

Unravelling Music

Introducing Intervals



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Welcome to Unravelling Music: Introducing Intervals!

Who said that ear training couldn't be fun? Enjoy learning while listening to great music on your iPod. Extra audio examples and musical scores will help train your ears to hear basic intervals - like a 5th, minor 3rd, or 4th - and even major and minor chords and other musical features.

Tracks gradually increase in difficulty, starting with Body Crash and Desert Run, electronica meant to get you on your feet, to the quieter ballad Fallen, rocking psychedelia Asylum, and ending with sassy and jazzy Club Mango.

Now you can train your ears to hear intervals whether you are at the office, at your dorm, working out, or even partying. Ear Training has never been so much fun!

Topic Overview

Track 1, Body Crash: 5ths, Octaves, and 4/4 Time

Track 2, Desert Run: 5ths Review, 4ths, Panning Audio FX

Track 3, Fallen: 5ths Review, 3rds, Major Chords

Track 4, Asylum: Minor 3rds, 6ths, 2nds, Minor Chords

Track 5, Club Mango: Interval Review, 7th Chords, Jazz, Timbre

Audio Index

There are 28 audio tracks which make up this album. An introduction, 5 full music tracks, and 22 example clips.

(#1) Introduction

(#2) Track 1: Body Crash

(#3) Ex. 1 [0.14] Bell Octaves

(#4) Ex. 2 [3.00] Octaves

(#5) Ex. 3 [3.49] Drum Beats

(#6) Ex. 4 [2.59] 5ths

(#7) Ex. 5 [2.28] 5ths Melody

(#8) Track 2: Desert Run

(#9) Ex. 1 [0.00] Bass 4ths

(#10) Ex. 2 [0.38] Vibes Melody

(#11) Ex. 3 [2.02] Panned Siren

(#12) Ex. 4 [1.06] Melody with Autopanning

(#13) Track 3: Fallen

(#14) Ex. 1 [0.00] Piano Reduction

(#15) Ex. 2 [1.38] Descending 3rds

(#16) Ex. 3 [3.05] Piano Chords

(#17) Ex. 4 [3.59] Flute Solo

(#18) Track 4: Asylum

(#19) Ex. 1 [0.50] Bass Solo Intro

(#20) Ex. 2 [2.18] G Minor Chord

(#21) Ex. 3 [2.45] G Minor Arpeggiated Riff

(#22) Ex. 4 [3.10] Bass Solo

(#23) Track 5: Club Mango

(#24) Ex. 1 [0.00] Vibes Solo

(#25) Ex. 2 [2.39] Marimba Solo

(#26) Ex. 3 [2.03] Bass Line

(#27) Ex. 4 [0.45] Vibes, Drum Duo

(#28) Ex. 5 [3.45] Timbre

How to use this album

This album is designed to make ear training a multi-sensory experience which will help you learn intervals in a fun and natural way. Each track and audio example has simple instructions (see the “Track Notes” section) to help you learn how to train your ears to hear intervals.

Listen: Use the audio samples to listen to and learn the intervals from the full track.

Sing: Using the audio examples and Noteflight (see below), try to sing the audio examples.

Singing helps imprint the intervals in your mind's ear.

Try the simpler examples first, then work your way to the more difficult tracks - like the bass solo in Asylum or the improvisation in Club Mango.

See: Use the score samples to visually identify where each interval and chord takes place. If you don't read music, you can still follow along.

Play: If you have an instrument, you can play from the real scores and even try to improvise over them - or just play the examples back in Noteflight.

Noteflight



The examples for each track are also available online, in a free interactive score program called Noteflight (<http://www.noteflight.com/>). This allows you to view, play, and even edit the examples, so that you can really explore the music.

If you can't view the examples on Noteflight for some reason, don't worry! You can still learn everything, using the included PDF scores and audio tracks for the examples.

You can find links to all the Noteflight scores for this album here:

<http://www.EasyEarTraining.com/UnravellingMusic>

Planning your study

Regular practice is the key to making progress with ear training, so try to listen to these tracks frequently. Once or twice every day is ideal as you get started.

