

# **VIDEO GAME MUSIC ANALYSIS**

## **- For Educational Use Only -**

# **Boss Battle 1**

# **(Chrono Trigger)**

Composed by Yasunori Mitsuda  
Transcription/Analysis by Seventh Sam  
[www.seventhsam.com](http://www.seventhsam.com)

chromatically descending quartal chords juxtapose with descending minor triads

**Intro** ♩. = 165

Rock Organ

Electric Guitar

Electric Bass

Drumset

Rapid-fire, confounding chromatic patterns scramble any previously established tone and *launch* the player into the fight:

*G Phrygian*

This entire track structures itself around two harmonic concepts that fall outside of common-practice theory:

- 1) *Modal Harmony* - in which the melody, countermelodies, etc. all juxtapose against a constantly present tonic note. Instead of functional diatonic chords that create tension/release via their role in the scale, the music remains in one *mood* (or, *mode*) throughout.
- 2) *Quartal / Quintal Harmony* - in which chords are built out of stacked intervals of P4/P5's instead of m3/M3's. These chords are distinct from inverted sus2/sus4 chords in that they never *resolve* the way suspensions in common-practice theory do.

The near-complete embrace of these two "non-functional" concepts is what gives this track its unique, thunderous sound. The Phrygian mode is quite dramatic and ominous in and of itself, but adding quartal/quintal chords to the mix turns the "enigmatic and portentous" dial up to 11. Add to that an extremely fast tempo at 12/8 to get that "rolling, charging" feel, electric guitar power chords, loud brass, blazing drums, etc. and it becomes clear what Mitsuda was after: a gripping, unrelentingly driving boss theme that would turn all (non-elite) boss battles in the game a high-stakes fight for survival.

Since functional chord symbols and roman numeral analysis don't apply, I won't include those. Instead, I'll indicate the tonal centers (modes) that the track is hovering around at any given point.

4 **A**

Brass

top notes of arpeggios hammer away at first three notes of mode

R. Org.

power chords firmly root harmony in phrygian mode

Guit.

8ve jump in bass line serves as accent and breaks up potential monotony in rhythm

Bass

D. Set

The short yet effective melodic line carried by a merged brass section has some noteworthy elements:

- The antecedent phrase (mm. 4 and 5) consist of only the interval of a perfect 5th. Combined with the insistent power chords in the guitar, this gives equal weight to both the tonic and dominant degree of the scale and is essentially the hyperactive, prog-rock equivalent to a P5 drone.
- The consequent phrase weaves a short, memorable figure that lands on the dominant (D). Yet, the harmony doesn't change from the rapid quartal arpeggios and modal powerchords. This robs the dominant degree of the usual amount of dramatic tension it would have in a common-practice style harmonic structure.

### So why does all this matter?

A game composer has quite a challenge ahead of them when they are tasked with creating a game-wide boss theme. The track is going to accompany many different foes in many different places under many different contexts. How, then, does one make the track "fit" all of those different battles? Analyzing all these details leads me to believe that Mitsuda's solution - conscious or not - was to go "completely modal" and pound away at one *very specific*, targeted feel rather than create a self-contained symphony, both in this theme and in the battle theme. And it works! Every boss battle in Chrono Trigger feels like an intimidating yet exciting obstacle that the player has built up to and worked towards facing.

TL;DR - Mitsuda's specific harmonic decisions turn this track into pure hype, challenge, and excitement

Brass

R. Org.

Guit.

Bass

Toms

D. Set

subtle change to the third scale degree gives a major lift to melody, adding contrast/interest

chromatic ascending figure in bass helps smooth upcoming abrupt modulation



16

Brass

R. Org.

Guit.

Bass

D. Set

again, bass helps abrupt transition sound less abrupt

The musical score consists of five staves. The top staff is for Brass, the second for R. Org., the third for Guit., the fourth for Bass, and the bottom for D. Set. The key signature is three flats. The score shows measures 16 through 19. In measure 19, a red annotation is placed over the Bass staff, stating 'again, bass helps abrupt transition sound less abrupt'.

**C (Bridge)**

20

R. Org.

Guit.

Bass

Toms

D. Set

cross relation of II (in organ) vs bII (in bass and guitar)

bIII -> bVII -> bII

bII degree

I degree

bIII -> bII ->

Same pattern, half step down.

**F# Phrygian**

**F Phrygian**

Another abrupt modulation whisks us a M3 down to F# Phrygian...sort of...

