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Dorian Mode: An Examination of Its Usage and Context In Film Music

By Sean Goldman

There are a number of common scales and pitch sets that composers have been drawn toward for any number of reasons. At their most basic level, the major scale is accepted to signify happiness, and the minor scale sadness.¹ However, there are a number of popular church modes outside of Ionian and Aeolian (major scale and natural minor scale) that also have a high degree of prominence in society and, as a result, film music.

Film music is unique because it is written to elicit very specific emotional reactions from the listener at a certain time. Eliciting these emotions is done using carefully chosen instrument combinations, tempi and, of course, pitch collections or scales. This paper is an examination of the use of one of these pitch collections that is not as understood in its modern context the way we have come to understand Ionian and Aeolian. A study of Dorian in its different film music and social contexts has taken place, alongside an identification of why it works so effectively in a large range of situations. A look at the historical usages of Dorian will be undergone, as well as famous examples of the mode, after which an analysis of its use in specific film cues will synthesize the scope of the paper.

It is the goal of the paper to identify the aspects of Dorian that allow for its frequent and effective use. Since the practice of music notation, the pitch set currently understood as Dorian has been used as a prominent scale with a wide range of usages.

¹ Ramos, D., J.L.O. Bueno, and E. Bigand. "Manipulating Greek musical modes and tempo affects perceived musical emotion in musicians and nonmusicians." *Brazilian Journal of Medical and Biological Research* 44, no. 2 (December 22, 2010).

Ultimately, the underlying thesis indicates that the Dorian church mode's large range of affective qualities and general versatility is the product of its underlying inherent neutrality.

Chapter 1: Dorian, Past and Present

Before there was equal temperament, before there was the major scale, before there was light on earth, there was Dorian. Dorian was the so-called “go-to” scale of the first documenters of notated music². Notated Gregorian chant employs our understanding of Dorian as their first “natural scale”- what we would now consider Ionian to be. Another means of reference to Dorian in this context is as the first “authentic mode.” Just as Western notation would now begin on C and consider each consecutive eight-note section a new mode, the practitioners of plainchant and Gregorian modes considered Dorian the beginning and end point of their primal scalar system. Slightly different rules in note treatment applied, but the basic principle still dictates that the note collection that roughly equates to our Western understanding of D to the next octave D on the white keys corresponds to the heart of ancient tonal systems.³ See figure 1.0 for the complete collection of commonly accepted church modes of this system. The late eighth century saw this development solidified and did not change until 1547 when Ionian and Aeolian

² Powers, Harold S. *The New Grove Dictionary of Music and Musicians*. 2nd ed. London: Macmillan Publishers, 2001.

³ Powers, Harold S. "Authentic Mode." In *The New Grove Dictionary of Music and Musicians*. 2nd ed. London: Macmillan Publishers, 2001.

were added and later took prominence.⁴ The concept of modes was applied in this period, in which one pitch collection exists and a different scale is identified based on the chosen pitch that is being focused on within the collection. However, the reference scale was Dorian, and contexts advocating for its continued prominence within music are evident and will be explored. General practice leading into the Baroque-era dictates the use of a key signature indicating Dorian mode even when the piece clearly makes use of the flat-six scale degree. This can be seen in figure 1.1 with J.S. Bach's Toccata and Fugue in D minor, BWV 538. The piece is clearly in D minor because of its Bb accidentals, however it is written as if it is original in D Dorian because of this omission in the key signature. This practice was a default until later when our current understanding of keys became more stubborn.

Figure 1.0 displays eight musical scales arranged in two rows of four. Each scale is written on a single staff with a treble clef and a common time signature. The scales are labeled as follows: Row 1: 1. Dorian (starting on C, with a flat on B and an asterisk on F), 3. Phrygian (starting on C, with a flat on B), 5. Lydian (starting on C, with an asterisk on F), 7. Mixolydian (starting on C, with a flat on B). Row 2: 2. Hypodorian (starting on C, with an asterisk on F and a flat on B), 4. Hypophrygian (starting on C, with a flat on B), 6. Hypolydian (starting on C, with a flat on B and an asterisk on F), 8. Hypomixolydian (starting on C, with a flat on B). The letter 'f' indicates the starting pitch, and '*' indicates a specific alteration.

* Under certain conditions, the B is flatted in modes 1, 2, 5, and 6.

Figure 1.0

Figure 1.1

Figure 1.1 is a musical score for 'Toccata and Fugue in D Minor (Dorian) BWV 538' by J.S. Bach. The score is for organ and is divided into two systems. The first system is labeled 'Oberwerk' and the second system is labeled 'Pedal'. Each system has a treble clef and a bass clef. The music is in common time and features complex rhythmic patterns and accidentals. The title and composer information are centered above the first system.

This illuminates the idea of Dorian as somewhat of a tonality starting point before things began advancing further into a wider variety of socially accepted sonorities.

However, even to the present day Dorian has a significant role in music. In a study published in the *Brazilian Journal of Medical and Biological Research* in 2010⁵, a group of participants were asked to listen to all of the basic church modes- Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian and Locrian- in a variety of different speeds within the context of specific composed songs for the purposes of the study. This was in an attempt for the researchers to gauge any universal emotional reactions to the modes at varying tempi. Figures 1.2 and 1.3 show the results of the study graphed using the x-axis as a representation of emotional strength, and the y-axis as representation for arousal, in this case meaning the degree of which the listener was excited and interested in the music.