We recommend studying the tracks in the order given, but you should adjust this to suit your own needs and the progress you make. For example, it's up to you whether you study a single track in depth before moving on to the next, or practice with all 5 together from the outset.

A key benefit of the Unravelling Music series is that your study can be flexible – train where, when and however

quickly suits you.

That can be a bit overwhelming though! To give you some ideas about how to approach studying with this album you'll find a detailed example **Learning Guide** at the back of this booklet to help you plan your own study.

Basic musical terms

If you haven't studied much music before - no problem! But you may find some of the terms used in the track notes are unfamiliar. Here are a few explanations to help you get started¹ :

➤ Interval:

The distance in pitch between two notes.

➤ Chord:

3 or more notes played together.

➤ Closed Form:

When a chord has all its notes as close together as possible.

➤ Open Form:

When the notes of a chord are spread out into different registers.

➤ Inversion:

*An interval or chord with the notes reordered.
For example, a 3rd of C to E becomes a 6th of E to C.*

¹ We've kept these explanations simple and relevant to the training material – music theorists, please forgive us!

➤ Major:

A type of interval or chord with a bright, happy sound.

Also written as 'M' – e.g. 'GM' for G Major, or 'M3' for Major 3rd.

➤ Minor:

A type of interval or chord with a dark, gloomy sound.

Also written as 'm' – e.g. 'Am' for A Minor, or 'm3' for Minor 3rd.

➤ Dissonant:

When notes played together clash and have an uncomfortable sound.

➤ Timbre:

The unique sound of an instrument.

➤ Audio Effect:

A way of artificially altering sound to achieve a certain effect.

Track Notes

When you see a time marker like **[01:23]** that means you should listen from 1 minute and 23 seconds in the track.

Track 1: Body Crash

Body Crash introduces the basic intervals of an octave and a 5th, as well as a brief intro to basic 4/4 rhythm.

Ex. 1: [0:14] Bell Octaves

Listen for the note D played low, in the middle register, and in the higher register. This music interval is called an octave. Train your ear to hear the same note (D) high and low throughout Body Crash.

Ex. 2: [3:00] Octaves

Remember the octaves from Example 1? In Example 2 you can listen to a musical line using D in various octaves. Listen to the audio sample a few times, then see if you can pick out the octaves at 3:00 and in other places in Body Crash.

Ex. 3: [3:49] Drum Beats

In most dance music, the drums play a basic '4/4' beat - four beats per measure. The bass drum plays the bottom figure, which is the heartbeat of the song, while beats 2 and 4 are usually played by the snare drum or hi-hat. Listen to the audio example then check out the rhythmic pattern in Noteflight. You can practice Example 3 by tapping your foot in four ("1, 2, 3, 4") and clapping on beats two and four ("1, clap, 3, clap").

Ex. 4: [2:59] 5ths

A 5th is a very familiar figure in music. Example 4 has the 5th in 'closed form', similar to chant music. Play the example a few times and notice its unique quality. Listen for it in Body Crash at 2:59.

Ex. 5: [2:28] 5ths Melody

Example 5 breaks down the 5th for you. Sing the example a few times. This melodic figure shows up throughout Body Crash. Listen to Body Crash around 2:28 to tune your ear in. Then listen for the 5ths melody throughout Body Crash.

Track 2: Desert Run

Desert Run incorporates the use of the 5th and its inversion: the 4th. Some audio effects - panning, echo, and autopanning - are also introduced.

Ex. 1: [0:00] Bass 4ths

Desert Run starts out with simplistic 4ths in the bass, which repeat throughout the piece. Try to pick out the 4ths in the short melody line as you listen. Check out the score example to see where the 4ths occur, and try singing them back to help you pick them out in the main track. A few other intervals have been noted for you, like 6ths and octaves. The bass 4ths continue underneath the melodic line.

Ex. 2: [0:38] Vibes Melody

Sing the vibes melody. Can you recognize the 4th? Look at the score example to see the 4ths. Play back the score example a few times. Notice that the melody is based on 4ths and 5ths (A to D, and A to E). The vibes solo has an 'echo effect' applied: the sound continues bouncing around the virtual room after the notes have been played. Can you hear echo effects in other parts of Desert Run?

