Understanding Music

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Part I

Week 1

LECTURE

1

RHYTHM

Rhythm is the movement of music within time. Includes,

- Pulse (beat)
- Tempo
- Rhythmic Deviations
- Meter
- Syncopation
- Accents

1.1 Pulse

Direct pulse refers to a beat you can hear, often the drums. Indirect pulse means the beat is felt or sensed, not directly heard.
Examples,

- Direct pulse - Poinciana - Ahman Jamal (drums)
- Indirect pulse - It Never Entered My Mind - Stacey Kent (Saxophone)

1.2 Tempo

Tempo is the rate of speed of a piece of music. Western music uses italian terms. Slower tempos are Largo, Lento, Adagio. Moderate tempos are andante and moderato. Faster tempos: allegro, vivace, presto. Know which of the terms generally correspond to the tempos.

1.3 Rhythmic Deviations

Refers to a change in the pulse or tempo. Most common are accelerando, ritardando and rubato.

- Accelerando - gradual increase in tempo
- Ritardando - gradual decrease in tempo
- Rubato - "stolen time" subtle manipulations of tempo, small increase with a small decrease

1.4 Meter

Meter is the regular grouping of beats (in much Western music, meter is often thought of as the time signature). A few basic categories of meter are simple, compound, and asymmetric meters.

1.4.1 Simple Meter

- Simple Duple meter - gorupings of 2 beats (1-2)
- Simple Triple meter - gorupings of 3 beats (1-2-3)
- Simple Quadruple meter - groupings of 4 beats (1-2-3-4)

1.4.2 Compound Meter

Meters with regular groupings of sets of three beats.

- Compound Duple, two groups of three (6/8)
- Compound Triple, three groups of three (9/4 or 9/8)
- Compound Quadruple, four groups of three (12/4 or 12/8)

1.4.3 Asymmetric Meter

Sometimes called additive meter, asymmetric meter includes irregular time signatures like 5/4 and 7/4, etc. They are often felt and counted as acombination of smaller beat groupings.

1.4.4 Non-Metrical Music

Music that is non-metrical does not have a specific meter. One example is Gregorian Chants.

1.5 Accents

Accented notes or beats are emphasized in some way to stand out from the surrounding notes or beats. This can be by playing a note louder, or adding a lower or higher pitched note.

1.6 Syncopation

Accented notes or beats that happen in unexpected places. For example, on a "weaker" beat or on an off-beat. Offbeat is a syncopation pattern in which the accented notes/beats occur in between the main beats.

1.7 Ostinato

An ostinato is a short, constantly recurring melodic or rhythmic pattern. Most music with a consistent drumbeat has a rhythmic ostinato.

LECTURE

2

HARMONY & MELODY

2.1 Background

1. Harmony = pitches heard simultaneously
2. Melody = pitches heard in succession

Harmony and melody work in different ways in different types of music.

2.2 Intervals

1. An interval is the distance between two picthes
2. Harmonies are based on simultaneous combinations of intervals
3. In harmony, an interval is the distance between two simultaneously sounded pitches

In western music, the **half step** is the smallest basic interval. Other music cultures recognize smaller intervals know n as quarter tones or micro-tones.

- The distance between two notes ina melody is a melodic interval
- The distance between two simultaneously sounding notes is a harmonic interval

In western music culture, intervals are classified acording to the number of half-steps they span. Intervals can be futher calssified as unison, minor, Major, diminished, augmented, perfect, and octave.

- An octave is an interval separated by 12 half steps, and is the distance between one note and the same note
- An octave is the only universally-recognized interval. Example, C-C.

2.3 Dissonance and Consonance

- Dissonant intervals are often used to create tension in Western music.
- A dissonant harmony is one that can sound unstable, clashing. Example: Augmented 4th
- Consonant intervals are often used to impart stability in Western music
- Stable, pleasant. Example, Octave, Perfect 5th.

However, different cultures have different conceptions of dissonance and consonance - what one hears as dissonant may not be thought if in that way by someone else with a different musical background.

2.4 Chords

- Chord = any set of multiple notes heard simultaneously
- A triad is a three-note chord, most common basic chord type
- Triads are classified and named based on teh pattern of intervals they contain
- A Major triad consists of the first, third, and fifth notes of a Major scale played simultaneously
- A minor triad consists of the first, third and fifth notes of a minor scale played simultaneously

2.5 Melody

A melody is a succession of different pitches one after the other. Like rhythm and harmonhy, melodies usually adhere to a particular system of music theory unique to the culture(s) from which they originate

2.6 Scales

Scales are a set of pitches in ascending and/or descending order.

- Classified by the combinations of intervals they contain
- Almost all cultures have scales, or ideas of scales
- Most used in Western, Major, minor, chromatic, pentatonic

2.6.1 Major Scale

- Made up of whole and half steps
- W-W-H-W-W-W-H
- C D E F G A B C
- Contains 7 notes (not including the top note)
- Stereotypically thought of as "happy"

2.6.2 Minor Scale

- Three different types of minor scales: natural, harmonic, and melodic
- All contain 7 notes, each has distinct pattern of whole and half steps

In music for the movies, natural minor scales are often used to highlight a sad or introspective atmosphere, and harmonic minor scales are often used to impart an "exotic" atmosphere or location. The idea of a scale or chord as being "happy" or "sad" is not an inherent universal quality of that scale or chord, but is instead a result of **cultural conditioning**. Scales and chords do not contain these qualities.