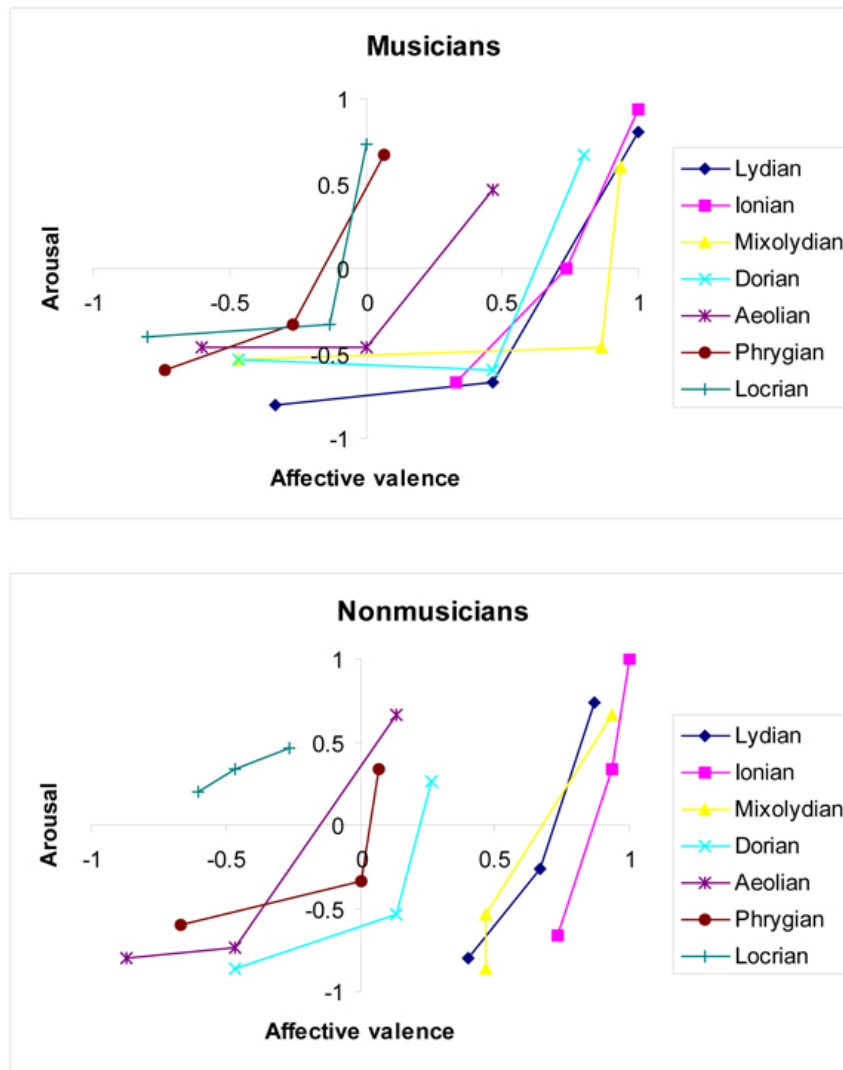
This study, as expected, saw Ionian and Lydian as the most cheerful scales and Locrian as the most distasteful. This can be seen as predictable because Ionian is the scale that society uses to associate something with cheerfulness.⁶ It is used in the Happy Birthday song, For He's A Jolly Good Fellow, and a great deal of others. Lydian extends

⁵ Ramos, D., J.L.O. Bueno, and E. Bigand. "Manipulating Greek musical modes and tempo affects perceived musical emotion in musicians and nonmusicians." *Brazilian Journal of Medical and Biological Research* 44, no. 2 (December 22, 2010).

⁶ Hevner, Kate. "The Affective Character of the Major and Minor Modes in Music." *The American Journal of Psychology* 47, no. 1 (January 1935): 103-18. Accessed April 24, 2017.

beyond Ionian in cheerfulness because it contains an extra resolution stemming from the semitone movement from the sharp-four scale degree to the fifth. In the process of altering church modes to become consecutively brighter, Lydian is the final one before it restarts the modal cycle (returning to Locrian and working around back to Lydian).

Figures 1.2-1.3



Important to the parameters of this paper is another constant seen in this study which shows that the quality of Dorian in either tempo variation was perceived as the

most emotionally neutral of all the scales in question. Just as a quick historical survey leads us to believe: Dorian is a baseline for society's musical ear. It can be hypothesized that this neutrality comes from the contrasting qualities of its two pentachords: the first five notes being minor, and the final five being major. The characteristic natural-six scale degree is much less severe than the flat-six that defines the natural minor scale, along with other darker sonorities such as the harmonic minor scale or the Phrygian and Locrian modes. The study aptly points out: "In the Dorian mode, the interval is a major 6th, and in the Aeolian mode, a minor 6th. This single difference in interval sufficed to modulate the valence value of the emotion associated with these modes."⁷

This mix of Dorian's characteristic pentachords results in a pitch collection that has both elevating major qualities and depressing minor qualities. The study also confirms the common belief applied to Western tonal music that, "[...]minor modes are associated with emotions of greater negative valence than major modes[...]"⁸ Dorian's minor and major pentachords in concert with each other invariably create the neutral scale that film composers have learned can fit into many different, and contrasting, contexts whose characters are defined by tempo and orchestration far more than the note choices themselves. An in-depth look at the specifics behind these contrasting pentachords will be undergone in a later chapter, after a number of examples have been analyzed.

