers. "Treefingers" and "Hunting Bears" were torn apart, not as pieces of a 60 minute or so record, but as worthwhile 34-minute download times (this, remember, was right before DSL/Cable). The resurgence, and arguable final entrenchment, of manufactured Pop Stars by their handlers over supposedly more artistic fare—and more importantly the acceptance of such common pleasures by critics-—razed the significance of the complete album. Which is why OK Computer, and... [My Bloody Valentine's 1991 album] *Loveless*, eternally top these polls: somehow we doubt we'll ever see their like again.[9]

A large part of the mystique and quintessence of *OK Computer* for rockers and music critics (particularly overly analytical and intellectual music critics) is its place in the evolution of the rock album. DiCrescenzo not only gives *OK Computer* the credit of historical significance in its archetypical album-ness, but cynically speculates that it might literally mark the end of the entire genre. This is not an unusual viewpoint; the general consensus, by fans and critics alike, seems to be that *OK Computer* is a *real album,* an essential part of the near-mythical legacy of *real rock albums,* and for that matter can perhaps even be considered a “concept-album(!),” despite the lack of any explicit narrative or cohesive theme that usually signals the identity of this subcategory of *real albums*.

DiCrescenzo’s argument, though, seems to be that the inclusion of these *other* tracks, and the ability of the consumer assert control by treating the

[9] DiCrescenzo, Brent, *Pitchfork's Top 100 Albums of the 1990s,* http://pitchfork.com/features/staff-lists/5923-top-100-albums-of-the-1990s/10/ (accessed March 31, 2011).

contents of digital albums precisely as a collection of singles rather than a unified whole, prevents the record from ever achieving the potential notional identity of *album* that records released only as hardware could. He also seems to imply there is no significant comparative relationship between “Fitter Happier” and the *other* tracks on *Kid A* and *Amnesiac* (perhaps, to go along with his socio-technological point, because purchasers of *OK Computer* in 1997 did not, for the most part, have any choice about the track’s inclusion, while 21st-century music pirates had the option to defer downloading the static “Treefingers”). I would argue, though, that “Fitter Happier” proves the unifying significance of these “*other”* tracks. Rather than possessing enough weight of distress to prevent the album from sounding cohesive, the disruption caused by the song on the album-level, as a perceived idiosyncrasy in the midst of more formally conventional songs, matches the musical disruptions that characterize the songs on the local level, so the other-ness of “Fitter Happier” could, like its lyrics, just as easily encourage the perception of the album as a cohesive whole.

3.3 Similar themes and topics in songs already discussed

The thematic significance of *technology* is reinforced by the lyrics in other songs on the album besides “Fitter Happier,” aspects of the actual music heard on the album (both inherent qualities of the music and aspects viewed in contrast to their earlier output and influences), and, of course, the title of the album itself,

which makes explicit reference to the singular icon of technology and advancement in the 1980's and 90's: the computer (wryly paired with an exclamation of ambivalent assent). The lyrical references to these themes are numerous, and range from unambiguous to peripheral, although the relevance of the hazier examples is bolstered by the appearance of examples as straightforward as in "Fitter Happier" among the constantly occurring fragments of text with potential associations. Tracking the use of these lyrical allusions reveals a kind of topical unity among the songs similar to the effect of the recurring use of musical themes, and the two kinds of associative events, lyrical and musical, complement each other on a background level in addition to occasional intersections on the surface.

In "Airbag," the singer is "amazed that [he] survived" from a car crash, being saved by the airbag. The tagline of the verses, "I am born again," along with the chorus, "In an interstellar burst I am back to save the universe," evoke a sense of rebirth after the singer's near-death experience, so the helpful technology of the car's safety mechanism protected the subject, and provided him with a new lease on life. The song's tonal closure in the major mode reflects the singer's apparent satisfaction with his car's fulfilled obligation to serve him, and his newly optimistic world-view. On a more subtle level, "helpful" technology is alluded to as early as the first entrance of the drums, which are actually

programmed, not played live, a choice made as part of their new experimentation that began with *OK Computer*.[10]

The title of "Paranoid Android" refers to a character from Douglas Adams's popular radio show from the late 70's *The Hitchhiker's Guide to the Galaxy* (later adapted to novel, TV miniseries, and feature film). Marvin the robot, while extremely intelligent and competent, represents a flaw in the development of machines emulating human personalities: instead of becoming warmer and more personable by being programmed with "genuine people-personality," he is overwhelmed by the negativity of his emotions and is crippled by intense depression and directionlessness. The character of Marvin is a humorous commentary on the potential of counter-productivity in attempting to integrate technology with humanity (not to mention the inherent tragedy of human emotion), so the apparent reference to Adams on this particular album, with its many references to mechanicity and technology, is comically relevant.[11]

Another theme or "topic" explored in the album is a sense of isolation and alienation, of being set apart from the conventional surroundings. Both the

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[10] Not to mention the sloppy-sounding splice effect at the album's first guitar note, the heavy-handedness and apparent carelessness of which, along with the incongruous timing of the drum entrance, might call into question how much of a human touch was involved with the production.

[11] Griffiths snidely predicts that "nerds worldwide are sure to point out the derivation of the title…" Of course, in case Radiohead's reference to "The Hitchhiker's Guide" still appears questionable, the second verse of "Paranoid Android" quotes Adams again, when Yorke sings "When I am king you will be first against the wall:" Adams describes the marketing division of the "Sirius Cybernetics Corporation," the fictional manufacturers of androids like Marvin, as "a bunch of mindless jerks who will be the first against the wall when the revolution comes."

themes of isolation and technology found in the album can be related to the stylistic shift the band made with the composition of *OK Computer*. The band began moving away from their grunge-rock influences, by using new sounds, and relying more on chromaticism and provocatively unusual musical events. One of the new sounds they incorporated was a different style of vocal production from Thom Yorke, a style that tended to be thinner, softer, and more vulnerable than the full-voiced production he used on Radiohead's first two albums. These timbral changes, along with the increasingly abstract nature of their lyrics, highlight an evolution that resembles the trend in art music at the turn of the last century towards neoclassicism and away from romanticism; the grunge-influenced rock of "Pablo Honey" and "The Bends" belongs to a highly expressive, personal, and sincere idiom of rock, whereas the "new" voice of *OK Computer* and their subsequent records is more distant, ironic, and dependent on mechanicity, like much neoclassical music written as a reaction to the emotion that characterized the previous musical era.

"Exit Music (For A Film)" is definitely associated with themes of alienation by its connection with the 1996 film *William Shakespeare's Romeo + Juliet*, for whose closing credits it was written. The protagonists of the story embody the epitome of alienation, feeling completely misunderstood by their families and society, and though there is no clear reference to *Romeo and Juliet* in the lyrics, the bitter and urgent sentiment expressed can be easily mapped onto the story's titular characters by anyone familiar with both objects (song and play), especially in cases like the first two verses of the song: "Wake from your sleep/ The drying

of your tears/ Today we escape, we escape/ Pack and get dressed/ Before your father hears us/ Before all hell breaks loose."

In the song, the thematized dichotomy of artificial versus natural is exhibited by the synthesized background "vocals," performed by a Mellotron's eight-voice choir setting. The sound of the Mellotron is realistic enough that its referent (the human voice) is clear, although the points of attack and release are so unnaturally abrupt that the transitions between tones makes the effect more horrifyingly uncanny than the sustain of the choir itself. The use of Mellotron on an album so characterized by the reference to and use of more modern digital technology is noteworthy, considering the Mellotron's primitive (but effective) ability to mechanically manipulate "natural" sounds in a referential, but surreal fashion.

The lyrics contain no direct reference to technology; however, the multiple references to breath and general vocal production ("Breathe, keep breathing," "Sing us a song," "You can laugh," "We hope that you choke," etc.) that commence at the same time as the entrance of the mechanical faux-chorus, are ironic given the accompanying mechanical emulation of singing (as soulless and inhuman as the recited text in "Paranoid Android."

It is difficult to hypothesize what level of prominence these lyrical events, and the associations they offer in the context of similar events, would achieve without the inclusion of "Fitter Happier" on the album, but the presence of the song is crucial as it is to the cohesion of the associative events mentioned; by

being such a stripped and plain presentation of text, “Fitter Happier” functions as a Rosetta Stone for the album, providing the listener with a clear model of what to listen for as a thematized concept. In this way, “Fitter Happier” is comparable to the “Sphinxes” of Schumann’s *Carnaval;* not music to be performed as a song, but rather the presentation of a formula that decodes the surrounding movements or hints at the construction or organicism. The mere presence of such a track on *OK Computer* makes a case for its identity as a song cycle (or, perhaps, the song cycle’s recording-age descendant, concept album) rather than a song collection. “Fitter Happier” has more meaning to offer in the context of a group of linked songs that contain potential associations with its themes than in the context of any other combination of material.

OK Computer’s “sphinx,” “Fitter Happier,” helps create a whole greater than the sum of its parts through its semiotic and associative relationships to the other “normal” songs, and its contribution to the themes and meanings of the album, in any part, is crucial even if the track is hypothetically skipped over for more “music,” omitted from a listening experience due to its different manner of communicating meaning (as “Sphinxes” is generally omitted from performances of Schumann’s *Carnaval*).

Some of the titles alone on *OK Computer* seem to make reference to some of these themes. The titles of “Paranoid Android” and “Subterranean Homesick Alien” speak for themselves. “Electioneering” and “Karma Police” are the first of several politically tinged song titles that would begin to appear on their albums. “No Surprises” sounds downright ironic as a song title by a band whose

greatest characteristic is musical idiosyncrasy and deviation (although, appropriately, it is one of the most harmonically and rhythmically conventional songs on the album).

Comparing Radiohead to Syd Barrett's seminal psychedelia and the advent of 'space-rock' in his article "The Pink Floyd of the Twenty-First Century," George Reisch notes:

> Radiohead got their 'space-rock' reputation with *The Bends* (opening with "Planet Telex") and, mainly, *OK Computer*. Pitchfork said the album moves through "space at 1.2 light years per hour," while Qmusic said "the first three tracks (of a five-song, continuous suite that's as brilliant as any music of the last decade) all mention aliens or interstellar travel in some capacity." …Titles like "Sail To The Moon" and "Black Star" invite the comparison, while Subterranean Homesick Alien" may even point to Barrett himself. Yorke sings about aliens who "take me aboard their beautiful ship, show me the world as I'd love to see it."[12]

The Bends not only evokes outer space (in the title of "Planet Telex"), but also artificiality, conspicuously, in the title of "Fake Plastic Trees," and artificiality that additionally touches on the theme of technology as a crutch for humanity in the titles of consecutive tracks "My Iron Lung" and "Bulletproof… I Wish I Was." Both these latter titles foreshadow two songs that appear on *OK Computer:* "Airbag" (whose title clearly indicates its lyrical topic of automobiles crashing) and "Lucky" (the refrain of which is "Pull me out of the aircrash." The references to collisions and accidents, especially collisions with or caused by automata or mechanical devices seems like an appropriate metaphor for the latent fear or

[12] Reisch, 4

discomfort with the rise of technology mentioned earlier in this chapter. And there is a delightfully ironic contrast created on *OK Computer* between these songs in which humans sing about the interference of (and dependence on) technology and a song in which a computer talks about how to become a fitter, happier, and more productive member of society. The society in question is supposedly human (but the absence of human presence on the track creates an ambiguity about whether the implied society in the song is in fact truly human at all).

3.4 Other aspects of Radiohead's artistic holism

"[*OK Computer*] has some sense of unity," writes Griffiths, "suggested in its title and reinforced by its visual presentation."[13] The visual presentation to which Griffiths refers is not just the album cover (included here as Figure 3.iii), which, aside from the cars that might relate to the few lyrics about driving, lacks direct reference to any particular song or theme. (Although the cover does convey an abstract sense of pastiche and mystery, which is easy to tie indirectly to various songs or topics on the album.) The layout of the interior of the CD booklet is particularly bizarre: its inclusion of abstract art and photographs is noteworthy, though not at all unusual for a rock album, but it is the text of the lyrics that stands out as being significantly disruptive from a visual perspective.

[13] Griffiths, 31.

Figure 3.iii

The stylization of the lyrics of “Fitter Happier,” shown earlier, characterized by very short lines in all lower-case lettering, is actually the most clearest of any of the album’s songs. The lyrics of other songs are formatted in even stranger fashion, with misspelled words, lines crossed out, mixed upper and lower-case letters, varying text justification, etc. For an example, the lyrics for the first track, “Airbag,” are presented as follows:

1421421**airbag**
>in the next world war
>in a jackknifed juggernaut
i am born again
>in the neon sign scrolling up and down
i am born again

..!!in an intastella burst i am back to save the universe!!

>in a deep deep sssleep of tHe inno$ent~~/completely terrified~~
am born again
>in a fAAst geRman CAR
im amazed that I surived
an airbag saved my life

Such a strangely glitchy presentation is what Griffiths is talking about when he says it reinforces the unity of the album's songs. Details like "interstellar" being spelled without the "r" (accurately matching the way Yorke sings the word), extra "s"'s in the word "sleep" (seeming to make an attempt at conveying the deep hypnotic state the singer is describing), and random upper-case letters in the middle of words are practically analogous to the musically disruptive events I have already discussed (like chromatic melodic tones, strange chord choices in the middle of idiomatic progressions, non-functional cadences, and measures too long or too short). The string of numbers before the title of the song even reflects the clipped, mechanically problematic attack of the introductory riff; in both cases the appearance given is that of a technological malfunction standing between the listener and the authentic artistic information, whether that information is text or sound.