2.6.3 Chromatic Scale

- Made up of all half-steps
- Contains 12 notes
- Contains all possible pitches within an octave

2.6.4 Pentatonic Scale

- A scale containing 5 notes
- Many forms
- Intervals can be larger than in Major or minor scales, often contain minor thirds
- Common form: C-E flat-F-G-B flat-C

Pentatonic scales are common in may different types of music from all over the world!

- Ancient flutes were found to have some type of pentatonic tuning
- Pentatonic scales are thought to be the oldest and most universal type of scale

Do you agree with the argument that the human brain is hardwired to hear and respond to pentatonic scales?

Part II

Week 2

LECTURE

3

INTONATION

3.1 Background

- The word intonation refers to the idea of a pitch being in or out of tune
- The idea of a pitch being "in tune" varies around the world
- Many music cultures have unique, distincy systems of intonation

Depending on where you are/what type of music you listen to, the pitch ideal (intonation preference) changes. Think of precise intonation versus variable intonation.

3.1.1 Precise Intonation

- Most western music
- Must be "in tune"
- Each pitch has a specific frequency it must adhere to
- Music that is even slightly out of tune is "bad"

3.1.2 Variable Intonation

- Many cultures have a less strict idea of intonation
- The overall contour of a melody is valued more than landing on the exact pitches
- Sometimes the instruments are purposely tuned so the frequencies of similar notes are just a little bit different from each other

LECTURE

4

TEXTURE AND TIMBRE

4.1 Texture

Texture refers to how the relationship between the melody of a piece of music and everything else that is going on (accompaniment). There are four general types of texture:

- Monophony
- Heterophony
- Homophony
- Polyphony

4.2 Monophony

Monophony is a single, unaccompanied melodic line with no harmony. Common examples include Gregorian chants, solo vocal or instrumental music. Can either be one or many instruments/voices if we hear exactly the same notes and they change pitches at exactly the same time.

4.3 Heterophony

Heterophony is two similar versions of the same melody that are heard simultaneously. Common in many Asian and African music cultures, but less common in western music. There are usually some differences between the versions of the melody we hear at the same time.

4.4 Homophony

Homophony is one dominant melodic line with lesser-important accompaniment (harmony), where all the parts have somewhat similar rhythms. Example, a voice singing with a piano accompaniment.

4.5 Polyphony

Polyphony is when seeral melodies sound simultaneously in an independent manner. These simulatneously sounding melodies create their own harmony.

4.6 Timbre

The word **timbre** refers to the quality of the sound. Also known as tone color, tone quality. Each type of instrument or voice has a unique timbre that distinguishes it from other instruments/voices.

4.6.1 Describing Timbre

Timbre is difficult to describe correctly. Usually described by using sensory adjectives, similes, metaphors, poetic descriptions, etc.
Examples:

- Full
- Round
- Thin
- Nasal
- Rich
- Soft
- Aggressive

Differences in timbres are determined by instrument range, material, method of sound production, instrument size, instrument quality, etc. The way we think about timbre depends on cultural context and can be subjective. Something we hear as raspy or nasal might be described by someone else as piercing or clear. It depends on the persons musical background.

LECTURE

5

ORGANOLOGY AND FORM

5.1 Organology

Study and classification of musical instruments, based on the way they produce their sound. The most common system is the **Sachs-Hornbostel Instrument Classification System**

5.2 Sachs-Hornbostel

Named after its two german founders, SHIC is modeled after the Dewey Decimal system. It allows for both existing and new instruments to be integrated into the system. The four main instrument categories are:

- Chordophones
- Aerophones
- Membranophones
- Idiophones

The system is not perfect! Some instruments fall into multiple categories. A piano is both a chordophone and a idiophone. Some instruments do not fall into any category, like instruments that use electricity. Because of this, a new category called electrophones is now used for instruments

whose sound is produced using some form of electricity. An example of an electrophone is the theremin.

5.2.1 Chordophones

Instruments that produce their sounds through vibrating strings. Examples include violin, violas, cellos, guitars, etc. The string quartet is an example of an ensemble of chordophones. 2 violins, 1 viola, 1 cello.

5.2.2 Aerophones

Instruments that produce sounds through vibrating columns of air. Examples, clarinet, recorder, flute, etc. Wind quintet, flute, oboe, clarinet, french horn, and bassoon.

5.2.3 Membranophones

Instruments that produce their sounds through a vibrating membrane. Examples are any kind of drum. The different drums in a Brazilian Samba percussion ensemble are all membranophones.

5.2.4 Idiophones

Instruments whose bodies vibrate to produce sound. Examples include xylophones, gongs and bells. Indonesian Gamelan ensembles are made up of a combination of membranophones and idiophones.

5.3 Form

Form can be thought of as the architecture of a song or a piece of music, how it is put together. Can be thought of as a skeleton or an outline. Large scale units!
There are many types of form, which change based on the historical period or cultural context. We use capital letters in descriptions of form (similar to a poem's rhyme scheme). For example: ABA

- A = first large main idea, any time it comes back we write another A
- B = a new idea

Differences in the B section can include some/all of the following:

- New harmonies
- Different melody
- Altered rhythm or instrumentation

basically anything that sets it apart from the A section.

5.3.1 Ternary Form

In ternary form, the original material comes back after a different middle section, ABA.

5.3.2 Rondo Form

Rondo form consists of A sections interspersed by instances of new material - but the main theme (A) keeps returning, A B A C A B A. In longer Rondo forms, there can be any number of new sections, always seperated by the A section.

Part III

Week 3