⁷ Ibid.

⁸ Ibid.

Chapter 2: Famous Film Examples Of Dorian Usage

In this next chapter, Dorian's versatility will be clearly shown given the types of contrasting musical examples and the range of emotions it is able to conjure based only on how the same template of notes has been different coloured. This conventional combination of tones and semitones should then be seen as a blank canvas, manipulated after the fact to represent the composer's wishes. The unique ability of Dorian is to not arise any specific association independent of orchestration and tempo, whereas the Phrygian mode, for example, draws on certain associations and affectations, particular with its sonorous link to death.⁹ The following chapter will explore the different palate of colours used on the tonally white backdrop of Dorian.

A highly consistent and effective example of Dorian's use in a film score comes from Thomas Newman's music for the film *American Beauty*. A large numbers of cues in this movie are in the mode of Dorian, not the least of which is the opening cue of the movie, "Dead Already" and the title theme, "American Beauty." Both of these cues merely oscillate between the i chord and the IV chord (uncapitalized roman numerals indicate a minor chord, whereas capitalized indicate major). This chord progression is the epitome of Dorian; it is the bare bones of the mode's most characteristic qualities, effectively changing between the triads in the pentachords that define it. The proceeding

⁹ Kimmel, William. "The Phrygian Inflection and the Appearances of Death in Music." *College Music Symposium* 20, no. 2 (1980): 42-76.

chapter will discuss the stark contrast between cues such as these, despite their identical- or near-identical- harmonic characteristics.

Figures 2.0-2.1

Dead Already, American Beauty

Marimba

American Beauty, American Beauty

Piano

The image shows two musical excerpts. The first is for Marimba, in 4/4 time, featuring a sequence of chords: F major, C major, F major, C major, F major, C major, F major, C major. The second is for Piano, in 3/4 time, featuring a sequence of chords: F major, C major, F major, C major, F major, C major, F major, C major.

Another well-known example of Dorian comes from the title theme of *The Good, Bad and the Ugly*, composed by Ennio Morricone. The Dorian progression is most prominent in the B section with a quick movement back and forth between *i* and *IV* led by the guitar melody. Already, this accomplishes a very different feeling from Newman's *American Beauty* score, and yet the harmonic devices used are functioning in parallel.

Figure 2.3

The Good, Bad and the Ugly Theme

The image shows a musical excerpt for 'The Good, Bad and the Ugly Theme' in 4/4 time. The melody is written on a treble clef staff. Below the staff, the chord progression is indicated: Dm, G, Dm, C, Dm, C.

There are also some prominent uses of Dorian in Alexandré Desplat's work, most

notably *The Curious Case Of Benjamin Button*. In the cue “Sunrise On Lake Pontchartrain” prominent uses of the mode come to light. Again, accomplishing very different emotional results from Newman or Morricone’s scores. The most notable characteristic of this cue is the oscillation in an out of Dorian and how each mode effects the listener in different ways and, by that design, accomplishes different things while always contributing to the end result of the complete sequence.

In stark contrast, John Powell’s score for *How To Train Your Dragon* makes distinct use of Dorian in three cues: “This Is Berk,” “The Downed Dragon” and “New Tail.” Again, the orchestration and tempi are the defining characteristics of these cues and only use Dorian as a means to an end. Much like the quirkiness of Danny Elfman’s Dorian use in the title theme of *Alice In Wonderland*, the harmonic language’s lenient and suggestible character lends itself well to an open palate of feelings and personalities.

Chapter 3: Cue Analyses

A careful examination of cues in the context of their movies will now demonstrate how sequences are made effective with the use of the Dorian mode. The first study will be *American Beauty*, beginning first with the opening sequence. Its extremely prominent Dorian usage sets the harmonic tone for the entire rest of the movie and indicates a

certain character associated with the cue through not only harmony, but-as discussed-also through variance in instrumentations and tempo.

To begin with, the fact that the cue is up-tempo recalls elements of band jams like Santana's Oye Como Va or Mark Ronson's Uptown Funk¹⁰. Dorian is a staple of these types of songs¹¹ and they are immediately called to mind with a quick oscillation of Dorian's two distinguishing chords. This coupled with the unusual and sparse instrumentation of solo marimba outlining this chord progression gives the cue a degree of lightheartedness and humour. The neutrality of Dorian is seen here in the ability to take two elements out of their familiar contexts and create an effective cue once put on a Dorian template. Two simple chords without a highly definitive character give rise to this phenomenon, with this mode as the meeting point.

To truly appreciate Dorian's effect, however, one must superimpose the flat-six scale degree where the natural-six occurs and recognize the stark differences that appear. Dorian already has a degree of tension that comes inherent in any minor mode simply because it is not major.¹² However, the natural-six relieves some of the tension that becomes sinister in Aeolian.¹³ In this opening sequence, the mix of humour in tempo and orchestration and tension mixed with harmonic lightheartedness give the impression that something is wrong, but nothing is *too* wrong. The opening shot overlooks a quaint

¹⁰ Heavily repeating the characteristic i-IV chord progression throughout the songs.

¹¹ Einhorn, Peter. *Introducing: The Dorian Mode: The Guitarist's Guide to Improvising*. Alfred Music, 1993.

¹² Hevner, Kate. "Experimental Studies of the Elements of Expression in Music." *The American Journal of Psychology* 48, no. 2 (1936): 246-68.