The crossed-out phrase ("completely terrified") is uniquely problematic, as it provides additional information beyond the lyrics as heard on the album. That the two words are crossed out implies that the narrator thought of them immediately and later changed his mind; by including this process in the liner notes, though, Radiohead creates yet another level of distance in the music by separating the narrator (who sings the words on the album) from the composer (who apparently wants to share with the audience the original (or apocryphal?) text. The situation is comparable to that of the few short works of French composer Erik Satie (1866–1925) that included brief comments and directions for the performer that were expressly not to be shared with the audience. In "Airbag," though, the audience is in on the secret, and potentially has even more information than the hypothetical narrator (or at least more information than the hypothetical narrator is willing to share).

Somewhat similarly, the first inner page of the booklet includes the following text, pasted above a drawing of a man who appears to be either sticking his hand in a furnace or trying to exit a burning building:

> Jump out of bed as soon as you hear the alarm clock!! You may also find it useful spending five minutes each morning saying to yourself: "Every day in every way I am getting better and better"[14] Perhaps it is a good idea to start a new day with the right frame of mind.

[14] This famous mantra of psychologist Émile Coué de Châtaigneraie is also quoted by John Lennon in the lyrics of "Beautiful Boy (Darling Boy)" from his and Yoko Ono's *Double Fantasy* (1980): "Before you go to sleep, say a little prayer: 'every day, in every way, it's getting better and better…'"

The hackneyed motivational advice seems to come right out of the lyrics of “Fitter Happier,” though they perhaps contained phrases that were too long and complicated for inclusion in the song. Like the extra lyrics to “Airbag,” these lines do not change the meaning of the actual lyrics, but rather augment them with additional (somewhat clarifying in the case of “Airbag” with its crossed-out line, and somewhat redundant in the case of “Fitter Happier” with the booklet preface) information.

The lyrics to “Paranoid Android” and “Lucky” are the most chaotically arranged in the booklet, with words and letters splayed across an entire page each, with enough strange spacing and strange characters to make it is impractical to reproduce; but those songs are matched by “No Surprises” and “The Tourist,” which are both much more concise (the former is presented very conventionally, with space only between verses, while the latter is not spaced at all, and takes up only five lines of text).

An entire essay or more could be written just on the design and artwork of a CD insert like *OK Computer’*s, and while I do not attempt to make any extensive analysis of it here, Griffiths’ point remains that there are visually stylistic events on the album (or at least its official packaging) that match and complement the same kind of disruptive characterization found by listening to the music; enough of these are readily apparent (like the oddly formatted song lyrics) that it is not a stretch for any listener (/viewer) to recognize.

Another graphic representation of Radiohead's artistic style originated with the release of *Kid A.* Designed as a logo for the album by Radiohead's long-time collaborator Stanley Donwood (who is responsible for all Radiohead's album covers and poster art), the Radiohead bear (shown in Figure 3.iv) exhibits some of the ironic characteristics of the music on *OK Computer*. It is both warm and familiar, through its resemblance to a teddy bear or cartoon animal, and surprisingly menacing, with its huge sharp teeth and maniacal grin. This dichotomy is similarly conveyed through the combination of soft curves and jagged triangles.

Figure 3.iv

Greg Hainge, in his description of the bear logo in the context of the rest of *Kid A*'s artwork, writes in his chapter of the anthology *The Music and Art of Radiohead:*

> [The bear] is so deformed and its teeth so sharp and long you would never try to pet it; one page [of the *Kid A* booklet] features the evil toothy grinning teddy bears one of whom has come closer but remains hostile. While this… …[provides] a nostalgic space of home, a chance to revisit lost childhood… …the childhood it evokes is one of trauma that we do not wish to go back to."[15]

In a later essay in the same collection, Joseph Tate traces the use of the bears in a number of short computer animations (called "antivideos") released by the band on the internet. A few of these short animations (less than half a minute long, each) feature incarnations of the bear figure, who has become an important character, graphically, in Radiohead's artistic presentation, much in the same way one can think of Fred (or the use of any generic computerized voice) as an important character sonically. Tate describes the bear icons as "wide-eyed… …with murderous grins, drawn alternately as symmetrical, disembodied heads or frantically sketched stiff-limbed figures, [who] punctuate the art of [Radiohead], from CD packaging and packing slips, to website images and promotional stickers."[16]

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[15] Greg Hainge, "To(rt)uring the Minotaur: Radiohead, Pop, Unnatural Couplings, and Mainstream Subversion," in *The Music and Art of Radiohead,* edited by Joseph Tate (Aldershot: Ashgate Publishing Ltd., 2005): 76.
[16] Joseph Tate, "Radiohead's Antivideos: Works of Art in the Age of Electronic Reproduction," in *The Music and Art of Radiohead,* edited by Joseph Tate (Aldershot: Ashgate Publishing Ltd., 2005): 103.

The way Tate describes the use of the logo, along with the animal's identification as being some kind of bear, can easily call to mind the dancing bear iconography of the Grateful Dead (which can appear similarly eerie, but certainly a little friendlier than Radiohead's toothy creatures). While there are not enough direct parallels between the music of the two bands to make immediate technical analogies, both groups are known for their cult status and their constant stylistic evolution over the course of their career, indicative of a group of artists who care more about challenging than pandering.

Radiohead's air of nonconformity has not been limited to the artistic *content* of their artistic output. In 2007, they announced that their follow-up to 2003's well-received *Hail To The Thief* (which marked the end of their contract with EMI) would be independently distributed, making *In Rainbows* available for purchase and download online, for *whatever price the customer chose* (they later released the album for sale in hard copy at standard compact disc and vinyl pricing). The "antivideos" of the *Kid A* era were only a foreshadowing of the potential utility the internet could provide for the band, and the comfort with which they adopted the independent, online release of *In Rainbows* suggests that they might have been happy to do more earlier, had they not been under a major-label contract.

They did not repeat the pay-what-you-want model for their eighth album, *The King of Limbs*, but again made it available independently as a digital download first ($9.00 for .mp3 format, $14.00 for .wav), and subsequently offered compact disc and a special edition, called by the band a "newspaper album." The

surprise of *The King of Limbs* was the release itself;[17] while Yorke and Greenwood had made vague hints in 2010 that they were recording new songs, the first official announcement of the album's release was February 14th, 2011, only five days in advance of the announced online release date (on Friday, February 18th, they decided at the last minute to push the release a day earlier, making the download available as early as that morning to the fans who had already preordered the album).

In the grand scheme of things, much more has been written (by critics, journalists, pop culture pundits, and online message-boarders, as well as scholars) on the social characteristics of Radiohead than on the technical music-theoretical issues in their music (music theory is still a relatively esoteric field, and there are quite simply too few fluent enough in it to warrant more mainstream discussion). One aspect of Radiohead as a band that should be apparent to anyone who has spent time observing Radiohead's operation and interaction with the outside world is their artistic and social distance. The practice of "purposefully confounding listeners' expectations," and writing music that is deliberately difficult to parse can already come across as rather cold; and it is mirrored by the persona the band has gradually developed, which is relatively opaque. Dai Griffiths notes that in the majority of Radiohead's interviews, "They seem as respondents bored by direct questions" (he then adds, by way of explanation, "[this is] not surprising in that they channel a lot of their energy and imagination

[17] A very large-scale disruptive event!

into music").[18] Especially now that the band is independent of a major record label, their communication with and presentation to the public, outside of occasional interviews, is limited to sporadic and often cryptic messages on their website.

In his 1999 dissertation "Authenticity In Rock Music Culture" (written with only three Radiohead albums yet in existence), Mark Mazullo devotes an entire chapter to "Radiohead and the Progressive Tendency in Rock." Mazullo interprets Radiohead as a band primarily (and extraordinarily) concerned with *progressive* creative artistry and forging their own identity, and adamant (if not quite desperate) about being taken seriously; they did not want their music to appear pre-digested or dismissable as lacking artistic value. To demonstrate their self-motivated desire for organic evolution, Mazullo includes the following anecdote: "Responding to being labeled 'the next U2,' Radiohead drummer Phil Selway stated that 'if, by comparing us to U2, they mean that U2 created their own identity, hopefully that's what people are recognizing in us.'"[19]

The band's need to be progressive, challenging, and creative is another factor that makes sense as contributing to their obscure persona. Mazulla later writes (in reference to the experimentation in songwriting and production that began with songs on *The Bends* and *OK Computer,* and implicitly comparing them to predecessors like the Beatles who decisively stopped touring to focus on studio recording):

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[18] Griffiths, ix.
[19] Mark Mazullo, "Authenticity in Rock Music Culture" (PhD dissertation, University of Minnesota, 1999): 174–175.

> Because Radiohead prizes the studio as the location at which their true, collective artistic expression is realized, this suggests not only that Radiohead is less interested in making hits than creating music that means something to them, but also that making hits might be considered anathema, or at least a vastly less important aspect, to the progressive aesthetic. Perhaps the most convincing evidence of Radiohead's aesthetic agenda is contained in the fact that with the review copies of *OK Computer* they distributed a walkman (and headphones) with a copy of the recording glued inside it… …[this] forced critics to listen closely to the music, to become enveloped by it, to engage the music on the band's own terms, not on their own. After the mainstream hits of *Pablo Honey* and the U2-inspired, more technologically advanced *The Bends,* in other words, Radiohead was now ready to be considered as a group of artists who made music not only worth paying attention to, but more specifically worth *listening* to—in a way that the more casual mode of listening common in rock reception (that of the fan who purchases the CD only for the radio hit) would not allow.[20]

Mazullo's explanation of these trends is not just a more generous reading of their work and persona than that the band members are simply cold, distant, and careless, but very eloquently and articulate describes the background motives from which Radiohead's techniques of surface-level and album-level disruption have originated.

In conclusion, salience and development of lyrical themes on this album parallel the saliency and development of certain provocative or disruptive musical themes and events, and can be heard to complement and interact with each other. While discussion or analysis of *OK Computer*'s lyrical themes, topics, the persona of the band, and their engagement with pop culture and their audiences does not necessarily require musical analysis, Radiohead is the kind of artistic collective that does provide the public with a cohesive, almost stylized identity in

[20] Mazullo, 191–192.

everything they do. Their lyrics and music are, relative to mainstream rock music, mysterious and provocative through their ironic reference to the familiar, but in a strange and challenging syntax. The forms (and formal structures) of their songs do not conform to mainstream norms, and so, subsequently, their albums, as containers of noncomformity, are similarly unconventional as well. The conscious effort to maintain a unified front of esotericism, minimal communication, and distance of personality (a significant distance, especially compared to the mass-communicative over-sharing of celebrities' lives in this age of reality television, social networking, Facebook, and Twitter) does not betray the matching esotericism of their songs.

The persistence of musical and extra-musical challenges in their songs makes Radiohead an excellent object for analysis, and the consistency of style and reference in their art and persona (particularly from *OK Computer* onwards) not only complements these challenges but makes the band and their music an exemplary pedagogical tool, rich with musical complexity and bridges to other fields and interdisciplinary perspectives (such as poetry or lyrical composition; popular culture and sociology of celebrity; visual art, performance, and personae; and philosophy, just to name a few). The fact that their distinctive, characterizing idiosyncrasy was slow to develop (with reasonable boundaries inferable between the first two albums and the next four, and between "Hail To The Thief" (their last major-label release) and their more recent, independently released albums) is another reason their music is ripe for such study, as the student or analyst can

even more effectively isolate musical idiosyncrasies when measuring against conventions that the band *did* follow to a greater extent in their earlier work.

Chapter 4

Tracing Codes and Characters

Open up, begin again… Keep it moving.
- "I Might Be Wrong," *Amnesiac* (2001)

Having explored some of the most significant examples of the musical disruptions and idiosyncrasies on *OK Computer,* in this chapter I will more concisely survey the albums that followed. I will highlight both the events (or characteristics) that seem more clearly born out of the precedents of *OK Computer* and the more forward-looking trends in selected songs from *Kid A, Amnesiac,* and *Hail To The Thief*. Even those techniques found on *Kid A* for the first time in Radiohead's chronology still owe a significant part of their musically disruptive effect to the seminally idiosyncratic and genre-stretching *OK Computer.*

4.1 *Kid A, Amnesiac,* and *Hail To The Thief*

In terms of conventional rock norms (and even, broadly speaking, tonal norms), Radiohead's next album, *Kid A*, is even more idiosyncratic than *OK Computer.* Moreover, the change in style heralded by the songs on *Kid A* is even

more drastic than the shift of *OK Computer* away from *Pablo Honey* and *The Bends.* Even fewer formal conventions are upheld, even more sounds and production techniques are employed, and the rhythm and harmony, if not too much deeper in complexity than *OK Computer*, is even more consistently idiosyncratic on this record than its predecessor. Minimalism plays a much greater role in the gradual turn from conventional form and organization of pitch, harmony, and rhythm. For these reasons, it proves itself a rich object for the same kind of analysis as demonstrated in Chapter 2 on *OK Computer.* The idiosyncrasies that such analysis would reveal include several gestures, events, and characteristic compositional choices similar to those found on *OK Computer,* but also several new issues: namely issues of timbre, modality, minimalism and form, and above all else, any salient ramifications of the band's sound owing less and less to the traditional electric guitar-rock genre.

While all these new developments mean that *Kid A*'s characteristic-based ties to the early albums are weaker than those of its predecessor (which proved both a paradigm shift and a natural outgrowth of the sound of *The Bends*), the changes present on *Kid A* can still make more sense when contextualized by the experimentation/interaction-with-norms of *OK Computer.* In other words, even when the changes themselves are new to *Kid A,* they can be seen as directly relating to the *kinds* of stylistic changes and experimentation found on *OK Computer. OK Computer* thematized the broadly conceived technique of expectation-disruption and idiosyncrasy, which can be realized in many ways; on *Kid A* (and on the albums that followed), Radiohead continued to use some of the

same specific techniques as introduced on *OK Computer,* but also added new techniques to the superset of recognizably characteristic disruptive effects.

