

Lecture 3: The meaning of pitch and melody

In this lecture we begin to turn our attention to music, to the sounds that musicians make. Many of us are more familiar with the idea of looking for patterns and conventions in language and visual communication but less so with music. In this session we show how elements in music and sound can be used to connote ideas and moods, just as words can in language.

In the study of popular music theorists have referred to the way that kinds of music have associated discourses. Hibbett (2005) made this case for 'Indie' music which he said can be thought of as a set of conventions related to authenticity, purity, and non-corporate ideals (p55). He accesses these discourses through the way that those who identify with Indie music speak of it, the qualities they ascribe to good and bad music. This is important as it captures the way that listeners also use music to talk about themselves, how they are the kind of person who appreciates the non-mainstream. But what Hibbett does not do is consider the music itself. Are there any kinds of melodies, rhythms, and sound qualities that are associated with Indie music? And if the Indie fans perceive authenticity, purity and non-corporate ideals in Indie music can we find signifiers of this in melodies, pitches and sound qualities?

In fact we can show that the kinds of discourses referred to by Hibbett, of authenticity, of purity, and non-corporate ideals be realised not just in the talk about the music but also through patterns of signifiers in the music itself.

Tagg (1982) and Cooke (1959) emphasise that, far from being a matter of simple creativity, since the nineteenth century there has been an established "language" of types of music that connote moods, landscapes, and character.

Tagg writes of a codal system of music which is understood by people in western societies. "Time and time again the average listener/viewer has heard a particular sort of music in conjunction with a particular sort of visual message" (Tagg 1982, p. 4). When we watch a movie or an advertisement, we understand the established meanings of the music that we hear. Many of us recognise musical codes that connote historical periods and geographical regions: for example, the bagpipes that connote the Scotland of Mel Gibson's film *Braveheart*, even though the instrument did not exist in this region until much more recently (Trevor-Roper 1983), or the generic chanting music that can signify Africa in various depictions.

Tagg (1982) discusses the "Music Mood" collections that were available first on sheet music collections and later, beginning in the 1930s, on record. These were used for theatre and later for movies, advertising, and television. These collections drew on the classical music of the 18th and 19th centuries, which started to use music as a narrative device to represent characters, places, and moods. The musical mood collections would be categorised under 'action', 'comedy', 'danger', 'eerie', 'big', 'children', 'national', 'nature', 'industrial', 'leisure', 'space', 'suspense'. We still hear the basic

themes from these pieces in contemporary adverts, movies, and news reports. For example, a special report on street prostitution may use a piece of music to create a mood of ‘loneliness’ or ‘darkness’ depending upon the angle of the report.

Cooke (1959) has argued that in classical music we can think about kinds of melodies, harmonies, instrumental sounds, and vocal styles, all as carrying meanings. It would be possible in his view to create a kind of phrase book of different kinds of melodies and say what it is that they mean—whether they are associated with sadness or anger, for example. He carried out detailed and extensive study of classical music where composers evoked different kinds of moods and feelings. He suggests that codes were established after much repetition. These codes would be built upon other metaphorical associations, such as booming thunderous sounds for danger, soft sounds for gentleness, sweeping sounds to represent landscapes.

The meaning of pitch

We begin by looking at a basic feature of sounds and music, that of pitch. That is simply how high or low a sound is. A scream would be a high note, thunder a low note. We look first at the meaning potential of pitch itself and then how movements in pitch can be important signifiers in melodies.

The meaning of pitch is rich in metaphorical associations. Cooke (1959) has suggested that high pitch means effort, low the opposite; in other words contained, immobile and static (p. 102). We could think of this metaphorically as being like someone speaking in a low soft voice as compared to raising their voice in excitement, tensing their throat. But from this higher pitches can also extend to meaning agitation and low drooping despair. Cooke shows that classical composers have used high pitch to suggest “up and away” due to its energy and low pitch to suggest “closer, down and relaxation” (1959, p. 103).

We also have associations of the way things in our everyday world produce different pitches of sounds. Heavy objects can make deep sounds when they move or fall. Smaller animals might make higher pitched squeaking sounds. Deep sounds give a sense of danger or something ominous as in thunder. This could be why deep sounds are often used to symbolise gravity or danger. High pitch can be associated with brightness and low with darkness and evil. We have associations of brightness with truth and dark with obscurity. Cooke adds that pitches beyond the range of the human voice can, in the cases of higher tones, give a sense of the ethereal, lightness, transcendence. When we listen to TV news we often find the music uses deep bass sounds to signify gravity and importance and higher pitched sounds to signify truth.