¹³ Ramos, D., J.L.O. Bueno, and E. Bigand. "Manipulating Greek musical modes and tempo affects perceived musical emotion in musicians and nonmusicians." *Brazilian Journal of Medical and Biological Research* 44, no. 2 (December 22, 2010).

suburban landscape while Kevin Spacey's stoic voice speaks through the sequence. It is quite clear his character is not happy, but he still makes dark jokes with the audience in between sad opinions about his life. The accompanying soundtrack works in perfect harmony with this idea, subconsciously explaining to the listener what Kevin Spacey is consciously implying in partnership with the tone and pace of the cinematography: this is sad, but it is also funny. It is important to note that Dorian compliments this feeling through the exposition of its pentachords, depressing the listener and then subsequently uplifting them. In conjunction with everything else, this can only be interpreted as humour.

The second sequence from *American Beauty* to be examined is the famous scene of the videotaped plastic bag blowing in the wind. A synthesizer drone begins the cue as the root and fifth of the key moments after the viewer sees the plastic bag. After it fades in, it takes another few seconds before the piano enters, clearly outlining a Dorian passage, this time approaching natural-six from the flat-seven degree, rather than from the fifth like the last cue. The synthesizer drone in fifths creates a feeling of stillness as the two characters sit silently watching the video, but the piano creates a serene movement in the piece that gives the windswept plastic bag elegance to its restlessness. It is truly the piano line that creates the illusion of dancing in this bag sequence, as one of the characters explains it. The entire cue is in the key of Dorian, sitting in a single tonal framework and only the piano moving to outline the two contrasting pentachords of the mode. The underlying point to be made, and most important, is that all of this is done strictly using the Dorian mode. This amount of stillness would be difficult in a mode with more tension (namely Aeolian with its extra flatted scale degree), and yet this is the same

harmonic field that was able to so effectively communicate dark humour and quirkiness at the beginning of the film. Different tempi and orchestration would not be enough to create such a deep contrast had this been a mode with less neutrality, but Dorian lends itself to be used in these different ways. In the case of *American Beauty*, the consistent use of Dorian creates a sense of homogeneity in the score, despite the contrasting characters. This can even be taken to mean that Dorian acts as a single character of the film, merely experiencing various emotions.

It will be noted that the same cue is used at a later point in the movie at 1 hour, 9 minutes and 30 seconds for another intimate scene between the same two characters who viewed the videotaped plastic bag. Just as the marimba cue signifies the quirkiness of the setting and characters, so does the slow, ambient piano cue draw associations to the intimacy between the two characters and the beauty of existence that was pointed out during the first use of this cue. Connecting the two scenes through the same music draws parallels in feeling and thus leads the viewer to feel similarly to the first cue by recalling the original context of the music.

At 10 minutes and 53 seconds, Dorian enters for the second time in the film in an unrelated cue accomplishing an independent emotional task. The music enters when the protagonist's real estate wife opens the doors to a run down house she is going to clean and attempt to sell at an open house that day. The cue begins as she opens the doors with confidence and determination, and it largely acts as cleaning music while she goes about her chores. The quirkiness of the rhythmic marimba that introduced the movie returns in this sequence, complimenting the motion of the scene and drawing attention to the odd behavioural characteristics the star of this sequence exhibits when she is on her own. She

is odd, but still very human in her oddities. This includes things like personal pep talks one gives to oneself in the mirror out loud when nobody is around, and other little idiosyncratic gestures that go uncensored when one is alone. The cue initially begins with a solo piano with a rhythmic chordal texture, which is soon picked up by the marimba when she begins the actual housework. The cue ends at 12 minutes and 11 seconds when it is clear that things are not going well for this character. The music was representative of her initial energy and positive enthusiasm, and when she is challenged by her final couple of the day with no prospect of selling the property, the energy and positivity fades away with the music.

To find some musical contrast in the movie, we can look to Lydian, Dorian's relative major. Lydian can be seen as the relative major counterpart because of the traditional harmonic relationship between a relative major and minor pair. A relative major key uses the same set of notes as its minor counterpart, but with a focus on the note three semitones above it. Using this idea, in principle, Lydian mode acts as the relative major of Dorian, giving them a certain unique relationship within the church modes.

At 19 minutes and 12 seconds, the protagonist- Lester Burnham- reaches an important turning point while being sexually aroused by his daughter's friend at a cheerleading event during halftime at a high school basketball match. Lester's voiceover in this turning point scene begins with his expression of the feeling of awaking from a coma as he imagines rose pedals falling onto his face with the picture of this girl erotically positioned in a bathtub full of these rose pedals. This is an important cue because it is *not* in Dorian, and it is important to note that Dorian may have worked in this scene as well, but Newman has already defined the meaning of Dorian in this film,

which is one that accomplishes different things from the aim of this particular scene. The listener is taught from the first cue that Dorian in this film represents a relationship to the main theme, which calls upon quirkiness, humanity and a bit of melancholy. This scene is none of that: it is erotic, fantastical and euphoric. Although the thesis of the paper is the fact that Dorian fits into many contexts, this cue is to note that Dorian has been used in this film to create a certain association with the listener, and is no longer viable for every context, although there is still some notable variety. This will be seen in later case examples as well. Furthermore, Lydian is a closely related mode based on the relationship described above, and makes for a simple blend in the soundtrack, while still creating a feeling of utmost optimism. In the same Brazilian study, Lydian was found to be the happiest mode among musician participants, rating slightly above Ionian.¹⁴

John Powell's soundtrack for *How To Train Your Dragon* will be the second case study of a contrasting, yet equally effective, use of the Dorian mode. Unlike *American Beauty* this soundtrack does not work nearly-exclusively in Dorian, but instead relies on it in fewer situations. However, where Powell chooses to use Dorian is important because of what he signifies as he does so. Much like its use in *American Beauty*, Dorian gives a sense of thematic familiarity to the audience and is used to call on previously established feelings introduced using thematic material in the film. It can also be seen that, once again, it is the inherent neutrality of this mode that allows such a contrasting but effective usage of the same scale set that created such a specific ambience in *American Beauty*.