In Rainbows does not maintain the same trajectory of change and challenge as the four preceding records, but while it still owes much to their earlier experimentation, the album is more subdued, stripped back, and reflective. It contains several hints of the eclecticism that defined the band's sound for so many years, but these traces do not function so much as actively disruptive events as they might on the earlier songs, and instead exist modestly as recognizably defining elements in otherwise formally basic songs. In this regard the album is not unlike the Beatles' *Let It Be* or Side A of *Abbey Road*; past the peak of antiestablishment rebellion and compulsively experimental artistic creativity, these later albums do not rest on the band's laurels but rather offer a mature perspective of the band's creatively rich palette, especially in the chronological context of the band's musical career.

It certainly seems like a natural arc for an artist or artistic group to start safely, relying more on external artistic and cultural precedent, before branching out into whatever depths of creativity are allowed by the artist(s)'s mind and practical capacity, often challenging or even alienating audiences, and eventually settling into a comfortable compositional voice or range, free to draw on the past

without pressure to resurrect obsolete or tired expectations, and to experiment without the compulsion to challenge and colonize new sounds or techniques.[1]

Of the later albums' characteristics that emerge post-*OK Computer,* there are two trends in particular I would like to highlight: first, along with a gradual shift further and further away from the guitar-governed grunge rock that was such a clearly fundamental influence on their early work, towards more complicated harmony and electronic sounds, there are clues in the musical writing to suggest that more composition was done at the piano (or at the computer, or drum machine, etc.) than on the guitar. While the details of how the songs were composed is far too entangled with the problems of poietics that I had hoped to avoid in this essay, this keyboard-writing, if identified as such, can still emerge as a characteristic sound contrasting with that of the strictly guitar-chord-based sound, both in terms of both the actual timbre and the distribution of pitches/harmonic progressions.

The second trend is that of increasing musical minimalism. While there are still plenty of actively disruptive events in these later albums like those on *OK Computer,* in the category of Radiohead's characteristic musical techniques they

[1] The course of the Beatles' and Radiohead's respective careers are as much of a factor here as simple chronology of output: obviously, by the time Radiohead recorded *In Rainbows* and the Beatles recorded *Let It Be* both bands were secure enough both in wealth and artistic clout to write songs as retrospective or as experimental as they wanted without the risk of being too seriously ruined by potential clash between what the public expected and what it received. As daring as it might have seemed for Radiohead to release *In Rainbows* as an internet download for whatever price the customer decided, they were in a position to be supremely confident that such a decision would still be adequately profitable for them.

are joined by what one might consider passively disruptive events: in other words, unconventional aspects of a song that do not stand out because of ironic or surprising contextualization but that are unusually deficient in providing any information at all. “Idioteque,” from *Kid A,* is based on a short sample from a Paul Lansky piece, accompanied by unprecedented (for Radiohead) techno-style dance beats from the drum machine. The sample provides the only harmonic context for the song, and the chord progression heard in the sample contains nothing except four different inversions of the same pitch-class set, {D, E-flat, G, B-flat}, shown in Figure 4.i.

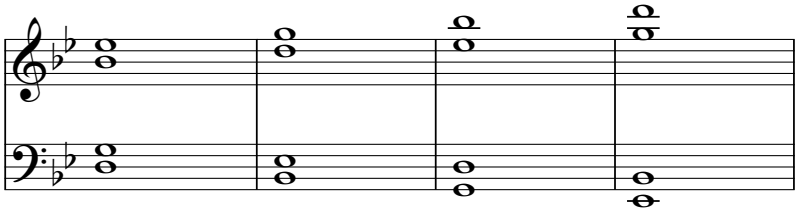

Figure 4.i. “Idioteque” progression.

Although the changing spacing of these chords belies their homogeny and does make it seem like there is at least a little bit of motion, it sounds like an alternation of G minor and E-flat major harmonies (and certainly no more chords than those). More and more songs on *Kid A* and *Amnesiac* do not even rely on harmonic accompaniment or harmonic progression at all, but might consist of

simply stratified lines (say, for instance, voice and bass, as in *Kid A*'s "The National Anthem").

While several of the songs on Radiohead's later albums are similarly minimalistic, using few or no chords as their basis, providing passive idiosyncrasy rather than explicitly disruptive or challenging chord progressions, something like the reverse can also be found: songs whose chord palette is so varied that almost every change from one chord to the next is confusing or functionless, almost numbing the listener to the unfulfilled expectation of functional progressions like the minimalist songs do by including so few chords. "In Limbo" is an excellent example of this phenomenon; it is very difficult to infer any consistent center or function of any kind amidst the constant onslaught of triads, ever-changing in their diatonic makeup. Figure 4.ii shows the first two measures of the verse, in which the initial C-minor harmony is gradually transformed to E minor (another PL operation) by the time Thom Yorke's voice comes in.

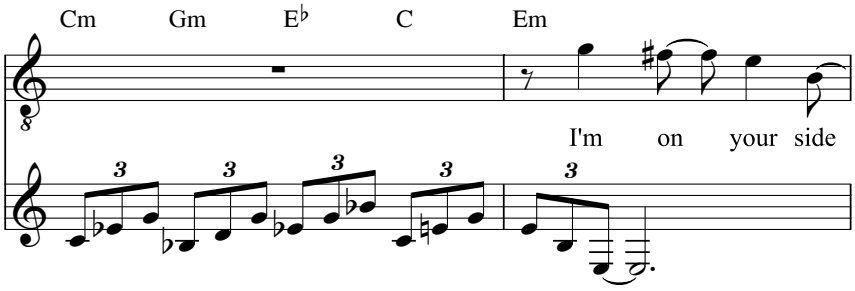

Figure 4.ii. "In Limbo" verse.

The effect is quite similar to that of the more abstract piano pieces of Erik Satie; Satie often appeared to deliberately compose as strange and challengingly provocative combinations of triads as possible (for example, his second Sarabande, excerpted in Figure 4.iii, contains progressions that make it difficult to aurally organize the disparate harmonies.

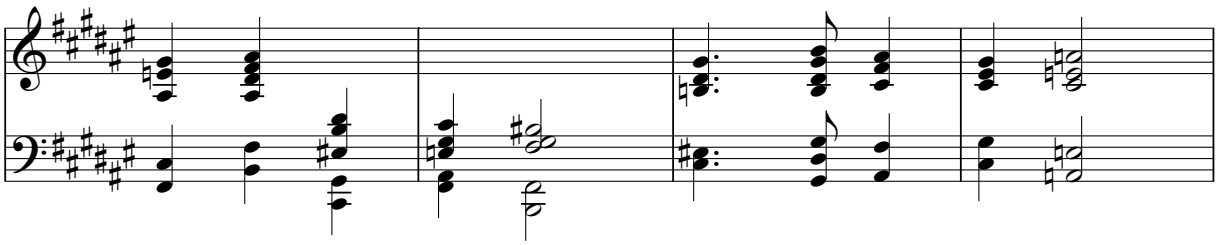

Figure 4.iii. *Sarabande No. 2*, Erik Satie.

Since the “codes” and categories of events I have isolated and identified through the analysis in Chapter 2 were selectively emergent, and at no point pretended to be exhaustive or universal, they are quite portable. Not only do they provide greater insight into the music of *OK Computer* specifically, they can become the first step to approaching a comparable object (in this case, the albums that followed *OK Computer*). As an alternative to analyzing *Kid A*, say, cold, this chapter will demonstrate second-step analysis, having already begun construction of the problematic or salient codes and categories with *OK* Computer. I will trace first issues of pitch and harmony in these later albums

(based on or problematized by the discoveries made in Chapter 2), and then issues of disruptive rhythm and meter.

4.2 Harmonic events in Radiohead's early 21st-century music

I will begin by summarizing the kinds of harmony events that characterized the songs on *OK Computer.* I will follow this with a survey of the most notable examples of these and similar events on the songs from *Kid A, Amnesiac,* and *Hail To The Thief,* to illustrate that the techniques used on *OK Computer* not only continue to characterize Radiohead's later work but continue to develop into new techniques and musical effects, maintaining Radiohead's progressive spirit. Even when the techniques themselves are not exactly like any used on *OK Computer,* they cause a similar enough disruption of musical norms that they are heard as being in the same language or dialect as that "spoken" on the earlier record.

The three primary harmonic or pitch-related issues discussed in Chapter 2 in regards to *OK Computer* and Radiohead's musical disruption were

a) disruption through extra-diatonic melodic tones: any chromatic tones in the inferred diatonic collection (e.g. the use of both major and minor mediants and other scale degrees non-hierarchically, not conforming to either the major or minor mode, described as the "option technique" in Chapter 2)

b) disruption through overt chromatic harmony: tonally non-functional chords that challenge either the asserted key or syntactically inferred function of the given phrase, e.g. the progression from dominant-functioning A major to C minor in the third section of “Paranoid Android”; the half-step-slide to the quasi-half cadence on the major submediant in “The Tourist” (this category differs from the previous in that the chromatic options of category “a” do not challenge the tonal center of the song, but rather, if anything, the sense of the scale’s topography)

c) tonal/modal ambiguity, or ambiguity of center: somewhat related to the first category, a shift away from relying exclusively on conventional key-tonality (the kind that defines a work by the work’s starting and ending in a particular key) and instead experimenting with pandiatonicism and modality (as in “Electioneering” and “Climbing Up The Walls”), and even tonalities, or Guy Capuzzo’s “sectional tonality” (as in “Paranoid Android” and “Karma Police”). Pandiatonicism, which reinforces a diatonic collection but can obscure a center, manifests itself both in the overall harmonic organization of a song and, on a smaller scale, in sectional heterophony (like the guitar ostinato in “Let Down” and the vocal harmony in the refrain of “Electioneering”).

All three of these categories are still in play for the later albums to which I turn the reader’s attention in this chapter. In fact, to a certain extent, all three are engaged as early as the first track on *Kid A,* “Everything In Its Right Place.” While

the opening (shown in Figure 4.iv) is not quite as brash as that of “Planet Telex” or “Airbag,” the track is just as expository as those by immediately presenting the listener with what will become recognizable as trademark characteristics of the album: synthetic timbre, minimalist loops, inner pedal tones in counterpoint with cyclic harmonic progressions, and a tricky-to-define tonic.

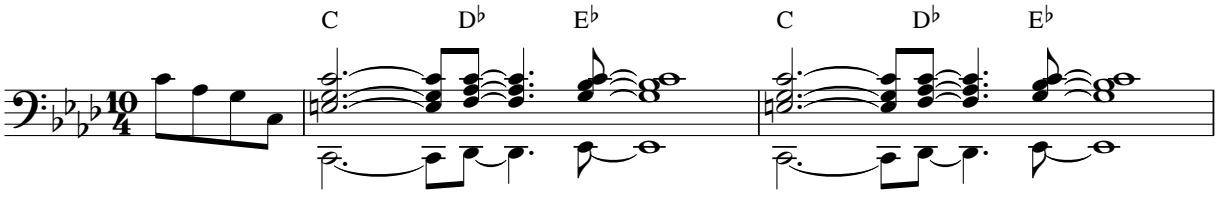

Figure 4.iv. “Everything In Its Right Place” intro.

As the song begins, during the thirty-second introduction, C sounds like the reasonable *de facto* tonic by virtue of the opening lick that contains a G–C descending fifth motion, the static middle-C pedal in the synthesizer part, and simply the fact that the phrase starts on a C-major chord and revolves around that chord. Even the presence of D-flat major in the progression does not really challenge the sense of C-centricity; in the absence of any functional grammar to suggest any other key, the introduction sounds more like C Phrygian (with the major mediant option) than anything else.[2] When the voice enters on an F, the

[2] This proposed momentary normalcy of the phrygian mode might be validated or foreshadowed by the A-flat–G half-step in the opening lick; in any case, that half step is significantly more marked an event after a few hearings of C–D-flat in the

progression changes so subtly that the difference is barely noticeable, from C major–D-flat major–E-flat major to F major–C major–D-flat major–E-flat major (see Figure 4.v).

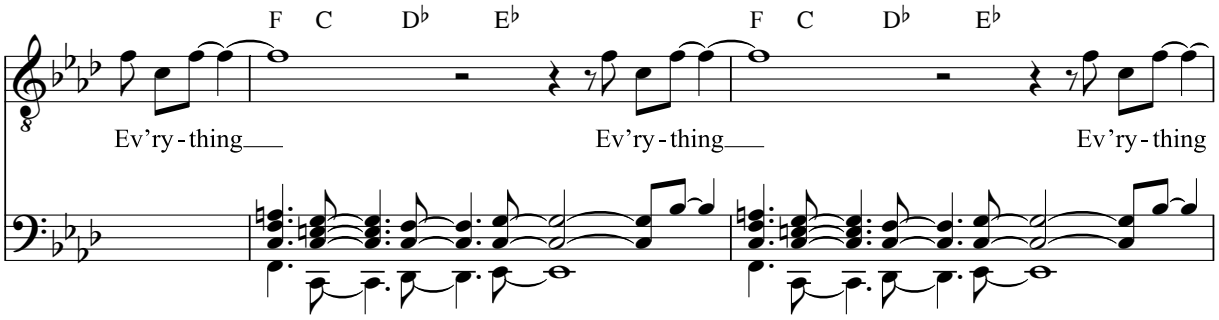

Figure 4.v. "Everything In Its Right Place" refrain.

The addition of that one extra chord, along with Thom Yorke's insistent sung F, suddenly rotates the previous perception of C phrygian (with optional major third) to F minor (with optional major third and leading tone). In the introduction, the E-flat chord functioned like a chromatic expansion of the "tonic" C major, left in the air before returning to C; it now functions strongly as a dominant-functioning goal-oriented subtonic, a member of the ascending bass line C–D-flat–E-flat–F.