When we analyse popular music we can simply ask whether the singer uses higher or lower pitches. Higher pitches can mean lightness, as we might find in a female folk singer, or agitation, as we might find in punk music. We can also look at the pitches of the instruments themselves. Some songs use a lot of bass while others do not. We will think about this in the context of some examples

shortly, but first we need to deal more with the meaning of movement in pitch. In music after all pitches rarely stay at one level.

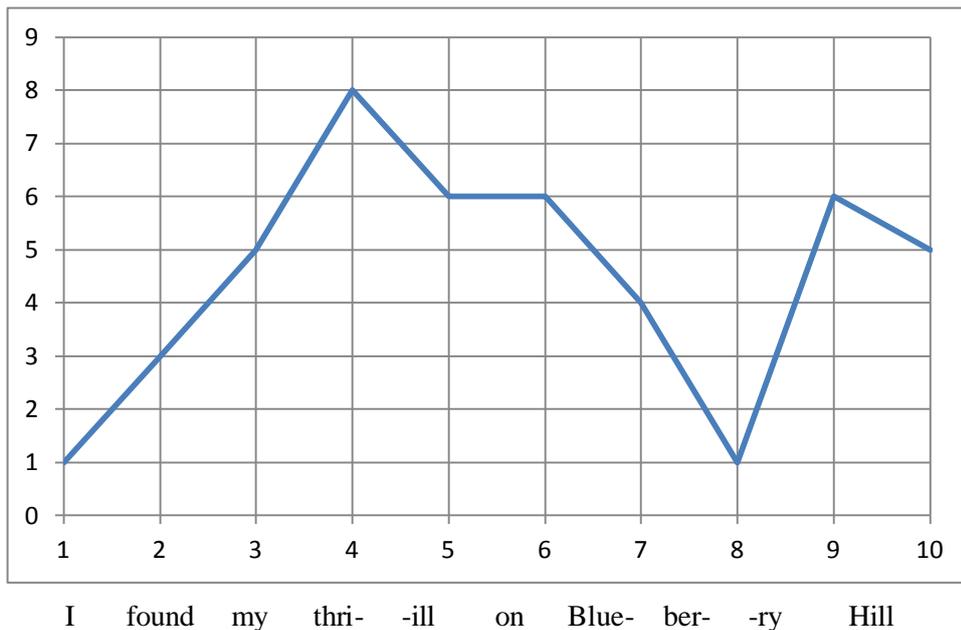
We can summarise the meaning potential of pitch in the following table:

High	Low
bright	dark
light	heavy
Tension/agitation	relaxation
optimism	despair
good	evil

The meaning of ascending and descending in pitch

When we hear sounds and music there is generally both movement from low to high, from high to low pitches. The direction of this movement can also have meaning potential. Cooke suggests that in classical music ascending melodies are associated with outward expressions of emotions whereas descending melodies are associated with incoming emotion. This is due to the association of higher pitches with higher levels of energy and brightness and lower pitches with associations of low levels of energy. The movement from one to the other expresses a shift in either direction. A movement from a high pitch to a low pitch the meaning is of a falling of energy. The opposite, a gradual slide from low to high pitch, gives a sense of a picking of spirits. National anthems use stepped increases in pitch to suggest the brightness and energy of the national spirit.