¹⁴ Ramos, D., J.L.O. Bueno, and E. Bigand. "Manipulating Greek musical modes and tempo affects perceived musical emotion in musicians and nonmusicians." *Brazilian Journal of Medical and Biological Research* 44, no. 2 (December 22, 2010).

The opening cue, entitled “This Is Berk,” is an important scene for the music of the film, as well as for the visual aspects. This opening film sequence introduces the main character (Berk), the scene and time period for the movie (a Viking location in space and time) and the existence of the fantastical element of dragons. In this, the opening musical idea is the familiar Dorian progression of i-IV. Eventually accompanying this musical idea is a melodic layer that can be heard as one of Berk’s themes. This is played on an indigenous flute in a jig-like manner, signifying a connection between the music and Norse roots, drawing ties to the Vikings that are being introduced. The quick triplet subdivisions and solo flute draw on strong associations for the general listener, but the scale set of Dorian does not imply exclusively Norse influence, rather it fits because it is used in Norse music. The quick triplet subdivisions and solo flute are important to note because, just dotted rhythmic figures in brass signify royalty, these musical elements immediately reference the jigs and reels of Nordic folk music, recognized in general society for these basic musical elements. The important distinction is that Ionian is just as common, if not more so, in the style of music Powell is referencing, and Dorian works because, over anything else, it is a minor musical palate that is yet not too minor. Common Irish folk songs (or Reels) are commonly notated in the Ionian, Aeolian and Dorian modes.¹⁵ But then, Dorian is common in a great many musical contexts. This is to say, the use of Dorian does not immediately suggest associations with Norse music, but rather encourages the association matched with the decoration of meter, tempo and specific instrumentation. Additionally, the use of these characteristics in the opening

¹⁵ Patterson, Annie W. "The Characteristic Traits of Irish Music." *Proceedings of the Musical Association* 23 (1896): 91-111.

scene, as with *American Beauty* provide a sense of tension due to the minor quality of Dorian, but also provide a lighthearted quality with it. That is an important element in this opening, because it is ultimately a fun animation, but not without its conflicts.

Another cue in this film that prominently uses elements of Dorian is in the “New Tail” sequence in which the protagonist builds and implements an addition to his injured dragon’s tail to give it the ability to properly fly. This scene, much like Powell’s other cues, is not exclusively in Dorian, but uses modal mixture to combine elements of different scale sets. The most noteworthy aspect of this cue is the fact that the first theme used here is contrasting in character from the first scene, but also uses Dorian. Acting as a harmonic theme in the film, Dorian in this form calls upon the main important elements introduced earlier in the film and attached to the mode. Once again, this harmonic homogeneity gives the entire soundtrack a sense of connectedness and coherence. This is notably effective because the cue transitions into the opening theme at a later point in the sequence, and keeps the listener feeling stable, like the music has changed but has not gone too far. Furthermore, yet again the mode accomplishes a different task because of its surrounding context. Powell no longer draws on associations to jigs and reels in the sequence’s primary theme, but still maintains the Viking flavour through his use of instrumentation- namely the Nordic-sounding flute. It will also be noted that the chord change to IV in a minor mode gives an uplifting feeling, such is the device active in Dorian that balances out the sinister initial minor pentachord.

Figure 3.0, Dorian in *How To Train Your Dragon*

Figure 3.0 shows a musical score for the cue "Dorian" in *How To Train Your Dragon*. The score is written for four instruments: Flute 1.2 (Fl. 1.2), Oboe 1.2.3 (Ob. 1.2.3), Clarinet 1 (Cl. 1), and Bass Clarinet (B. Cl.). The music is in D minor, indicated by a large '3' and a '4' on the left. The first staff (Fl. 1.2) has a 'SOLO' marking. The second staff (Ob. 1.2.3) has a '1 only SOLO' marking. The third staff (Cl. 1) has a 'SOLO' marking and a '3' marking. The fourth staff (B. Cl.) has a 'p' marking. The score is divided into two measures by a vertical line. The first measure is in D minor (Dm) and the second measure is in G major (G).

This uplifting element is one major factor in the drive that the harmony contributes in the title sequence of Ennio Morricone's *The Good, Bad and the Ugly* (see figure 2.3). After a clearly established minor relationship between *i* and *bVII*, the B section enters with the "surprise" chord of *IV* in a minor key- the characteristic Dorian chord and the chord that is acceptable to our ear without being too out of place, an important factor in how we discern what music we like.¹⁶ The B section of this cue makes prominent use of the oscillation between *i* and *IV*. This, combined with the melody led by the guitar, gives the cue a boost of energy and interest. This can almost be seen as an exaggerated and condensed version of the effect given in Desplat's cue "Sunrise On Lake Pontchartrain." As will be seen in the study ahead, the latter cue mixes elements of Aeolian and Dorian in order to express a combination of gravity balanced with the minor version of levity. In both of these cases, the Dorian note gives an uplifting effect, but in this classic Western, the effect is more defined by the use of the entire *IV* chord, not just its third and fifth degrees.