Thus, the song contains both chromatic scale-degree options and ambiguity of center. It contains disruptive chord changes as well, to the extent

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bass line. The parallel half-steps above scale degrees $\hat{1}$ and $\hat{5}$ are a distinctive characteristic of the phrygian mode (a characteristic that is easily exploitable).

that the initial C major–D-flat major is atypical and unexpected; it occurs so frequently thereafter, though, that it ceases to appear at all disruptive except in relation to the paradigm of conventional major-mode tonality. In this case, the sense of convention being disrupted is less noticeable on the surface level of moving from one chord to the next, and more caused by the style of the entire song, which is minimalist and modal.

Another song whose harmonic vocabulary is made up of chromatic or modal triads moving by step (with an upper pedal) is the second track on *Amnesiac,* "Pyramid Song." The chord progression, while based in F-sharp rather than C, is remarkably similar to that of the opening of "Everything In Its Right Place" (see Figure 4.vi):

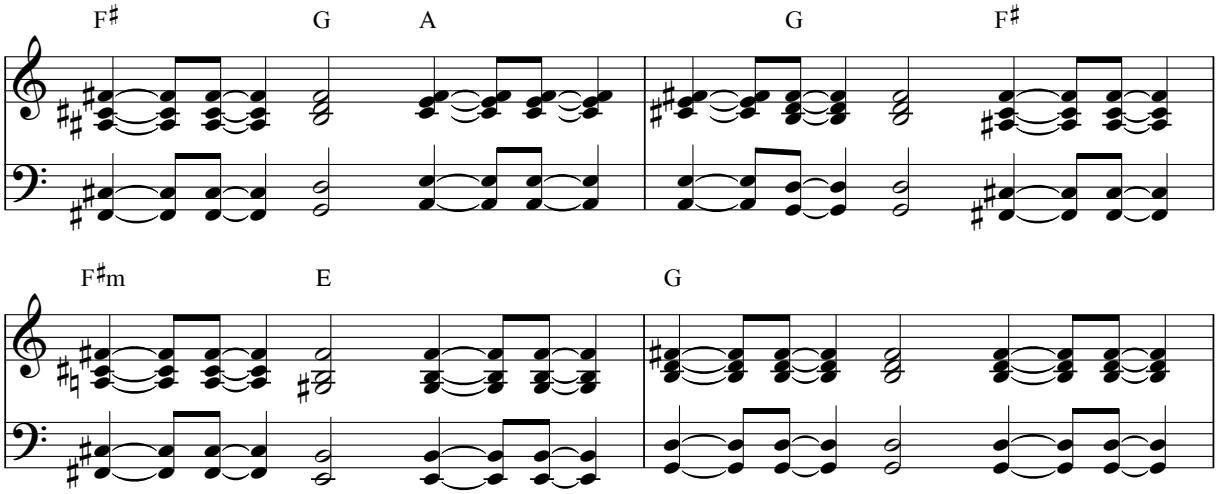

Figure 4.vi. "Pyramid Song" progression.

The first three chords are essentially the same as those of the earlier[3] song (transposed up a tritone, of course), and the entire texture is clearly written in the same keyboard-based idiom (although while “Everything In Its Right Place” is played on a synthesizer of some sort, “Pyramid Song” is played on piano). Too, both songs feature cycles of chords with uneven or inconsistent rhythm: in “Everything In Its Right Place” the E-flat chord is held longer than the others, and in “Pyramid Song” there is no beat of the measure on which the chord changes every time, creating a very strange and confusing metric situation (discussed further in subchapter 4.3).

The initial progression in “Everything In Its Right Place” seemed to center on C, with the D-flat indicating a C Phrygian tonality; when the later sections assert F minor as the tonic, C is relegated to dominant function. In “Pyramid Song,” F-sharp remains the undisputed center for the entire song, so the opening progression, the same as that in “Everything In Its Right Place,” would stand to imply F-sharp Phrygian (with the major mediant option for the use of major-quality tonic chords), especially with the way the G chord (flat-II) is so definitively used to resolve to the tonic. G-sharp appears as part of the E-major chord in the second half of the verse, though, and as scale degree $\hat{2}$ whenever the voice descends from the mediant to $\hat{1}$.

[3] When I say “earlier” here, I refer to *Kid A* being released a year earlier than *Amnesiac.* “Pyramid Song,” like most of the tracks on *Amnesiac*, was written at the same time as the songs on *Kid A,* and was in fact first performed live prior to *Kid A* even being released, so it was probably composed simultaneously or soon after “Everything In Its Right Place.”

The chromatic options for this song, then, are the use of major and minor mediants (the major mediant is only used to provide a major-quality version of the tonic triad) and the use of regular and lowered supertonics. G-sharp, the regular supertonic, allows the use of the major subtonic triad, harmonically, and the normative minor-third descent, melodically in the voice part, while the flat supertonic (and the resulting flat supertonic harmony) is always used as the final cadential resolution in the bass voice. Beyond the now-typical modal ambiguity created by the alternation between major and minor mediants, the contrasting instances of the regular and lowered supertonic suggests both phrygian and aeolian modes, while F-sharp is never questioned as the tonal (or modal) center.

The first track on 2003's *Hail To The Thief,* "2 + 2 = 5," while not written in the same keyboard idiom as the two previously mentioned songs, has a similar kind of harmonic palette, and a stepwise progression of triads out of which the interval of an augmented second (resulting from the juxtaposition of two major-quality chords a semitone apart) stands out, just as in "Everything In Its Right Place" and "Pyramid Song" (E–D-flat in the former and A-sharp–G in the latter; E–D-flat is heard again in "2 + 2 = 5"). The excerpt in Figure 4.vii is taken from the linking section (at 1:21 into the song) between the verses and the extended closing section (which is not strictly another verse section nor a chorus, but a relatively autonomous unit).

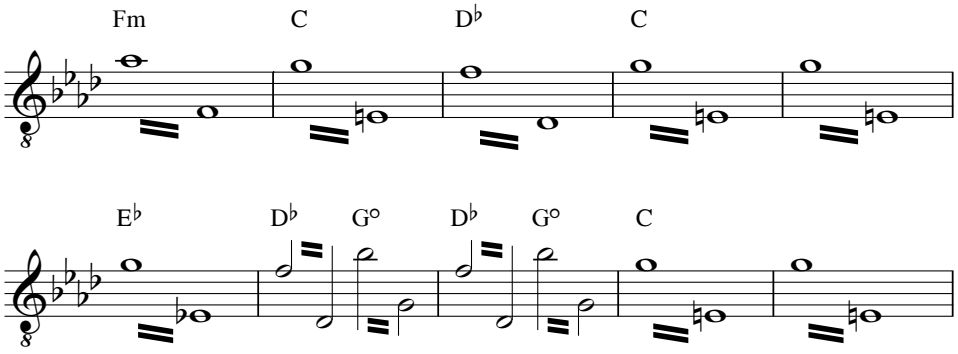

Figure 4.vii “2 + 2 = 5” link.

It is worth comparing the chord progressions of these three songs, especially “2 + 2 = 5,” with the music of Estonian minimalist composer Arvo Pärt. The following (Figure 4.viii) is an excerpt from his piece *Fratres*:

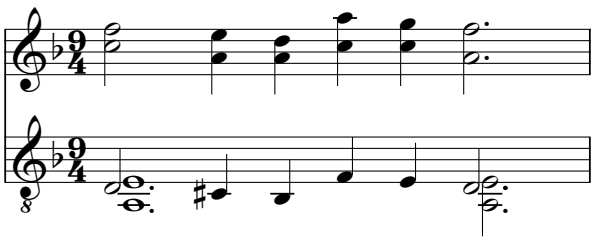

Figure 4.viii. *Fratres,* Arvo Pärt.

While not similar enough to be a considered a direct quote, the similarities (stepwise triads set against inner-voice pedals, parallel tenths, and the modally chromatic augmented second to name a few) are vindicated by the knowledge

that Johnny Greenwood is quite familiar with the composer: in fact, *Fratres* is used significantly in the soundtrack of the 2007 film *There Will Be Blood*, for which Greenwood composed the original score. Ironically, his inclusion of the Pärt (along with excerpts from the Brahms violin concerto) was considered extensive enough that his critically acclaimed score was deemed ineligible for the "Best Original Soundtrack" award by the Academy at the 2008 Oscars. In any case, as oblique and mysterious as the band can be (and often is) about their compositional process and direct influences, their awareness and fondness of experimental twentieth-century art-music composers is shown in such homages as the previously mentioned "Idioteque" and the *tintinnabuli*-evoking minimalist idiom of "Everything In Its Right Place," "Pyramid Song," "2 + 2 = 5," and others.

The opening verse section of "2 + 2 = 5" introduces the parallel-tenths-based harmonic idiom highlighted in the earlier example. The four-measure guitar intro simply oscillates between tonic F minor and a dominant harmony with E in the bass, and with F and C held as inner voice pedals (see Figure 4.ix).

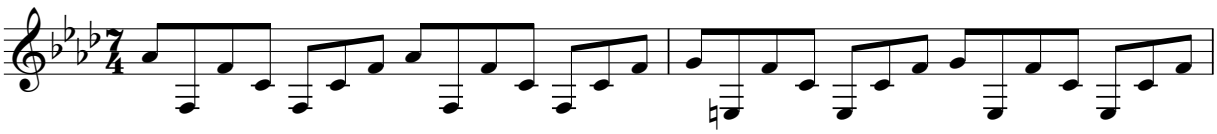

Figure 4.ix. "2 + 2 = 5" intro.

When the voice enters (on scale degree $\hat{5}$), it continues the pattern (elaborating the dominant harmony with a D-flat–C, or flat-$\hat{6}$–$\hat{5}$, appoggiatura figure), but instead of swinging to the dominant a second time, the voice parallels in fifths the bass's semitone descent from F to E-natural with C to B-natural, creating an E-minor harmony (related to the expected C-major harmony by the L operation) (see Figure 4.x).

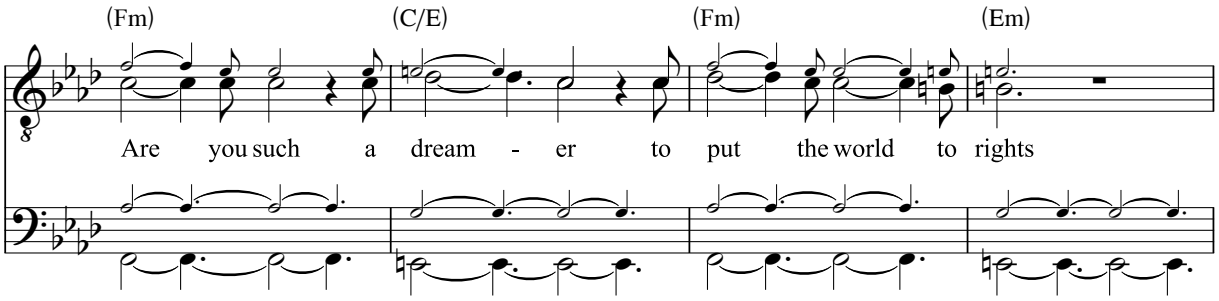

Figure 4.x. "2 + 2 = 5" verse.

The organum-like parallel-fifths voice leading is striking enough (as is the heterophonic falsetto counterpoint), but the strange sound of a minor-quality leading-tone triad is certainly unexpected at this point, especially after the precedent of a normal dominant harmony. Like the expected dominant harmony, though, this E minor functions as a point of departure from the tonic, and resolves right back to the tonic just as a dominant chord would. The exact chord choice is somewhat disruptive in itself (as is the bare sound of the chromatic parallel fifths), but especially considering that the triad is still based on the

leading tone, the original tonic–dominant pattern is maintained, just with an substitution of harmony.

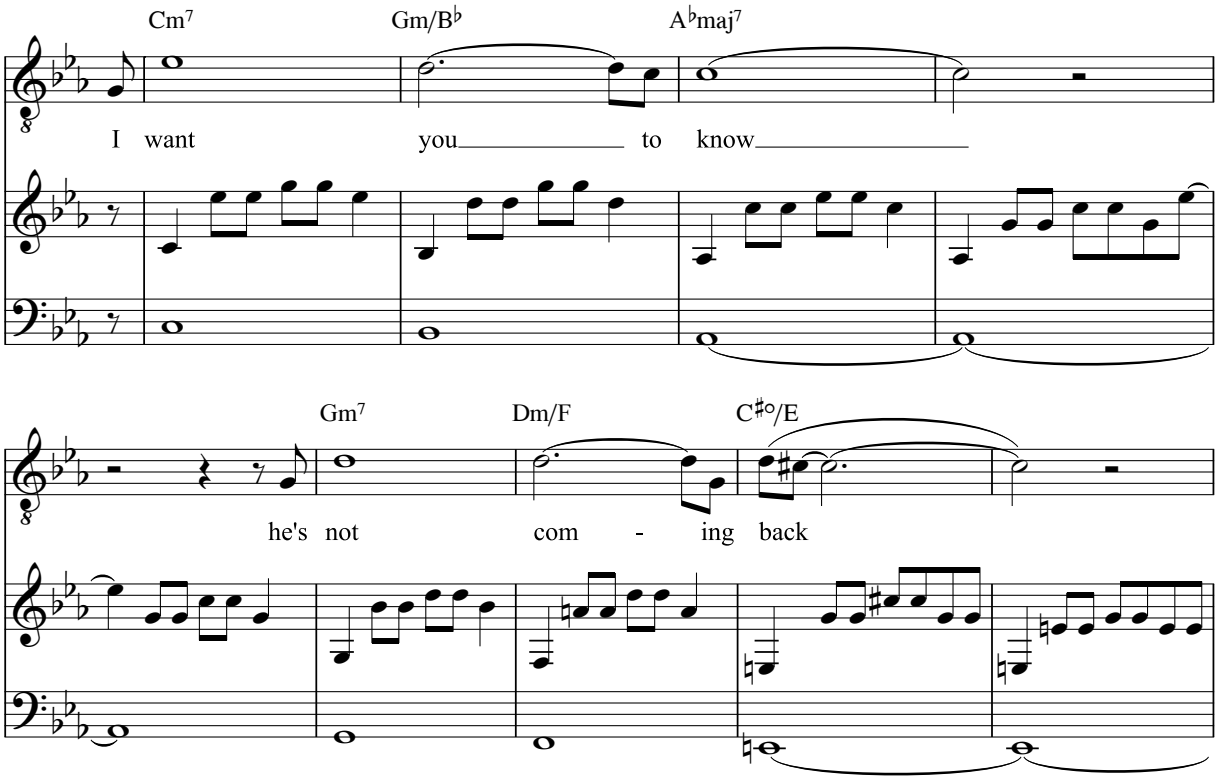

Figure 4.xi. "Knives Out" verse.