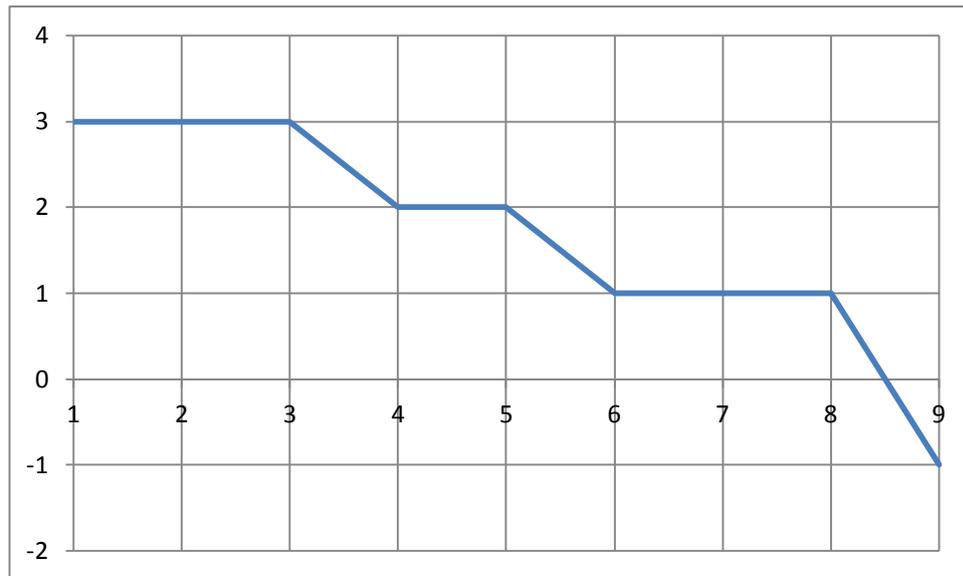
We can show how increase and decrease in pitch works in a familiar popular song to help us to establish the available meaning potentials drawn upon in our fascist songs. Here is the melody from the start of “Blueberry Hill”. On the graph the scale on the right represents the notes going up and down and the scale at the bottom the progression of the melody. .



In this case the first four words of the song ascend. If you hum the tune yourself you will be able to hear this. Therefore we can say that the singer here, drawing on Cooke's observations, is expressing an outgoing emotion or an increase in optimism. The melody then levels off and descends back to its starting point, although there is an important ascending note before this on 'berry'. So the outward expression of emotion, of joy, is followed by a move back to something more grounded and relaxed, perhaps more thoughtful. But the other ascending note on the second syllable of 'berry' marks another burst of emotion before it tidily resolves back to its starting point, giving a sense of closure. If the melody descended from the start then, according to Cooke, there would be incoming emotion, such as a received sense of joy or consolation or even a simple slide to bleaker thoughts and self-absorption. So in terms of pitch 'Blueberry Hill' is an outburst of positive emotion.

When we analyse melodies in this way we can consider also the rate at which pitch raises and falls. This might happen over several bars in a long outpouring of emotion or in lots of short bursts as to some singer songwriters which suggests containment with bubbling feelings underneath.

In contrast we can see below that the singer-songwriter David Gray uses a falling melody to bring a sense of consolation or emotional gravity to the verse of his song 'Babylon'.



Fri day night and I'm Go ing no where

The song gradually falls away in terms of pitch. Were this to be sung using an upward going melody it would bring a sense of outgoing emotion rather than of consolation or thoughtfulness or the introspection of incoming emotion. We can imagine that if the same lyrics were sung with an ascending melody it would seem as if he were pleased he was going nowhere. Here the gradual relentless slide downwards gives a sense of regret and brooding.

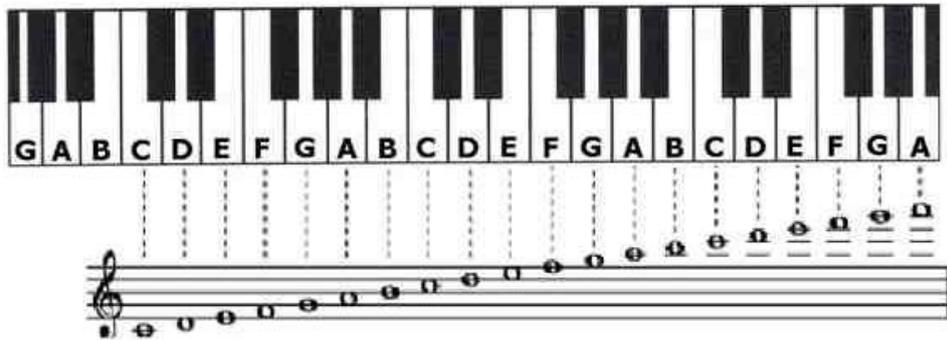
What Is the Range in Pitch Between the Highest and Lowest Note?