Ex. 3: [2:02] Panned Siren

Listen to the police car siren as it races from one ear to the other. Moving a sound between speakers is known as 'panning'. Use headphones to listen to Desert Run one ear at a time. Notice which sounds play on each ear. Compare this to listening with both headphones on. Notice the fullness and space created by panned instruments and effects. Panning is a very common effect. Try looking out for it throughout the album.

Ex. 4: [1:06] Melody with Autopanning

Listen to Example 4 on a pair of headphones. The melody lightly bounces from one ear to the next at a steady pulse with 'autopanning'. In autopanning the sound bounces between two speakers, back and forth at a rate determined by the tremolo audio effects settings. In this case, the tremolo balance is equal and so the sound pans quickly between the ears evenly.

Track 3: Fallen

Fallen introduces the 3rd (both major and minor) and major chords. For now don't worry about the difference between major and minor thirds, just listen for the way they seem to 'skip' a note.

Ex. 1: [0:00] Piano Reduction

The intro starts with a 3rd (C and E). The figure returns with 3rds in the upper part. Listen to the example several times and compare it to the piano reduction score. ('8va' is marked where the voices actual play in a higher register than shown.) Listen to Fallen and hear different variations of the opening 3rds.

Ex. 2: [1:38] Descending 3rds

Sing along with Example 2 - play back Fallen at 1:38 and sing along with the figure. The 3rds move down in stepwise motion (one note at a time) making them very singable. Can you recognize this figure repeated throughout Fallen in the piano and flute?

Ex. 3: [3:05] Piano Chords

Example 3 takes the piano part in the upper register and brings it back to middle C. You can listen to a very common major chord progression C-F-G in this part. The chords are

in closed position. Try playing them on your keyboard at home. Listen to the bright quality of the major chords, which distinguish them from "ominous" sounding minor chords.

Ex. 4: [3:59] Flute Solo

The Example 4 flute melody is full of 3rds and arpeggiated chords - chords played one note at a time, in order. Major 3rds normally sound pleasant to the ear. Listen to the audio example several times and try to find all of the 3rds. Check your observations against the example score. Did you find all of the 3rds? Can you recognize other familiar musical figures from earlier in *Fallen*?

Track 4: Asylum

Asylum incorporates minor chords, 3rds, 2nds, and 6ths.

Ex. 1: [0:50] Bass Solo Intro

Asylum covers some of the less pleasant sounds of the 2nd, minor 3rds, and minor chords. The bass solo intro uses a combo of the minor 3rd paired with the dissonant minor 2nd for an ominous sounding bass line which plays throughout Asylum. Listen to Example 1 several times and try to memorize the line and intervals. Listen to Asylum again and find the minor 3rds and minor 2nds.

Ex. 2: [2:18] G minor chord

Listen for the choir and synth pad entrance at 2:18. The G minor chord provides a solid foundation for this section of Asylum. The open G minor chord emphasizes the interval of a minor 3rd and gives Asylum its creepy sounds. Think Halloween night.

Ex. 3: [2:45] G minor arpeggiated guitar riff

Picking out the minor 3rds and G minor chord in the guitar riff at 2:45 can be difficult. Listen to Example 3 while reading the score. The part is made up of arpeggiated G minor chords, which have a minor 3rd between the bottom

two notes. Listen to Example 3 a few more times, then listen to Asylum at 2:45. If you have an instrument at home, you can play the part using the score.

Ex. 4: [3:10] Bass Solo

Try to sing Example 4. The mix of 2nds, and the diminished 5th in measure 4 make the line very difficult to sing, but your ears can easily pick out the diminished 5th and minor 2nds. Listen to the audio example several times. Identify the intervals in the full Asylum at 3:10. For an extra challenge, try to memorize the bass line. This will help embed the intervals in your mind. Notice how easy it is to pick out the 4th now!

Track 5: Club Mango

Club Mango emphasizes the dominant 7th chord, 7ths, the jazz style, and timbre.

Ex. 1: [0:00] Vibes Solo

Club Mango is all about jazz and free improvisation. Notice the freedom of rhythm during the intro. The vibe player improvises on the F minor 7th chord. Jazz is full of 7th chords, blue notes (notes which are slightly flattened for effect), intricate rhythms, and vibrant timbres.