Another song featuring a chromatic quasi-half-cadence is "Knives Out," from *Amnesiac.* Also like "2 + 2 = 5," the verse of "Knives Out" is characterized by parallel tenths between the outer parts and a sustained vocal line that is accompanied by an arpeggiated guitar figure. Instead of a cyclic oscillation between tonic and dominant-functioning harmonies, though, the progression of this verse is essentially dictated by the gradually descending bass line (see

Figure 4.xi). The first half of the phrase expands the tonic by descending from C to A-flat, the submediant; the second half starts on G, but instead of the descent reaching E-flat, E-natural is used along with the incongruously dissonant C-sharp diminished triad in first inversion.

Like the other quasi-half cadences isolated in Chapter 2, this chromatic chord (which subtly and almost imperceptibly reasserts itself as E minor in the next two measures, retroactively suggesting that the salient C-sharp had only been a coloring non-chord tone in the E-minor harmony) is approached by half-step: in this case, the lowest voice descends from F to E and the upper voice descends from D to C-sharp in parallel sixths. Again, as bizarre as the presence of the minor sharp mediant (or half-diminished sharp tonic, if the sound of the C-sharp is retained) is, if fulfills the function of the dominant, and, like the previous example from “2 + 2 = 5,” the presence of the leading tone in the triad in question makes its interpretation as dominant that much more sensible to the listener.

A few of the songs on *OK Computer* feature strikingly unusual chromatic chord changes by third, which not only challenge the diatonic landscape but disrupt the expectations as to which triads could be used to convey various harmonic functions. The E minor at the end of this verse leads directly back to C minor when the verse repeats, which reinforces its rhetorical interpretation as a dominant-functioning harmony (as does the presence of C minor’s leading tone, B, in the triad, like the quasi-half cadence in “2 + 2 = 5”). The resulting turnaround also creates one of the aforementioned chromatic-third disruptions, with the root of the E-minor chord moving down a major third to another minor

chord (not a diatonic progression). At this point is should be clear how typical this technique is for Radiohead, although the fact that “Knives Out” contains this quasi-half-cadence on the raised minor mediant while at the same time the melodic D–C-sharp gesture hints at a half-cadence in the supertonic makes the progression strange even for Radiohead’s quasi-half-cadences.

The third track from *Kid A,* “The National Anthem,” picks up on the minimalism that predominates “Everything In Its Right Place” and takes it to a further level. “Everything In Its Right Place” utilizes only four chords, in varying rotation depending on the section of the song, but “The National Anthem” is not even really based on any harmonic progression at all; rather, there is a two-measure bass riff repeated through the whole song, and most of the time it is not even accompanied by actual chords as much as vaguely D-centric cacophony. The bass riff in question (shown in Figure 4.xii) suggests a D triad, though the first measure starts on F-sharp and the second measure tends to start on either F-natural or at least an F-sharp bent enough to convey a change (or challenge) from the modal implications of one measure to those of the other. An implicit descent from F-sharp to F to E to D is suggested by the downbeats of the riff.

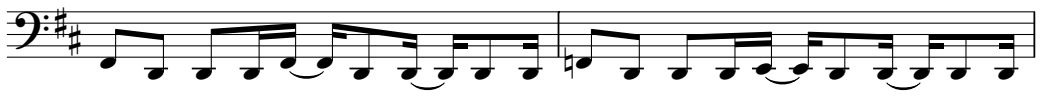

Figure 4.xii. “The National Anthem” riff.

The synthesizer line that accompanies the bass during the long (over a minute and a half) introduction similarly hints at motion away from the overwhelmingly persistent D-center by using both F-sharp and F-natural, and by using B-flat, the lowered submediant, as the upper neighbor to A. The result is made even more minimalist and, even more particularly, eastern-sounding, by the employment of an excessive drone in the bass and a free, chant- or sitar-like upper voice melody that slides around chromatically and does not commit to a diatonic scale (or even, necessarily, to a "tonic"; the introductory melody does eventually close to D, but lingers on tones like A, B-flat, and F-sharp, almost to the extent of challenging the bass's insistence on D).

Not even the brass chords at the end of the song escape the domination of the bass ostinato, and the "National Anthem" really can be heard as having absolutely no harmonic progression, but rather heterophonic elaboration of the bass's D-foundation. There are no songs on *OK Computer* that achieve this level of minimalism; even "Electioneering," which comes the closest, involves harmonic progression, albeit modal, through the use of D-minor tonic chords and C-major/A-minor dominant chords.

Another song featuring a harmonic narrative of alternation between major and minor tonic chords, like "Pyramid Song" and "The National Anthem" (and just as harmonically minimal as the latter), is *Amnesiac*'s "Dollars And Cents." "Dollars And Cents" achieves a large amount of contrast involving tension and release considering the harmonic palette of the song consists only of B-major

and B-minor chords.[4] As in “The National Anthem,” a single bass riff is used for much of the song (under both the major and minor tonic harmonies, in fact, even though the riff uses only the minor mediant), shown in Figure 4.xiii.

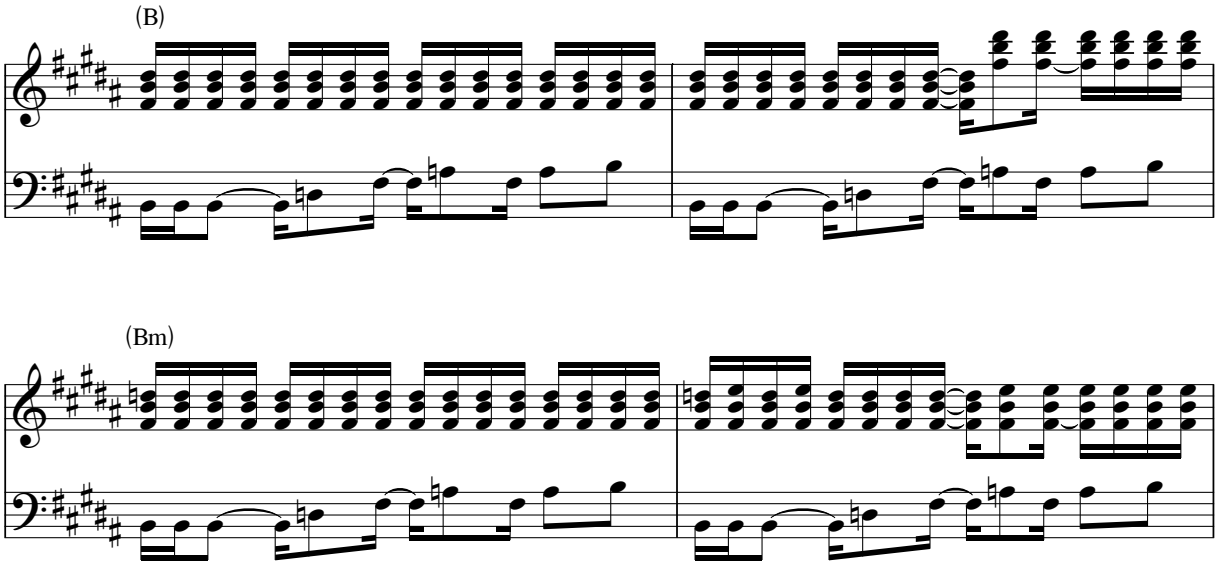

Figure 4.xiii. “Dollars and Cents” progression.

The primary chord progression of “Optimistic” is one of the most conventional on the album (and the electric guitar is featured prominently, hearkening back to the sounds of *OK Computer* and *The Bends).* The progression, D minor–C major–E minor–D major over a D pedal, exhibits

[4] These later albums establish such a minimalist idiom that in the absence of authentic harmonic progression, even a simple transformation from one tonic to its parallel mode sounds as conventionally progressive as root motion by fifth.

alternation between the major and minor mediant, just like “Airbag” and others, and the melodic content is simple (see Figure 4.xiv).

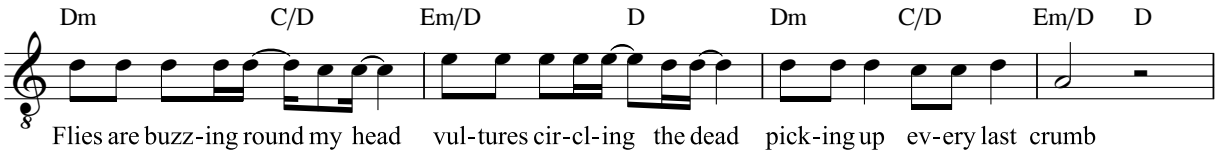

Figure 4.xiv. “Optimistic” verse.

Again, the choice of either major or minor as a fundamental mode proves problematic or arbitrary—but D is clearly the tonic (it is held as a pedal throughout most of the song!), and while the tonal leading tone is never used, the scale alternates between using F-sharp and B from the hypothetical D mixolydian, and using F-natural and B-flat from the hypothetical D aeolian. Therefore, like the songs on *OK Computer* regarding chromatic option-based keys rather than choosing one primary mode and designating a secondary mode from which tones are borrowed, I prefer to think of “Optimistic” as being D-centric (or D mixolydian/aeolian/minor-based, to account for the consistently lowered seventh scale degree) with chromatic options for the mediant and submediant.[5]

As part of a hypothetical argument for the prioritization of D major, or simply as a reductionist point of view, one might isolate the gradual

[5] In other words, I want to interpret the D-minor chords expressing the same level of tonicity as the D-major chords, and the B-minor chords expressing the same level (albeit a different practical function of tonicity) as the B-flat major chords.

transformation from D minor (and the aeolian-collection tones) at the front of phrases to D major (and the mixolydian-collection tones at the end of phrases). The music does not allow this argument to establish D major as the ultimate tonic as strongly as it might, as the end of the song does not settle on D minor or D major, but instead, in the middle hinting at both F-sharp and F-natural, back and forth, the song segues seamlessly into the appropriately titled “In Limbo,” which moves away from D as any kind of center at all.

Another intriguing effect in “Optimistic” is the destabilization of a cadential arrival in the introduction. The song starts with a brief contrasting period, or antecedent-consequent phrase (shown in Figure 4.xv): A minor–B minor–D major (add 9) (V–VI–I in D), followed by B-flat major–C major–D (add 6 & 9) (VI–VII–I), all over a D pedal (not unlike “The National Anthem”).

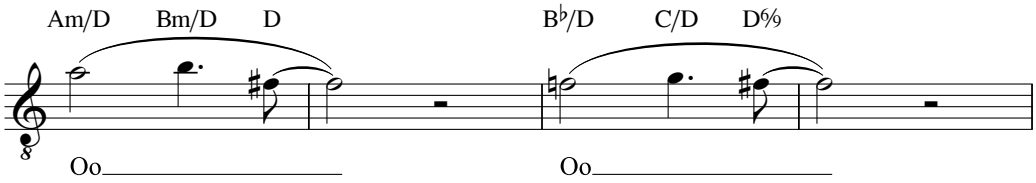

Figure 4.xv. “Optimistic” intro.

Both phrase halves cadence in the tonic D major, although the antecedent uses a weak quasi-plagal cadence in diatonic D mixolydian, while the consequent-half utilizes the other chromatic options of F and B-flat, creating a

somewhat stronger, modal cadence (i.e., the aeolian VI–VII–I, which is functionally analogous to subdominant–dominant–tonic).[6] The potentially augmented strength of the modal "authentic" cadence in the second half of the phrase is undermined by the added sixth and ninth, but particularly by the sixth (B) which, in combination with the sung F-sharp, momentarily gives the cadence a deceptive sound, as if it had resolved to the submediant instead (B minor is played just two measures earlier, which makes it even easier to hear a resemblance between the two chords).

"Morning Bell," a song included on both *Kid A* and *Amnesiac* in different versions, not only contains a similar chromatic third motion, but is based on such a progression: a repetitive oscillation between A minor and C-sharp minor. All the examples of chromatic third progressions that I highlighted in Chapter 2 involve relationships of a minor third, while the "Morning Bell" progression is by a major third (see Figure 4.xvi). In terms of Neo-Riemannian operations, the change from A minor to C-sharp minor is PL (hypothetically, first the A minor is changed to A major through the "P" operation, then from A major to C-sharp minor through the "L" operation).[7] The visceral dissonance of this progression comes from the change back and forth between C-sharp and C-natural. Many of Radiohead's songs use the chromatic mediant option as a kind of driving narrative, or at least a point of interest, but this progression stands out because of the way the minor

[6] Nicole Biamonte discusses the use of such modal gestures in rock music in her essay "Triadic Modal and Pentatonic Patterns in Rock Music," *Music Theory Spectrum,* Vol. 32, No. 2 (Fall, 2010): 95–110.
[7] This is the reverse operation of the quasi-half cadence turnaround in "Knives Out," discussed earlier.

third of the tonic (the C-natural of the A minor chord) changes to C-sharp as C-sharp becomes the root of the new chord. The upper E pedal in the vocal line eases the dissonance of the progression somewhat by bringing focus to the one common tone (see Figure 4.xvi).