As well as whether pitch increases or decreases there is important meaning potential in the range of these changes. A large pitch range means letting more energy out whereas a small pitch range means holding more energy in. So we might think of a singer like Bob Dylan holding energy in, while a singer like Freddie Mercury lets it out. Van Leeuwen (1999) draws on work in linguistics by Brazil, Coulthard, & Johns (1980) who argue that pitch range in speech is akin to excitement, surprise, and anger. Narrow pitch is boredom and misery. Pitch range in speech is also associated with emotional expressiveness. In Anglo-American societies, men have less pitch range than women (McConnell-Ginet, 1977). So small pitch ranges can be associated with holding in, or even modesty. In Bob Dylan's singing about tragedy or injustice, using a limited pitch gives a sense of resignation or contained pain, perhaps giving it a different kind of gravity than an opera singer using a large range to sing about tragedy.

We can show this if we return to our example of *Blueberry Hill*. Here we look at the way the melody uses notes from a scale of 8 notes in order to show pitch range.

I FOUND MY THRILL ON BLUE-BERRY HILL
 1 ↑ 3 ↑ 5 ↑ 8 ↓ 6 → 6 ↓ 4 ↓ 1 ↑ 6 ↓ 5

Songs normally draw on a scale which is comprised of 8 notes. Note 1 gives the name of the scale and is called the root note and the 8 notes after this rise in pitch. Since there are 8 notes in the scale, note 8 is the same as the root but an octave higher. We can see this on the illustration of the piano key board below.



Once we move below note 1 we find the same sequence of 8 notes repeated.

Above we have represented the notes in *Blueberry Hill* with numbers to indicate where they are in the 8 notes of the scale. The higher the number, the higher the pitch of the note.

What we find in *Blueberry Hill* is a large pitch raise in the first phrase “I FOUND MY THRILL.” Here there is a leap of 8 notes. This is therefore an extensive release of energy and brightness.

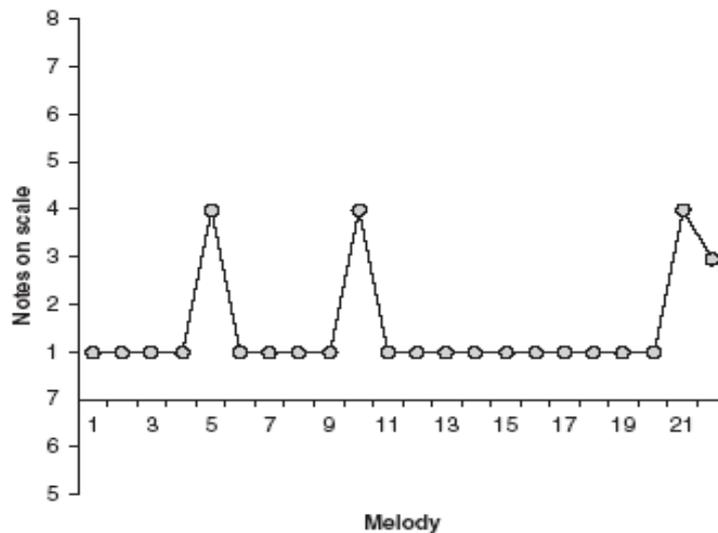
We can see an example of a melody with a very limited range of pitch movement in *Anarchy in the UK* by the Sex Pistols:

I am an an--- ti christ , I am an an ---arch-ist,
 1 → 1 → 1 → 1 → 1 ↑ 4 ↓ 1 → 1 → 1 → 1 → 1 ↑ 4 ↓

don't know what I want but I know how to get it
 1 → 1 → 1 → 1 → 1 → 1 → 1 → 1 → 1 → 1 ↑ 4 ↓ 3

Here we can see that much of the melody remains on the first note. There is therefore very little outward giving of emotion or positive energy. This means that there is something very contained about the way it is sung. In fact the vocalist sings the song generally at a high pitch which conveys an emotional intensity.

Below we can see this in the form of a graph where the melody remains level with surges of pitch to the fourth notes.



Anarchy in the UK

The meaning of using different notes of the scale

As we have said, in a scale there are 8 notes. So in a scale of C there are eight notes following from note one, C. The eighth note, the octave, marks a return to C. A song is normally based on one scale of eight notes. Both the notes in the melody and the notes in the chords of the accompaniment are drawn from these notes. In between these eight notes are other notes that do not belong to the scale, but to other scales. These can be used in songs to add more drama.