A 7th chord is a triad plus the addition of a major or minor 3rd above the chord.

For example, F minor 7th is F, A flat, C, and E flat.

Ex. 2: [2:39] Marimba Solo

Listen to the audio examples and check out the score for Example 2. Slow down the audio in Noteflight to hear the quality of the chords. Sing the melody a few times in your head to recognize the jazzy 7th chord. Notice how the D minor 7th chord is made up of 3rds. Listen to the full version of Club Mango at 2:35 and find the D minor 7th chord.

Ex. 3: [2:03] Bass Line

In measures two and four, although the passing note is a 5th (D to A), the notes emphasized are D and C, an interval of a 7th. The 7th is usually avoided in both instrumental and

vocal music, since it is usually more difficult to accurately perform. This bass line is a good example of how the 7th can be incorporated into a line easily. After you have listened to this sample a few times, listen to Club Mango at 2:03 for this repeating bass line.

Ex. 4: [0:45] Vibes/Drum Duo

Club Mango is full of intriguing timbres. Listen to the call-and-response between the vibe soloist and the drums. Listen to how the tom-tom drums and the cymbals mimic the melodic line. As you listen to Club Mango, listen to the sonic 'colors' of each instrument. Try to pick out specific qualities like which instruments sound dark, bright, harsh, sweet, soft, airy, silvery, etc.

Ex. 5: [3:45] Timbre

Listen to Example 5 several times. Each time focus on a different instrument - the metallic triangle, the bass, the scratchy shakers, the mellow lines of the woodwinds, the vibes, toms, etc. Then play Club Mango and listen out for each instrument's unique sound.

Learning Guide

This is a suggested approach to learning with this album. Follow this guide for Track 1: Body Crash, and then adapt it to suit yourself for the other tracks on the album.

Stage 1

Listen to Track 1: Body Crash (#2). Try not to let your mind wander - instead, actively pay attention to the different instruments and sounds in each part of the track. This skill, called '**active listening**', is an important one to develop!

Stage 2

Once you are familiar with the track, listen to each **example**:

(#3) Ex. 1 [0.14] Bell Octaves

(#4) Ex. 2 [3.00] Octaves

(#5) Ex. 3 [3.49] Drum Beats

(#6) Ex. 4 [2.59] 5ths

(#7) Ex. 5 [2.28] 5ths Melody

Read the **notes** given for each example in the "Track Notes" section of this booklet. These provide extra information on the musical meaning, and tips on how to listen for them.

Look at the **score** for each example. You can use the PDFs included with this booklet, or the interactive Noteflight examples online. If you don't read music, try to just visually connect what's happening on the score with what you're hearing - but don't worry too much. The important thing is to hear what's going on.

Singing is the best way to reinforce what you hear. Even if

you're not a confident singer, try to sing back each example. For the drum example you can make drum noises, or tap your foot and clap your hands to copy the rhythm.

Practising copying what you hear is a great way to improve your improvisation and 'playing by ear' skills, and will really help tune your ear into what it's hearing - great for Stage 3!

Stage 3

Now, for each example, go back to the main track and use the timestamp provided (e.g. [0.14] means '0 minutes 14 seconds' for the first example) to **locate the example** within the track. You may find that the timestamp on your player is a few seconds out from the timestamp given - Trust your ears to find the example.

Listen to how the example sounds different in context. If examples overlap (e.g. Examples 2 and 4 for Body Crash), try to tune your ear into each separately, and then both together.

You may find some examples difficult to hear. This is normal. Just be patient. Listen carefully to the sound of the example - the notes, the instrument, the character of the sound. Then listen to the relevant section of the main track and try to pick it out. Is it lower than you thought, or higher? Perhaps it's louder in one ear than the other? Does it get submerged under another musical part, and is only audible for short periods?

These are all important things to tune your ear into, and as you practice listening in this way, you'll find you start to hear more and more in music without even trying.

Stage 4

Once you've been able to hear each example within the main track, the next step is to listen to it regularly - on your CD player, your computer, your iPod, your phone - however you like! We recommend adding it to your favourite playlist, putting into your 'shuffle' mix, or aiming to listen to it once a day as part of your music practice routine.