Danny Elfman's score for *Alice In Wonderland* makes use of Dorian in a similar manner to *How To Train Your Dragon* in the sense that it marks an important character theme- in this case Alice's- and signifies a piece of the character whenever the mode appears. Speaking more broadly, the use of Dorian harmony as a returning thematic

¹⁶ Levitin, Daniel J. "My Favourite Things: Why Do We Like The Music We Like?" In *This Is Your Brain On Music*, 223-46. New York, NY: Plume, 2007.

gesture to signify a specific association developed earlier in the film was also used in *American Beauty*, as noted with both prominent Dorian scenes being used to draw on newly forged connections harkening back to previous points in the movie. For John Powell, this harkening back is a reference to the protagonist. Thomas Newman uses these associations to connect the viewer to subject matter that occurs at other points in the film— for him being the sensitive beauty of everything on earth, and the other being the humanistic, flawed quirky behaviour of average, middle-class, American citizens who have been pushed to their limit.

In *Alice In Wonderland*, the first appearance of Dorian occurs at 12 minutes and 10 seconds into the movie. This is the first reference of Alice’s theme, and this section of the larger cue begins when she begins pursuing the rabbit that will eventually lead her down to Wonderland. It can then be inferred from this that Alice’s theme is tied into a broader “Alice in Wonderland” theme, rather than the character of Alice herself. This can be further exhibited by observing the instrumentation that draws on associations with magic or mysticism. Flutes, a whirring string section that creates the same sense of mystery Phillip Glass achieves in *The Illusionist*, and a choir that contributes to the sense of urgency and epic-ness in the cue. As this is not a fully realized version of the theme, the basic idea is stated and the cue changes directions when Alice discovers the rabbit hole she soon dives down.

The next appearance of the theme is in a quotation of it in the context of another cue at the 44 minute and 20 second mark. It is characterized by a chromatic walk in the melody from scale degree 5 to scale degree natural-six, the harmonic motion being i-bVI-IV (see figure 3.1). The significance of this quotation is the link to the core character of

Alice, as with the previous instance, within wonderland. This sequence shows her heroically riding off to rescue somebody from earlier in the movie and connects her more personally to Wonderland. Just as before, Dorian is used in a thematic link between Alice and Wonderland. The cue at 52 minutes and 45 seconds also quotes the theme, but this time as the dog, Hunter, arrives to deliver a message about Alice to the White Queen. In both of these cues, the theme is referenced for roughly four bars during a scene that uses movement, giving the theme not only a character association but also one of arriving, or rather more accurately: charging. It is only a short while later at 56 minutes and 18 seconds that the theme's characteristic i-IV is used again while Alice is consoling the Mad Hatter. This time the context is not one of action, but of emotional intimacy. Again drawing parallels to *How To Train Your Dragon*, the easily recognizable traits of the theme appear in various contexts which both give the score cohesion and display the efficacy of this scale in multiple situations. As is now predictable, once again the Dorian quote is used at 1 hour, 7 minutes and 10 seconds while the White Queen's gates are being charged in an epic fashion, becoming an established musical trope for the movie. There are several more instances where the theme is quoted in this way throughout the film, and the final instance of the theme arrives in a more complete form in the final cue of the movie, still with a mystical character but without its sense of urgency like it had throughout much of the film. This is to symbolize the resolution of the protagonist with Wonderland, which is revealed to be a metaphor for Alice's real life. Once this internal conflict is resolved, the theme so too changes character, while still remaining firmly in a Dorian framework from beginning to end and meanwhile emotionally accomplishing

very different things from the other film examples seen previously despite the near-identical harmonic framework.

Figure 3.1

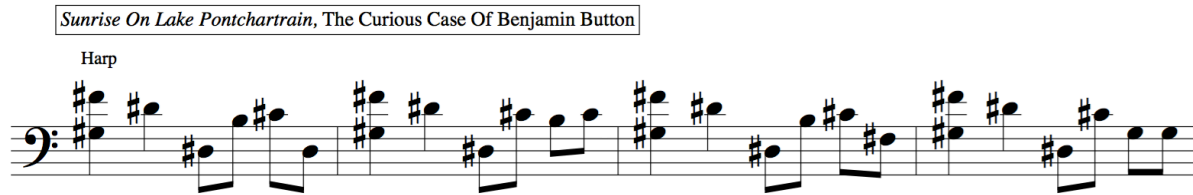


The examination of Alexandre Desplat's cue "Sunrise On Lake Pontchartrain" from *The Curious Case Of Benjamin Button* brings new ideas to light about the use of Dorian's neutrality in a film scene. The treatment of the music in this scene varies from the previous examples because of its clear skeletal structure and how its minimal surface detail allows for easy manipulation in character through small musical gestures. This cue takes place during an important emotional scene where Benjamin gives a nonverbal message of forgiveness to his father for abandoning him at birth. His father is dying and Benjamin takes him to a dock as they watch the sunrise, as the title of the cue clearly states. As will be seen in this upcoming analysis, the use of Dorian in this cue gives the appropriate and unique mix of sadness and optimism which ultimately define the scene.