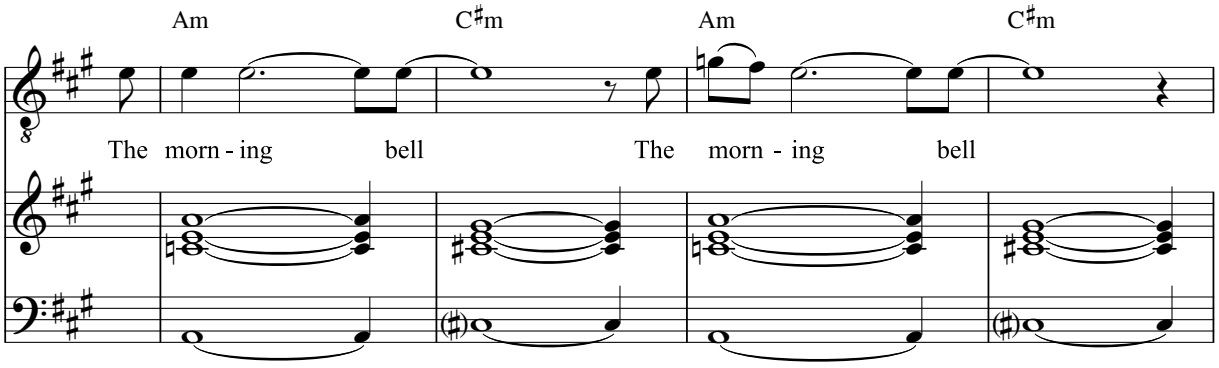

Figure 4.xvi. "Morning Bell" verse.

Somewhat unusually for Radiohead, this chord change is, later on in the song, briefly transposed up a fifth to provide a point of contrast in the bridge (this technique is all too common in tonal classical music, but perhaps due in part to the deprioritization of the dominant-tonic relationship, it is very infrequently used by Radiohead)[8] (see Figure 4.xvii).

[8] Transposition of thematic material up by fourth in rock music dates back to the form of twelve-bar blues, in which the first phrase (in the tonic key) is transposed to the subdominant for the second phrase.

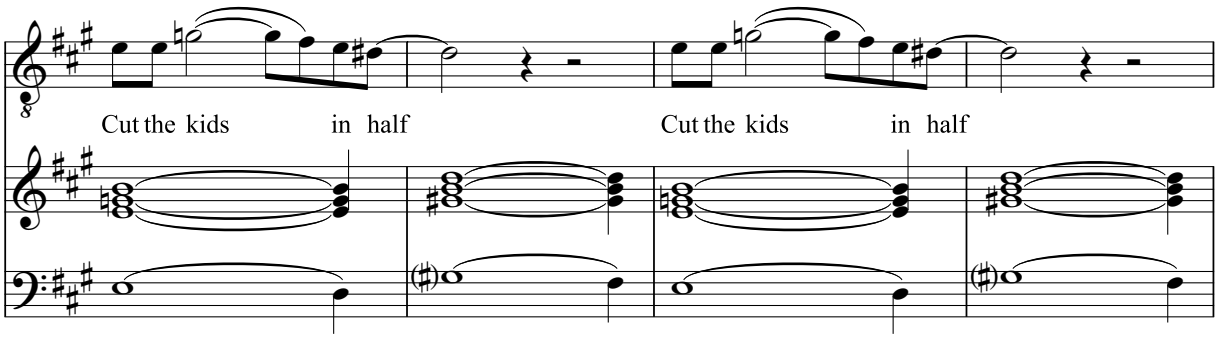

Figure 4.xvii. "Morning Bell" bridge.

The four measures in question are even more theoretically interesting when one considers that the vocal line (namely, its melodic basis of E–G) is so similar to that of the opening, when the chords were untransposed. The pitches that had functioned as scale degrees $\hat{5}$ and flat $\hat{7}$ at the opening of the verse are reinterpreted as scale degrees $\hat{1}$ and flat-$\hat{3}$ over the newly transposed progression in the bridge.

These chord relationships are all still true for the version of the song included on *Amnesiac,* where the meter is changed to a mundane 4/4, the square nature of which seems emphasized by the slow, monotonous quarter notes of the accompaniment. The only metric subdivisions are provided by occasional bass-line passing tones or guitar chords strummed in eighth notes for variety) (see Figure 4.xviii).

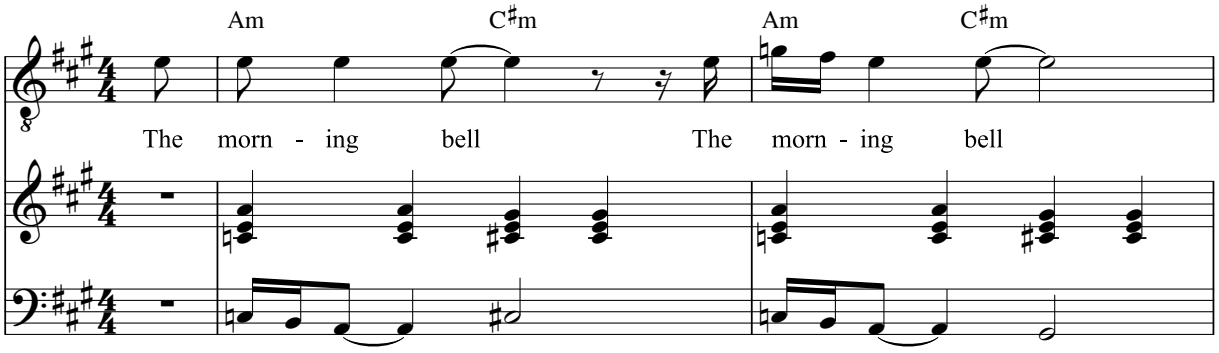

Figure 4.xviii. “Morning Bell/Amnesiac” verse.

“You And Whose Army,” from *Amnesiac,* is written in a mode similar to that of “Karma Police”; although while “Karma Police” is characterized by the recurring suggestion of conventional descending-fifth progressions and the frustration resulting by their absence (because of deceptive cadences and nonfunctional modality), the verse of “You And Whose Army” goes almost all the way around the circle of fifths, from D-sharp to A (see Figure 4.xix). It is not a *diatonic* descending-fifth progression, though, and seems to oscillate between the diatonic landscape of five sharps and four sharps, because A-sharp is used at the head, but every time the end of the phrase is reached it is A major, not A-sharp, and the A major to C-sharp-minor motion functions as a kind of plagal cadence (VI–I).

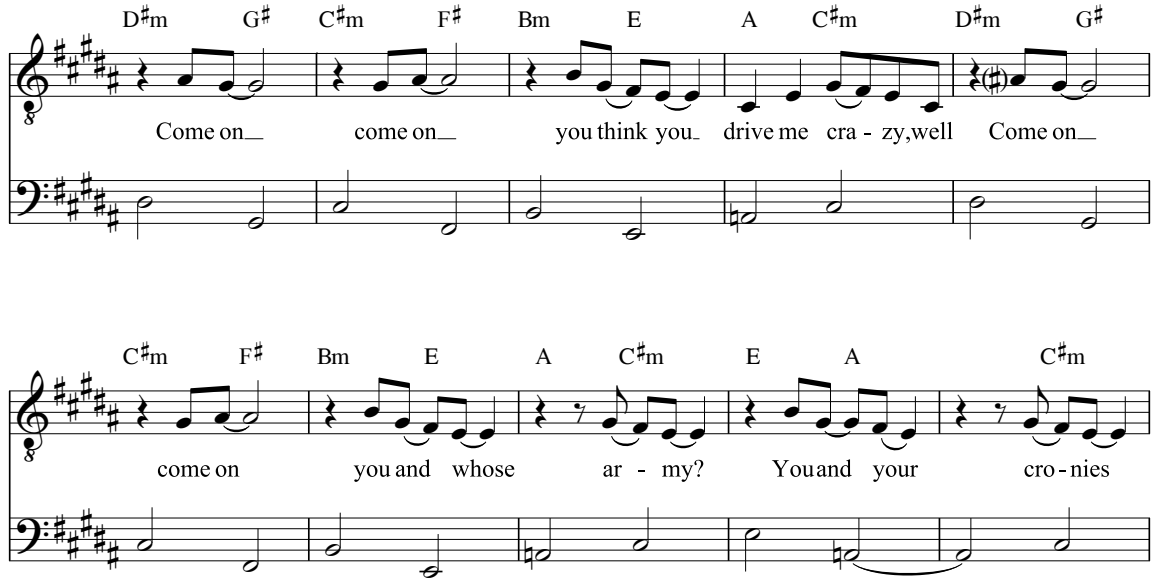

Figure 4.xix

Not all of the harmonic issues on these albums are chromatic. “How To Disappear Completely,” propelled by acoustic-guitar strumming in a moderate compound meter, seems to be a return to naked simplicity after the noise of the preceding tracks (“Everything In Its Right Place,” “Kid A,” and “The National Anthem”); and though the guitar is eventually overwhelmed by screaming ambient chords and instrumental fragments left over from “The National Anthem,” the harmony is completely diatonic, and more modal progressions-by-third are found than tonal progressions-by-fifth. The verse consists only of an oscillation between D major and F-sharp minor, which creates a certain amount of modal ambiguity: the song ends in F-sharp minor, but the hypermetric placement of D major on strong measures makes I–III in D major just as feasible a hearing as VI–I in F-sharp minor.

4.3 Rhythmic and metric events in Radiohead's early 21st-century music

In this subchapter I will again survey the songs from *Kid A, Amnesiac,* and *Hail To The Thief*, looking instead for examples of rhythmic and metric disruption that can be traced back to techniques found on *OK Computer.*

In the previous section I discussed "Everything In Its Right Place" for the ways in which it presented harmonic surprises and challenges. The song is also metrically disruptive, in that its phrases are divided into groups of ten beats in an uneven division: 4+2+4 (refer to Figure4.iv). This division is suggested by the harmonic rhythm of the ten-beat measures: C for four beats, D-flat for two beats, and E-flat for four beats. While possessing internal symmetry, this moderately slow 4+2+4 meter does not foster a sense of metric regularity. When one considers the precedent of Radiohead's use of too-short and too-long measures in songs on *OK Computer,* the meter of "Everything In Its Right Place" sounds like a natural extension of that technique. Instead of appearing once or twice to color a section, here the technique is used to structure an entire song.

In the absence of meter-clarifying percussion, and without any change from the homogenous chord cycles out of which the song is built, "Everything In Its Right Place" maintains the same metric disruption (uneven measures of 10/4) from start to finish, and there are no clues or revelations along the way. *Amnesiac'*s "Pyramid Song," on the other hand, while written in a similar

keyboard-based chromatic idiom, provides the listener with a rare (for Radiohead) metrical mystery that offers clues before relenting and allowing the drum set to enter and reveal the hidden meter (which is still unusual, but at least made clearer by the rhythmic backdrop the drum provides). The durations of the plaintive, plodding piano chords with which the song starts are difficult to parse. There are shorter-held chords and longer-held chords, but the proportional relationship between the short and long chords is not clear, the shorter chords are not even all exactly the same duration, and the distribution of short and long chords does not appear to imply any kind of square meter. The melody helps indicate the starts and endings of the phrases, but it is not particular rhythmic itself, and Yorke's vocal performance is metronomically liberal, further obscuring precise durations and beat placement. As mentioned earlier in this chapter, the chord changes do not occur precisely regularly either, so the harmony offers little more help in perceiving the meter.

When the drums finally do come in, halfway through the song, and Yorke continues with another verse, nothing else about the music has been changed, but it sounds like a new version of the song has begun when the helplessly vague and ametrical impression given by the first half of the track is retroactively compared with the distinct rhythmic framework the drums provide. What the rhythm of the drum set reveals is that the meter is relatively conventional (in four or eight quarters), while the random-seeming chord changes are syncopated and cause tactus confusion. Adding to the confusion, the subdivisions of the drum set are swung eighths, so even two dotted quarter notes in a row are technically of

varying temporal durations (in other words, instead of 1.5 + 1.5, they would sound closer to 1.66 + 1.33).

"Morning Bell" (as it appears on *Kid A*) is, as has already been shown, in the uneven meter of 5/4. These 5/4 measures are not subdivided as 3+2 or 2+3 quarter notes, though, but as 3+3+2+2 eighths, in a particularly jazzy idiom ("Take Five," written by Paul Desmond for the Dave Brubek Quartet, is probably the most famous popular piece in 5/4, and it is subdivided the same way, though with swung eighths). The song is also notable for being *consistently* in 5/4; most of Radiohead's other songs that utilize irregular meter and odd time signatures tend to balance the idiosyncratic measures with stretches of simple meter. Juxtaposition of irregular and simple meters can polarize the perception of both, making the simply metric sections, when present, sound even more definitively "stable," and the irregularly metric sections sound even more unstable by comparison. In "Morning Bell," the asymmetry of the 5/4 measures is enough to keep reminding us the rhythm of the song is unusual, but, like the unusal chromatic chord substitutions and turnarounds that gradually begin to sound normal in other Radiohead's songs, the consistency of the meter here also identifies it as relatively stable.

"2 + 2 = 5," already discussed in terms of its harmony, also uses irregular meter (see Figures 4.ix and 4.x). Most simply notated as 7/4, the subdivisions reveal the meter being more complicated than that. There is not a regular quarter-note tactus; instead, somewhat like "Morning Bell," the measures are divided as four eighths + three eighths + four eighths + three eighths (this is

clearly illustrated in Figure 4.x). Unlike “Morning Bell,” though, this irregular meter is abandoned after the opening section in favor of 4/4, which is maintained for the rest of the second half of the song.