The important thing is that each time the track comes on you **pay attention** and try to pick out each of the examples. If you can't remember what each example is teaching, refresh your memory from the track notes.

Stage 5

Now that you're familiar with the track, and know the music behind each of the examples, try to **dissect other parts** of the track. Here are some example questions to think about:

- How many instruments can you hear at any given moment of the track?
- Can you hear the instruments from the examples elsewhere? Are they playing the same thing, or something different?
- Are different things happening in one ear than the other?
- Can you hear the musical content of the examples being used elsewhere? For example, are the 5ths

from Example 4 used elsewhere in the track? (Check using your instrument!)

These are just some examples. As you get used to active listening, and learn more about the music underlying the tracks, you should find your ears start to pick up on all sorts of details you were never aware of before. Try to keep figuring out what's going on musically in the track.

If you have any questions or want to discuss the track, come talk about it in our forums:

<http://www.EasyEarTraining.com/Forums>

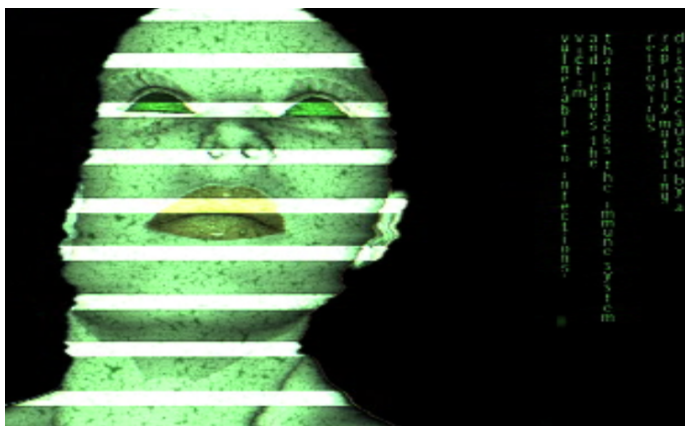
About the composer

Intermedia composer,
percussionist, author, and
obsessive sci-fi buff,

Sabrina Pena Young
composes mind-numbing
electroacoustic works
heard in Asia, North
America, Australia, and
Europe.

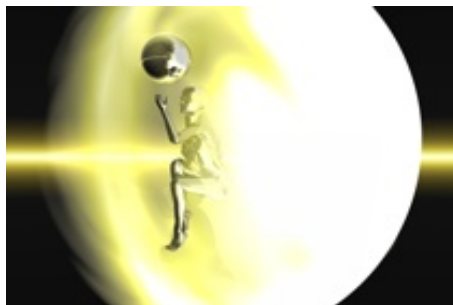


Her music has been heard in film festivals, radio, electronic dance clubs, random boom boxes in France, and as not-so-pleasant background music. Her multimedia works have been performed at venues like the Beijing Conservatory, the International Computer Music Conference, Miramax's Project Greenlight, the Athena Festival, the New York International Independent Film Festival, Art Basil Miami, Turkey's Cinema for Peace, and Pulsefield International Exhibition of Sound Art.



Origins, a riveting album of cinematic soundscapes, pulsating rhythms and enigmatic vocals, was released on CD Baby and iTunes in 2008. Origins includes **World Order #1**, a pounding dance piece about nuclear war and **Looking Glass**, a nightmarish musical poem.

Recent projects include **World Order #5**, an apocalyptic tale about the decimation of the human race by a viral mutation written for the Kansas State University percussion ensemble, 3D animation, and electronic music, and the **Creation**, a CGI multimedia oratorio composed for the Millikin University Women's Chorus and percussion ensemble.



Visit Sabrina's website for news and information:

<http://sabinapenayoung.blogspot.com/>

Want more great music? Buy "Origins" here:

<http://www.cdbaby.com/Artist/SabrinaYoung>

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Further Training and Support

If you need any help using this album to develop your ears, have questions, or just want to discuss your progress with other students – come join our discussion forums at:

<http://www.EasyEarTraining.com/Forums>

You can also find support information and links to further training resources at the **Unravelling Music** series homepage:

<http://www.EasyEarTraining.com/UnravellingMusic>