### **Breakdown:**

- 1) The bass line and electric guitar almost entirely play modal figures that emphasize various degrees of the Phrygian mode, as illustrated above (*note: the roman numerals are referring to the scale degrees, not chords*).
- 2) Meanwhile, the rock organ plays quartal arpeggios and unresolved "sus2" triads (a harmonic leitmotif of the soundtrack that could be thought of as a form of quintal, quartal, and secunda harmony all in one triad) that confound any sense of tertian harmony and - as illustrated above - creates a cross relation that clashes with the guitar and bass, which prevents the harmony from settling in any kind of familiar or stable fashion.
- 3) Then, the whole thing repeats itself a half step down.

This whirlwind of nonfunctional harmony combined with the cymbal and fill-heavy rhythm section creates a bridge section that provides a great contrast to the A and B sections and simply refuses to let the player/listener rest in any kind of resolution. This is why this track works so damn well as an indefinitely looping boss theme despite its brevity.

The image shows a musical score for four instruments: R. Org. (Rock Organ), Guit. (Guitar), Bass, and D. Set (Drum Set). The score is in G minor (one flat) and 4/4 time. Measure 24 is marked with a '24' above the staff. The R. Org. part features a melody of eighth notes and chords, with some notes highlighted in blue. The Guit. part has a single note in measure 24 and a series of eighth notes in measures 25-27. The Bass part plays a steady eighth-note line. The D. Set part uses 'x' marks for cymbals and vertical lines for the drum kit.

Perceived tonal centers shift so abruptly at this point (mm. 24 and on) that any attempt to analyze this in a traditional manner falls flat on its face. I'll spare anyone reading this the five page essay on the ultra specifics of quartal harmony theory and techniques, but mention a few of the key takeaways:

**1)** The melody conforms to a scale - G minor - although the quartal harmony and irregular bass make it impossible to place the tonal weight in any part of that scale. However the scale is headed somewhere. Where? To the note D (in mm. 26). Why? Because that is the dominant of G, and will serve to imply a resolution to G at the loop point. It's also important to note that D (in the following page) is voiced in the highest register, and is thus heard most prominently.

*This keeps the music from becoming directionless and without dramatic tension.*

**2)** The two inner voices of the rock organ part essentially serve as *one, blended* voice. This is due to the homogenous sound that a P4 or P5 interval creates. Looking at the harmony from that perspective, it begins to make more intuitive sense.

*Mitsuda embraces what things like contrapuntal writing forbids to create a very specific kind of sound: enigmatic, open, powerful.*

**3)** As much as possible, Mitsuda avoids accentuating imperfect consonance via major or minor thirds/sixths, and instead aims for the accentuation of the following intervals: P5 (quintal), P4 (quartal), or M2/m7 (secundal).

***Demonstrating this requires more than this text box allows, so skip ahead to the measures after the repeat for a detailed explanation of this.***



26

R. Org.

Guit.

Bass

Toms

D. Set

ornamental runs plucked from  
G melodic minor, fits with the harmony

Up until these last three measures, the meter has been a solidly and predictably quadruple. Breaking up meter into unexpected, lightning-fast triple and duple measures creates a rhythmic imbalance (and therefore tension) that is released by looping right back to the A section (and its steady, rolling quadruple feel). This is a fantastic example of not only looping but of using devices other than harmony (i.e. V-I) to create tension and release.

29

R. Org. ① RED NOTES = changed from original ②

Guit.

Bass

D. Set

**...cont'd from page 8:**

*Example 1:*

I changed the melodic motif from Down-Up to Up-Down. This placed a *third* on the downbeat, as opposed to a *fourth* (as Mitsuda) wrote it. Compare the two and you will probably notice the dramatic difference this makes. Mitsuda wanted to avoid the music sounding too "unambiguous", as it does above, so he opted to accent the perfect fourth.

*Example 2:*

I changed the inner "double voice" to retain the shape of a P4 on beats 2 and 4. This creates a compound third (between F# and A on beat 2, between A and C on beat 4). Since this interval is formed with the highest voice, it again makes the music sound a lot less harmonically open, a lot less ambiguous, and generally out of step with Mitsuda's desired tone for the track.

*Note: This change also necessitated altering the bass (as noted above) to avoid m2 clashes. This adds further "unwanted consonance" and generally sounds clunkier than the original.*