Like “2 + 2 = 5,” “Go To Sleep” (from *Hail To The* Thief) uses mixed meter for the first half of the song before resolving to 4/4 midway through, and remains in simple meter until the fadeout (giving both songs a strong sense of bipartite form, and the first parts of each song a synecdochical relationship with the whole for being of mixed nature). The first half, which does contain mixed meter, is made up of a consistently repeating pattern of one 4/4 measure followed by two 6/8 measures (see Figure 4.xx).

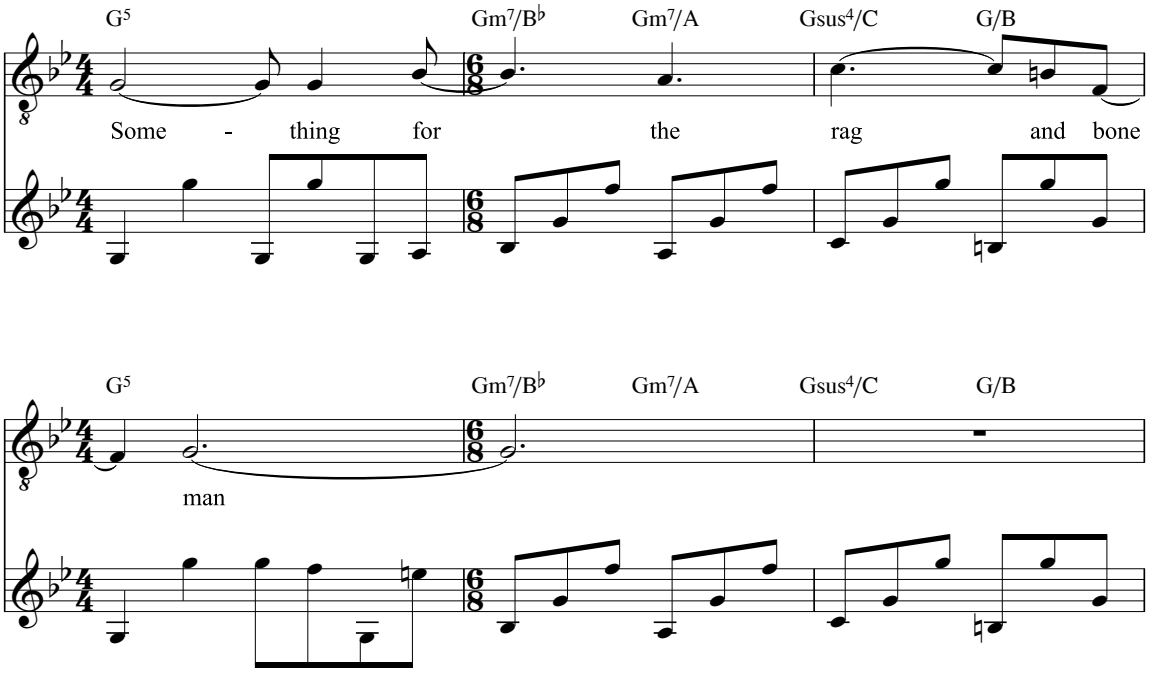

Figure 4.xx. “Go To Sleep” verse.

"In Limbo," already mentioned for its confusing harmonic progressions, is metrically unsettling as well. The intro and chorus are both in 6/4 (with triplet subdivisions), while the verse is in 4/4, creating the need for a hypermetric adjustment when one section leads to the other. In this song, though, the changing meter is hardly noticeable amidst the meandering arpeggiation of nonfunctional triads. The instruments do not provide a strong sense of hypermeter, and on top of that the vocal part in the verse is syncopated, landing on the offbeats, distancing itself from whatever the rhythm or meter of the accompaniment may be (recall Figure 4.ii).

Similar examples of songs in which the beat is maintained but the number of beats-per-measure fluctuates include "I Might Be Wrong" (from *Amnesiac*) and "Sail To The Moon" (from *Hail To The Thief*). In the chorus of "I Might Be Wrong" (see Figure 4.xxi), the 4/4 that dominates the rest of the song is interrupted twice by measures of 2/4, creating an effect like that found in the verse of "Paranoid Android" and the bridge of "Exit Music (For A Film)," discussed in Chapter 2. Oddly, the two 2/4 measures do not occur at corresponding hypermetric positions in the twelve-measure chorus: the last measure of the first four-measure phrase is 2/4, the second measure of the next four-measure phrase is 2/4, and then the rest of the song returns to 4/4. The meter in "Sail To The Moon" is extremely inconsistent, maintaining a steady quarter-note pulse but adjusting the number of beats-per-measure with no easily discernible pattern.

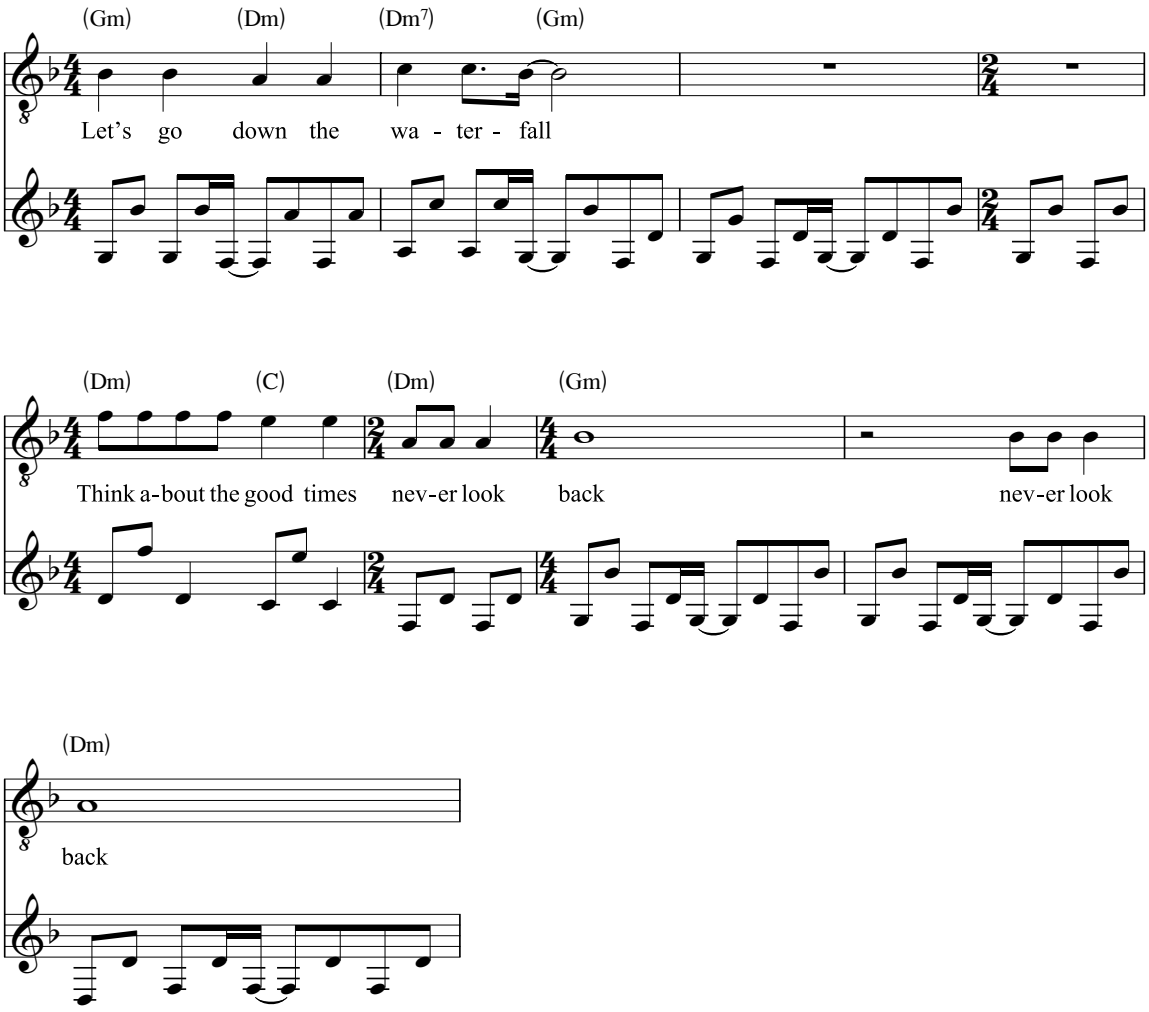

Figure 4.xxi. "I Might Be Wrong" chorus.

"Knives Out" stays consistently in a simple 4/4, but the verse contains an example of the kind of "wrong-beat hypermeter" originally isolated in "Paranoid Android." The verse (cited previously as Figure 4.xi) can be divided up into two subphrases ("I want you to know" and "he's not coming back"). Based on the melody and harmony, it would be reasonable to expect that the two subphrases would be four measures each, creating a conventionally symmetrical antecedent-

consequent phrase group. The antecedent phrase has an extra measure at the end, once again tripping up the listener, for a total of five measures, and then the consequent has *two* extra measures at the end, for a total of six measures. In both cases, the goal harmony is reached (A-flat major seventh in the antecedent and C-sharp diminished/E minor in the consequent), and instead of moving forward just lingers a little bit too long, like a broken record, forcing the listener to dwell in the harmony a measure or two more, making the eventual change a surprising event (which it would not have been in the absence of the extra measures).

In *Hail To The Thief*'s "Myxomatosis," a 4/4 meter is constant through the whole song, but the melody and lead guitar part are so syncopated that, even with consistent meter, there is an ongoing sense of metric dissonance and feeling out of place (see Figure 4.xxii).

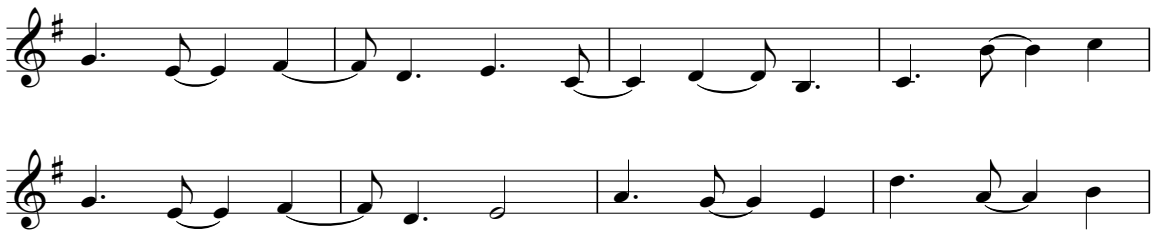

Figure 4.xxii. "Myxomatosis" intro.

On the other hand, "Treefingers" (from *Kid A*), and "Pulk/Pull Revolving Doors" and "Hunting Bears" (from *Amnesiac*) are rhythmically problematic for

how little perceivable rhythm they contain at all. “Treefingers” in particular is so slow that any tactus is barely perceivable; electronic pedal tones appear and disappear arbitrarily, and it is extremely difficult to infer any kind of narrative arc or internal motivation within the music. These tracks can be heard as descendants of the experimentalism of “Fitter Happier,” but drawing that comparison only shows that the breadth of experimentation in which the band delves has only grown. We can trace stylistic categories from one album to the next, but just as all of the other songs mentioned in this chapter expand on the trends from which they originate (namely the harmonic and rhythmic disruptive events that so characterize *OK Computer*), “Treefingers” is not *just* “*Kid A*’s ‘Fitter Happier,’” but in fact represents another step in Radiohead’s progressive artistic evolution that, fortunately for us, still continues.

4.4 Conclusion: Changes in the later albums

The sound of *Kid A* is so strikingly different from Radiohead’s earlier work that it is easy to see it as the seminal album of a new, experimental phase. I have shown, though, that most of the ways in which *Kid A, Amnesiac,* and *Hail To The Thief* sound “new,” experimental, and disruptive can be traced to techniques used on *OK Computer,* and some even as early as *Pablo Honey* and *The Bends.* All of the techniques enumerated in Chapter 2.4 can be found in Radiohead’s later albums. The principal difference between *OK Computer* and *Kid A* is that

the former still relies heavily on conventional rock idioms of harmony, form, and timbre for song organization (this actually helps us notice the idiosyncrasies that appear in contrast with the idiomatic music), while the latter uses the idiosyncrasy of *OK Computer* as its point of departure (as *OK Computer* used the more mainstream *The Bends*); there is little mainstream music left in the result. Radiohead's 21st-century music tends to be fundamentally structured around disruptive elements (like irregular meter, unusual timbres, and functionless chord progressions), rather than including such techniques in otherwise familiar contexts.

As I mentioned before, one of the most significant changes in Radiohead's songwriting in the 21st century is an increasingly extensive use of musical minimalism (in their harmonic progressions, melodies, rhythm, and timbre). The inherent repetition in this reliance on musical minimalism, however, helps "teach" the listener Radiohead's idiosyncratic idiom through rote and assertion (since the disruption is less frequently identifiable by a framework of normalcy). The hypnotic repetition of their more minimalist music also contributes to the sense of distance they put between the songs and the listener through the use of disruptive techniques and irony. While the specific techniques that color their music may change from album to album, Radiohead continues to maintain an air of difficulty, nonconformity, and ironic distance in their progressive musical output.

Chapter 5.

Concluding Remarks

5.1 Next steps

As I have stressed, my greatest hope for this research is to further develop it into a full method or syllabus for rock music analysis (aimed towards less-educated theorists rather than graduate students or theory majors). But I also believe that the analytical approach I have taken could be a model easily applicable to a wide variety of subjects: other rock and pop musicians, and even classical music.

In terms of further analytical work on the music of Radiohead, there are many aspects of their music that I have short-changed, or even completely neglected, in my analysis, but the study of which could readily be built on the conclusions I have drawn in the context of my focus here. In prioritizing matters of harmony and rhythm, for example, I have spent very little time discussing timbre and production, which are two of the most important aspects of rock music to consider. Parallel tracks could be drawn, though, between the progression of Radiohead's musical (that is, harmonic and rhythmic) challenges and the

progression of their experimentation and postmodern commentary with timbre, instrumentation, electronics, and production techniques.