To make up a melody any of the eight notes can be used. But each of the eight notes has a different kind of sound which in turn has a different kind of effect for the listener. Because they have different effects, certain notes and certain note combinations are usually used. Cooke suggests that since we have been hearing these combinations and making certain associations for a long period in our culture, we can now easily recognise what is being communicated, what mood, what idea, what emotion.

In melodies certain notes of the eight in any scale are used a lot as they create a solid connection to the musical accompaniment, which will also draw on the same notes. These commonly used notes are mainly notes 1 and 5. Note 1 is the main defining note of the scale. In the scale of C therefore, note 1 is C. So this anchors the melody to the scale firmly and roundly.

Note 5 is similar in sound to note 1 and therefore is also good for anchoring the melody to the scale. Also important is note 3. These structures using notes 1, 3 and 5, have become the basis of western music.

Notes that anchor the melody to the scale and to the accompaniment allow the music to feel “easy” or “rounded.” In contrast jazz will use many notes that do not create this solid connection in

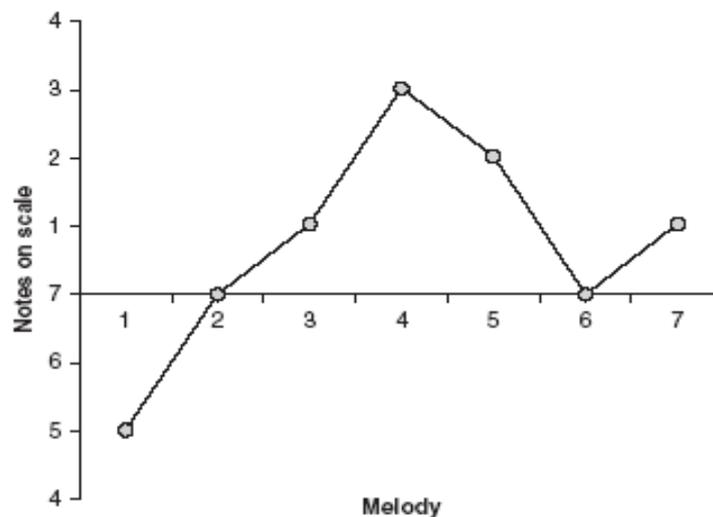
order to create tension and “trouble.” Blues music often uses the occasional difficult, or “blue,” note to create and release tension.

In *Blueberry Hill* above we can look at which notes are used in the melody. The first four notes are 1, 3, 5, 8. Since the 8th note is the same as note 1 we can say the first four notes are 1, 3, 5 1. Such a combination will anchor the melody, the song, to the music underneath very roundly. In the case of *Anarchy in the UK* we can see that much of the melody stays on the 1st note. This is a highly untroubled melody therefore. There is no complexity or trouble in what he feels. Videos of the Pistols performing the song live show him with a continual sneering smirk on his face.

The 3rd note is important for other reasons. It is the way that the 3rd and other notes are used that can bring much more complexity of emotion and feel to a melody. You might be aware that, in general, a minor key is sad and a major key is happy. Research suggests that major notes and chords are associated with positive feelings. A minor key is created by lowering some of the notes in the eight-note scale; the 3rd and the 7th notes. These are lowered to notes in between the notes of the scale. So they become a bit like a 2 and a half and a 6 and a half. If a melody has the standard 3rd and 7th notes then it is a major melody and is therefore happy and joyful. If it has the lowered 3rd and perhaps a lowered 7th, it is sad. Looking at the example of *Blueberry Hill* above we can see that the 3rd note used for “FOUND” is a standard 3rd, also known as a major note. The song goes straight to this defining happy note from the 1st note. Therefore it is happy. Since it is an ascending melody we can comfortably say that we have an outward expression of joy and brightness.

In contrast, in the following example of *Ain't No Sunshine*, the 3rd and 7th notes have been lowered creating minor notes. This can be seen under the words “NO,” “SHINE,” and “SHE’S”:

AIN'T NO SUN—SHINE WHEN SHE'S GONE
 5 ↑ minor7 ↑ 1 ↑ minor3 ↓ 2 ↓ minor7 ↑ 1



Ain't No Sunshine melody

This creates a sad feel to the melody. If you hum the tune you will be able to hear this. Since the melody ascends at the start we can say that this is an outward expression of emotion, but that with the minor note this becomes one of pain. There is an increase in energy, therefore almost like a cry out in anguish. As with *Blueberry Hill* the melodies matches the topic of the lyrics.