The cue is a clear nod to minimalism in its repetitive ostinato use, and only maintains interest through variation in orchestral decoration as the piece progresses. Because the ostinato (played by the harp, notated in figure 3.2) does not change, the harmony also remains fairly static, only changing at a few key moments that will be acknowledged in this analysis. Otherwise, it is a clear minor pad with a single definable modal characteristic. In this cue, the slow tempo plays a significant role in its depressive nature, more so than the minor mode itself. In the Brazilian study mentioned earlier in

this paper, Dorian was found to be on the sadder side of neutral when the tempo was slowed down; otherwise, it quickly loses this characteristic.¹⁷

Figure 3.2



The string melody is the first to indicate Dorian, with its use of the natural-six scale degree occurring on top of the ostinato (seen in figure 3.3 as the distinct E-sharp note). The ostinato itself does not define Dorian and, at best, can be defined as a pattern with minor pentatonic influence. This is even more of a blank slate than Dorian because it simply skips certain notes that further define the value of the pitch set. In this case, it is solely the melody line that lets the listener know the mode of the piece of music. The strategic orchestration is key in this cue, and the string solo part is significant because it adds interest without disrupting the harp's original intention- the cue still remains stable; slightly melancholic, but mainly neutral.

Figure 3.3



The key of this cue is Ab minor, making the harp ostinato fit snugly into the pentatonic scale of Ab, Cb, Db, Eb and Gb. There is a shift into a darker, more emotional harmony when the flat-six scale degree takes over as the bass note of an E major chord, occurring over the notes of the pentatonic ostinato. This added note implies the Aeolian mode, and thus gives the cue a heavier emotional quality as a result. Further, all of the notes of Ab minor pentatonic fit neatly into this E major chord. Ab, of course, is the enharmonic third of E major and Cb is the enharmonic fifth. Db is the sixth, which belongs in the diatonic scale and also contributes interest as a non-chord tone. Eb exaggerates the melancholic nature of this musical moment because it creates a major-seventh chord in this flat-six harmony, creating extra colours in the new sound world of Ab minor in the context of Aeolian. This moment happens to be at the point in the cue where Benjamin is just approaching the scenic lake with his father, giving more gravity and sentiment to the situation. However, Dorian is brought back once the strings defining the E major chord fade out and leave the pentatonic harp ostinato on its own to outline the neutral harmony once again. The reentry of Dorian takes place this time with the solo cello's melodic line, replacing the function of the violin section earlier in the cue. The return to Dorian lets the scene sit without too much sadness, but still with the reminder of the sentiment the Aeolian moment brought on earlier. This is an important distinction in the sequence because Benjamin and his father are finally finding solace in their relationship, resolving earlier conflicts and accepting their present situation. Too much Aeolian would be overbearing for the scene, giving the impression of an overarching sadness, when, in reality, it is a scene with peace and serenity that consists of heavy

sentiment without an overly high emotional weight. The levity built into the melody line with the major pentachord natural-six counteracts the weight a straight Aeolian pitch collection provides, once again giving a high degree of function to the easily accessible neutrality of the Dorian mode.

Chapter 4: So What? A Compositional Approach

Looking at the evidence above, it is made clear that Dorian is used prominently and effectively in film music. With this information in mind, there are now a number of questions to address. What does this mean for film music? What are the implications for music in general? Does the reliance on Dorian in certain contexts provide for a dangerous opportunity for unoriginality? These ideas will be addressed in the coming chapter along with other approaches to the philosophy of music and why there is value in modes such as Dorian.

As far as film music is concerned, it is clear that there is a certain reliance on some “bad compositional habits” that have formed with the inclusion of untrained musicians in the film. A highly minimal approach to music as taken place in a number of different ways, one of which being the popularization of the single-note drone in place of much harmonic activity. Looking back to *American Beauty*'s title cue: with the lead piano line taken out, the unchanging drone would be all that is left in the sequence. It is this type of composition that has made itself so prominent over the recent years, and Dorian is a byproduct of this type of approach. It is not because Dorian is simple by

nature, but because it is simple to play. Many of Hans Zimmer's scores, for example, utilize the key of D minor. It is then no coincidence that, still being drawn to the minor pentachord, when looking for variety, one does not have to go very far to simply remove the Bb from the scale and result in a D Dorian pitch set. With many uneducated composers, this is a simple and natural way to arrive in this tonal realm and is extremely accessible on the keyboard.

This being said, there is no denying the efficacy of the Dorian mode. This then begs the question: is there even a problem? Despite the lack of variety it can produce,¹⁸ there are good reasons why Dorian works. Therefore, the meaning this has for film music can be seen as one of mixed result: it excludes a greater amount of harmonic interest, but provides a different and open framework for modern film composition. It is open in the sense that it allows for musicians with little familiarity with music theory to compose cues that suit a large variety of contexts. Choosing to use the Dorian mode is the musical equivalent of cooking with olive oil: it is a base that works underneath almost anything one would want to make.

To conclude this question, it can be seen that the meaning for current film music is a more accessible palate for a wider variety of composers coming from a series of different musical backgrounds. From a musical perspective, although harmonic variance may suffer, there is also an influx of creative ideas in more electronic avenues that had not previously been explored; and to this end, Dorian is an effective way to score for

¹⁸ The *Finding Nemo* score bears many resemblances to that of *American Beauty* in its Dorian ambience. Thomas Newman is also the composer for this film, which then points to a type of light self-plagiarism of his earlier ideas.

picture appropriately while further layering innovative concepts on top of a safe harmonic backdrop.