Similarly, by focusing on surface-level connections between musical events and their immediate salience, I have not provided a thorough and direct discussion of form and background relationships (I have in fact discouraged attention to background relationships and large-scale development for the purposes of my approach). That is not to say, however, that there are not significant discoveries and arguments to be made in the study of background relationships, and especially in form; as previously mentioned, the form of "Paranoid Android" might be its most striking feature.

Another potential use of Grounded theory, besides my appropriation of it as a formative influence for this project, would be to go back a step further than I have, and actually interview listening subjects to gather a variety of responses to, say, *OK Computer*, and from there continue to the categorization of emergent topics (this use would directly address the potential problem in my approach as to whether the borders of expectations one has set for one's self are "accurate enough"). Grounded theory was meant to be based in discourse analysis, and while that would certainly be possible in the classroom, another (perhaps more authentic) approach for similar research would be to conduct interviews with actual listeners and conduct a broader study of various audiences to determine expectations and idiosyncrasies.

Since the time I began this project, the growth of new rock music scholarship has been exponential. I hope my work both contributes to the collective value of the field, and offers others a resource to which to react or upon which to build, in the ways I have suggested here or otherwise.

5.2 Postscript: "If You Think It's Over Then You're Wrong"

In listening to the lyrics of "You," the first track of *Pablo Honey,* and "Separator," the last track on *The King of Limbs,* one can detect a pleasing bit of textual symmetry. In "You," Yorke sings "It's like the world is gonna end so soon, and why should I believe myself?" (excerpt provided as Figure 5.i).

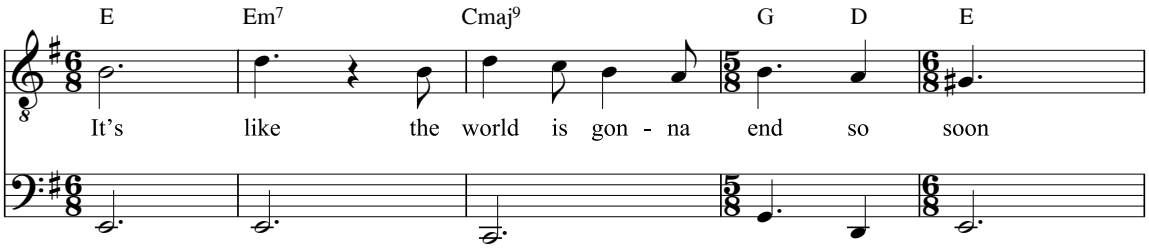

Figure 5.i. "You" verse.

Whether nihilistic or apocalyptic, the tone is clearly rather dark, not to mention indulgently self-pitying (or at least self-doubting), dwelling on a sense of

impending doom and the end of the world. The emotional self-indulgence, of course, matches the tone of “Creep,” the emblematic bitter-adolescent single that so popularized the 1993 record and, by extension, the band.

In contrast, there is a line in the middle of “Separator” where Yorke (layered over his own vocals) dreamily sings, “If you think it’s over, then you’re wrong” (the melody is, by coincidence, remarkably similar in contour to that of the previous example) (see Figure 5.ii):

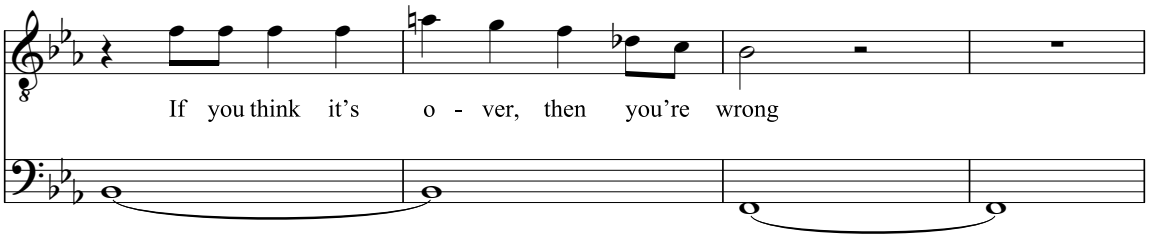

Figure 5.ii “Separator” refrain-like tag/pre-chorus.

Read in dialogue with each other, these lines seem to underline the shift in tone and perspective the band has undergone over the course of their now over-two-decades-long career. A change in the tone of lyrics goes hand in hand with a change in the tone of music; in both cases Radiohead has evolved from writing humanistic songs that wallow in self-centered emotion (and sound more musically derivative and less challenging) to becoming more detached personally and intricate, ironic, and inventive musically.

Most, if not all, of the musical issues I've discussed could have easily been isolated using only conventional tonal analysis (from which I have still borrowed a great deal), with the use of roman numerals and voice-leading graphs and such, but my general approach of measuring the musical object against an organically proposed set of normative expectations seems fitting for the music of a band that seems for whatever reason characterized by eccentricity; it helps clarify why certain events sound as momentous or disruptive as they do, and supports the position that such disruptive events are significant characteristics of Radiohead's style. This is not to mention that their music is simply not born from a classical musical education, so direct application of classical musical analysis is arguably inappropriate.

Additionally, though, in bypassing the great depth of classical-music theory and the magnificent but esoteric legacy of classical-music theorists, and arriving at the musical problems only by way of a rudimentary understanding of theoretical concepts and a vague set of broad expectations, like those I outlined earlier, this kind of analysis can prove to be a rewarding alternative to standard music theory analysis in the classroom. It can be impractical, with a room full of non-music majors, or inexperienced theorists, to engage in the precepts of traditionally taught tonal theory, sometimes even to a very minimal degree.

I hope to show with this approach, however, that a great deal of analytical problems can be isolated with only basic–intermediate levels of theory concepts in play (essentially confined to the identification of scales, chord roots and qualities, and meter), while at the same time contributing to the construction of a

theory built specifically for a genre of music that lacks one as unified and comprehensive as that we apply to music of the common practice.[1]

Furthermore, we as music analysts and educators should be just as progressive, flexible, and innovative as the fascinatingly progressive music we are inclined to study. Spending time listening to and examining music as variable and idiosyncratic as Radiohead's (on the surface level of the notes and words of their songs as well as on the level of their career-long artistic evolution) should provide us with enough evidence to prove that we should always be ready to change our analytical perspectives, and to adapt to new music and new ways of thinking and talking about it, *especially* for the benefit of our students and future generations of musicians. If we ever think it's over, we'll be wrong.

[1] For that matter, the genre is so broad that such a unified approach might be implausible; I am simply campaigning for the development of analytical methods in rock music that are suitable for application to a wide range of aspects of a wide range of songs.

Appendix

Radiohead Discography and Videography

Studio Albums

Pablo Honey EMI, 1993

1	“You”	3:29
2	“Creep”	3:56
3	“How Do You?”	2:12
4	“Stop Whispering”	5:26
5	“Thinking About You”	2:41
6	“Anyone Can Play Guitar”	3:38
7	“Ripcord”	3:10
8	“Vegetable”	3:13
9	“Prove Yourself”	2:25
10	“I Can’t”	4:13
11	“Lurgee”	3:08
12	“Blow Out”	4:40

The Bends EMI, 1995

1	“Planet Telex”	3:29
2	“The Bends”	3:56
3	“High And Dry”	2:12
4	“Fake Plastic Trees”	5:26
5	“Bones”	2:41
6	“(Nice Dream)”	3:38
7	“Just”	3:10
8	“My Iron Lung”	3:13
9	“Bullet Proof…I Wish I Was”	2:25
10	“Black Star”	4:13
11	“Sulk”	3:08
12	“Street Spirit (Fade Out)”	4:40

OK Computer EMI, 1997

1	“Airbag”	4:44
2	“Paranoid Android”	6:23
3	“Subterranean Homesick Alien”	4:27
4	“Exit Music (For A Film)”	4:24
5	“Let Down”	4:59
6	“Karma Police”	4:21
7	“Fitter Happier”	1:57
8	“Electioneering”	3:50
9	“Climbing Up The Walls”	4:45
10	“No Surprises”	3:48
11	“Lucky”	4:19
12	“The Tourist”	5:24

Kid A EMI, 2000

1	“Everything In Its Right Place”	4:11
2	“Kid A”	4:44
3	“The National Anthem”	5:51
4	“How To Disappear Completely”	5:56
5	“Treefingers”	3:42
6	“Optimistic”	5:15
7	“In Limbo”	3:31
8	“Idioteque”	5:09
9	“Morning Bell”	4:35
10	“Motion Picture Soundtrack”	6:59

Amnesiac EMI, 2001

1	“Packt Like Sardines In A Crushd Tin Box”	4:00
2	“Pyramid Song”	4:49
3	“Pulk/Pull Revolving Doors”	4:07
4	“You And Whose Army?”	3:11
5	“I Might Be Wrong”	4:54
6	“Knives Out”	4:15
7	“Morning Bell/Amnesiac”	3:14
8	“Dollars And Cents”	4:52
9	“Hunting Bears”	2:01
10	“Like Spinning Plates”	3:57
11	“Life In A Glasshouse”	4:34

Hail To The Thief EMI, 2003

1	“2 + 2 = 5 (The Lukewarm)”	3:19
2	“Sit Down. Stand Up (Snakes and Ladders)”	4:19
3	“Sail To The Moon (Brush The Cobwebs Out Of The Sky)”	4:18
4	“Backdrifts (Honeymoon Is Over)”	5:22
5	“Go To Sleep (Little Man Being Erased)”	3:21
6	“Where I End And You Begin (The Sky Is Falling In)”	4:29
7	“We Suck Young Blood (Your Time Is Up)”	4:56
8	“The Gloaming (Softly Open Our Mouths In The Cold)”	3:32
9	“There There (The Boney King Of Nowhere)”	5:23
10	“I Will (No Man’s Land)”	1:59
11	“A Punchup At A Wedding (No No No No No No No No)”	4:57
12	“Myxamatosis (Judge, Jury & Executioner)”	3:52
13	“Scatterbrain (As Dead As Leaves)”	3:21
14	“A Wolf At The Door (It Girl. Rag Doll)”	3:23

In Rainbows Self-released, 2007

1	“15 Step”	3:58
2	“Bodysnatchers”	4:02
3	“Nude”	4:15
4	“Weird Fishes/Arpeggi”	5:18
5	“All I Need”	3:48
6	“Faust Arp”	2:09
7	“Reckoner”	4:50
8	“House Of Cards”	5:28
9	“Jigsaw Falling Into Place”	4:09
10	“Videotape”	4:42

The King Of Limbs Self-released, 2011

1	“Bloom”	5:15
2	“Morning Mr Magpie”	4:41
3	“Little By Little”	4:27
4	“Feral”	3:13
5	“Lotus Flower”	5:01
6	“Codex”	4:47
7	“Give Up The Ghost”	4:50
8	“Separator”	5:20

Extended Plays

Drill Parlophone, 1992

1	“Prove Yourself”	2:32
2	“Stupid Car”	2:21
3	“You”	3:22
4	“Thinking About You”	2:17

Itch EMI, 1994

1	“Stop Whispering” (US version)	4:13
2	“Thinking About You” (*Drill* version)	2:17
3	“Faithless, The Wonder Boy”	4:09
4	“Banana Co.” (acoustic)	2:27
5	“Killer Cars” (live)	2:17
6	“Vegetable” (live)	3:12
7	“You” (live)	3:38
8	“Creep” (acoustic	4:19

My Iron Lung Parlophone, 1994

1	“My Iron Lung”	4:36
2	“The Trickster”	4:40
3	“Lewis (Mistreated)”	3:19
4	“Punchdrunk Lovesick Singalong”	4:40
5	“Permanent Daylight”	2:48
6	“Lozenge Of Love”	2:16
7	“You Never Wash Up After Yourself”	1:44
8	“Creep” (acoustic)	4:19

No Surprises / Running From Demons Parlophone, 1997

1	“No Surprises”	3:49
2	“Pearly” (Remix)	3:38
3	“Melatonin”	2:08
4	“Meeting In The Aisle”	3:07
5	“Bishop’s Robes”	3:23
6	“A Reminder”	3:51

Airbag / How Am I Driving? Capitol, 1998

1	“Airbag”	4:46
2	“Pearly”	3:33
3	“Meeting In The Aisle”	3:09
4	“A Reminder”	3:51
5	“Polyethylene [Parts 1 & 2]	4:22
6	“Melatonin”	2:09
7	“Palo Alto”	3:43

I Might Be Wrong: Live Recordings Parlophone, 2001

1	“The National Anthem”	4:57
2	“I Might Be Wrong”	4:52
3	“Morning Bell”	4:14
4	“Like Spinning Plates”	3:47
5	“Idioteque”	4:24
6	“Everything In Its Right Place”	7:42
7	“Dollars And Cents”	5:13
8	“True Love Waits”	5:02

COM LAG (2plus2isfive) Toshiba-EMI, 2004

1	“2 + 2 = 5” (live)	3:34
2	“Remyxomatosis (Cristian Vogel Remix)”	5:08
3	“I Will” (Los Angeles version)	2:13
4	“Paperbag Writer”	3:58
5	“I Am A Wicked Child”	3:05
6	“I Am Citizen Insane”	3:32
7	“Sktterbrain” (Four Tet Remix)	4:26
8	“Gagging Order”	3:35
9	“Fog (Again)” (live)	2:19
10	“Where Bluebirds Fly”	4:23

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7 Television Commercials. DVD. Directed by Magnus Carlsson, Jonathan Glazer, Grant Gee, Jamie Thraves, Paul Cunningham, and Jake Scott. 1998; London, UK: EMI, 2003.

Meeting People Is Easy. DVD. Directed by Grant Gee. 1998; London, UK: EMI, 2000.

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