In the case of *Ain't No Sunshine*, the pitch range is less than that of *Blueberry Hill*. We can therefore say that while it does let out energy it is to a lesser degree, slightly less exuberant. But there is certainly not the same degree of stasis that we find in *Anarchy in the UK*.

If a melody starts on a note then moves to a minor note and then back again this gives a massive sense of immobility. But this can be true of any melody which moves between a small number of notes. This can give a sense of brooding, of being trapped, but also of confidence as we saw in *Anarchy in the UK*.

The fourth is associated with building or moving forwards. It can also give a sense therefore of space and possibility. We can see that in *Anarchy in the UK* the verse melody is comprised of the 1st note and the 4th note. So while the melody is dominated by stasis, which we suggested in this case could mean confidence or at least contented lack of interest, there is a repeated 4th to suggest some building. The meaning would have been very different had the first note always moved towards a minor 3rd or minor 7th.

While the minor 7th note is associated with dischord, often called a blue note, the major seventh has been associated with longing. We can see the extended use of this note in David Gray's *Babylon*

Let go your heart, let go your head-and feel it now Bab -y - lon
 1 → 1 → 1 ↓ 7 → 7 → 7 → 7 ↑ 1 ↑ 3 ↓ 2 ↓ 1 → 1 ↓ 7 ↓ 5

Above we noted that the opening of this chorus has little pitch range suggesting stasis rather than emotional growth or decay. But the use of the 7th note here helps to turn this into a whistful longing. As it falls in pitch only slightly from the 1st note to the 7th there is little outpouring of emotion. And it conveys just an edge of soulfulness without the true pain or blues that could be created with the minor 7th.

The 2nd note has been associated with transition by the suggestion of movement, or the promise of something to follow, or lengthened 2nd notes can suggest limbo or entrapment. This is because of its position between the strongly related 1st and 3rd. *Aint No Sunshine* uses a 2nd note for the word 'when'. The lingering on this note suggests a sense of limbo.

We can see the use of the 2nd here at the end of the verse of *Anarchy in the UK*. Rather than resolving to the 1st the verse ends with the 2nd which suggests that more is to follow.

I wanna dest---roy the passer by cos
 1 → 1 → 1 → 1 → 1 → 1 → 1 → 1 → 1

I wan---na b---e an ar-----chy,
 5 → 5 → 5 ↓ 4 ↓ 3 → 3 → 3 ↓ 2

Above *Walking in Memphis* uses emphasis on a 2nd note for the word 'feet'. Such emphasis can increase a sense of the cohesion of the melody. We can see though that a melody could not simply end on such a note as it implies that another note is to follow. The 2nd can also have the effect of delaying or diluting the effect of a note. The shift from a 1st up to a minor 3rd indicates an outward and direct burst of pain. The use of the 2nd can delay and therefore dilute this effect. A 2nd positioned between a 1st note and a major 3rd could suggest a slightly less confident statement of joy.

The sixth note is very much like the major 3rd and can therefore be used to ground the melody. On *Blueberry Hill* we find much use of the 1st, 3rd and 5th which give the melody a grounded solid feel and also the 6th which has the same effect. The only note that does not have this grounding effect in this melody is the 4th used for the word 'blue' which suggests building.

Activity

Listen to a number of singers. Consider how they use pitch to communicate either energy or otherwise. So they appear to use large pitch ranges? Even if you are not a musician you should be able to get a feel for this by humming the tune to yourself. And do these songs appear to use ascending or descending melodies?

In sound editing software create some simple melody lines that descend or ascend, that have wider or narrower pitch ranges and that use different notes in order to communicate: 1, optimism; 2. Regret. Experiment by writing a lyric and then using different notes to bring a sense of building, stasis or sadness. Note you can easily download a piano keyboard to your computer that allows you to play notes with your mouse or keys. This can then be recorded.

References

Hibbett, R. (2005) 'What is Indie Rock?' *Popular Music and Society*, 28/1, 55-77