The proceeding discussion seeks to trace the influence of Dorian into the uses of film music and outside of the genre of visual media music. The ability to follow Dorian's path of influence from the beginning of notated music makes it more noteworthy than any other pitch set composer employ in their common practice at this stage of musical development in popular Western culture. It has been previously stated that Dorian is the original Western scale, but the entire path has not been followed to determine exactly what kind of trail it has blazed for the general state of music composition.

The path that Dorian follows has been examined up until the Baroque era (see Chapter 1) where key signatures as we understand them were finalized and exceptional key signatures were phased out and de-normalized. At this point, the Classical era began to develop and a concise relationship of Tonic and Dominant (I and V or i and V) was a firmly used as the basis for most music at this time. Modal exploration came into the mid-to-late Romantic period, which reasserted the lack of necessary dominance of tonic-dominant motion in the use of traditional Western classical music. Beethoven was known to write minor passages in Aeolian, which makes use of the bVII chord. This is unusually in the context of strict classical harmony, because the seventh scale degree has a tendency to be raised on semitone in the minor mode. From this, it only takes another flatted note (scale degree six) to create a Dorian tonal framework. Among notable composers who used Dorian are Jean Sibelius in his Sixth Symphony and Claude Debussy in a great many of his works.

Taking *Rêverie*, Debussy's solo piano piece, as an example, the rediscovery of a blatant use of the Dorian mode in Western "art" music can be seen. This is significant because, at this time in history during the industrial age, pianos were cheap and a norm in typical familial households. Debussy's solo piano works became popular and pieces such as *Rêverie* are relatively easy to play for pianists of a less-than-professional skill level. This accessibility created widespread opportunity for this new harmonic language to find a place within society at that time, and general acceptance of music that employed this mode brought it back into the mainstream. It should be noted that this is merely the Western music perspective. Dorian and its many variations were employed in several other parts of the world before, during and after this period, but this bears a closer relationship to its tie into film music, originating in the West. In figure 4.0, *Rêverie* can be seen as a blatant homage to the Dorian mode. G Dorian exists through the use of E-natural in an otherwise clear G minor harmonic territory. This natural six quickly and clearly defines the mode, and is used in the main motif of the piece, and predominantly, its opening statement before variations in the subject occur.

Figure 4.0, *Rêverie*

C. Debussy (1862-1918)

Andantino sans lenteur

pp très doux et très expressif

Following, and striding alongside, Debussy's many Dorian pieces were other composers expanding their modal reaches. Bartok, Stravinsky and many others employed extended tonal techniques that reached far beyond the tonic-dominant relationship of the Classical era. Meanwhile, pop music took influence from these great musical minds and employed classical harmony in their work, to a much simpler extent. Although tonic-dominant relationships are still what pop music typically uses today, there was a large development of modal use in the singer-songwriter genre that carries until the present day. As mentioned earlier in this essay, Santana is a prominent user of the Dorian mode. Other psychedelic bands of the same era used this mode, just as Santana, as a blank slate for what they would refer to as "jamming," meaning improvised soloing on top of a repeated chord progression. Other prominent examples of Dorian jamming include: Pink Floyd's "Breathe," Neil Young's "Down By The River," The Doors' "When The Music's Over" and a great many others. This movement of Dorian in rock music formed an extensive basis for its further use in popular music over the decades, eventually filtering into film music when these musicians began participating in this medium. Notable early examples of these musicians include Hans Zimmer and Danny Elfman- both fans of Dorian and Aeolian- and extending more recently to the likes of Trent Reznor and even Canadian indie rock band Arcade Fire who did the score for Spike Jones' *Her* with experimental Canadian indie musician and University of Toronto graduate Owen Pallett.

This extensive look at the use of Dorian throughout the history of notated music displays the extent of its influence and truly shows that no type of music exists in a bubble. This simple harmonic palate has transformed music for ages and continues to

work its way into different genres, still providing the humanistic, accessible and neutral framework it was used for since the conception of standardized Gregorian chant.

It is with this in mind that the ideas of this paper can be synthesized to see things from a broader perspective. Taking everything as a whole into account, the range and efficacy of Dorian's usage is clearly unparalleled in modal influence. *American Beauty*, *How To Train Your Dragon*, *The Curious Case Of Benjamin Button* and *Alice In Wonderland* all have vastly different characteristics as movies. They are quirky and beautiful, adventurous and dynamic, sentimental and fantastical, respectively, and yet they all prominently use the same Western church mode for main thematic material. It is used to identify major concept in the film and link associations to them; it is used to place a malleable music framework that can be identified in many moods; and it is ultimately used to provide a vehicle for musical ideas without being overbearing in its own harmonic momentum. The usefulness of Dorian in film music is clear when looking at the wide range of examples of its use and how it accomplishes very different things by accomplishing very little on its own. It is thus the inherent neutrality that Dorian has that provides the opportunity for it to exist in so many different contexts. As seen through studies and case examples, it can create a series of different moods and associations as it creates very little on its own, without the assistance of tempo and orchestration to contextualize it. Therefore, I propose that Dorian will continue to be used for ages after many other modes have gone out of style, in keeping with this ongoing historical pattern and persistence of this one single mode. And perhaps in another hundred years there will be even more to say on the subject as it transforms in a multitude of other musical ways that we have yet to see.

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