VIDEO GAME MUSIC ANALYSIS

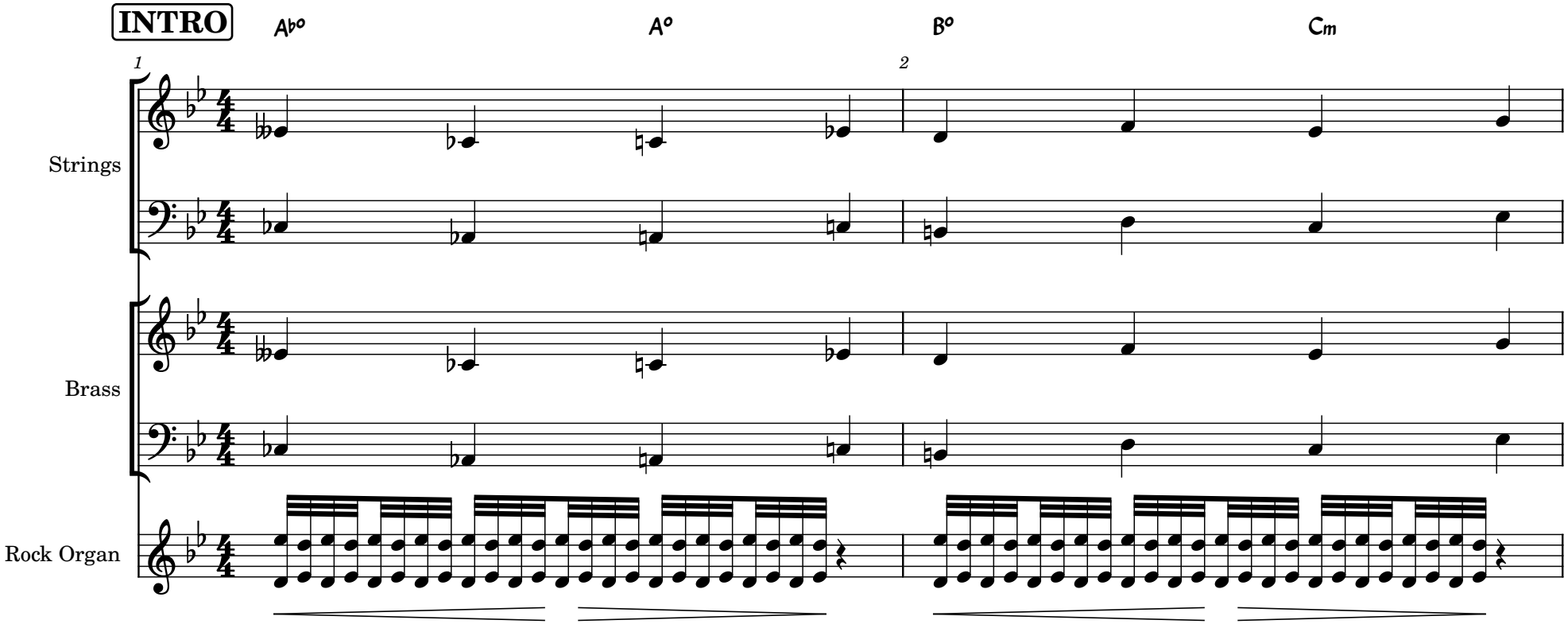
- For Educational Use Only -

Zeromus Battle

from

Final Fantasy IV

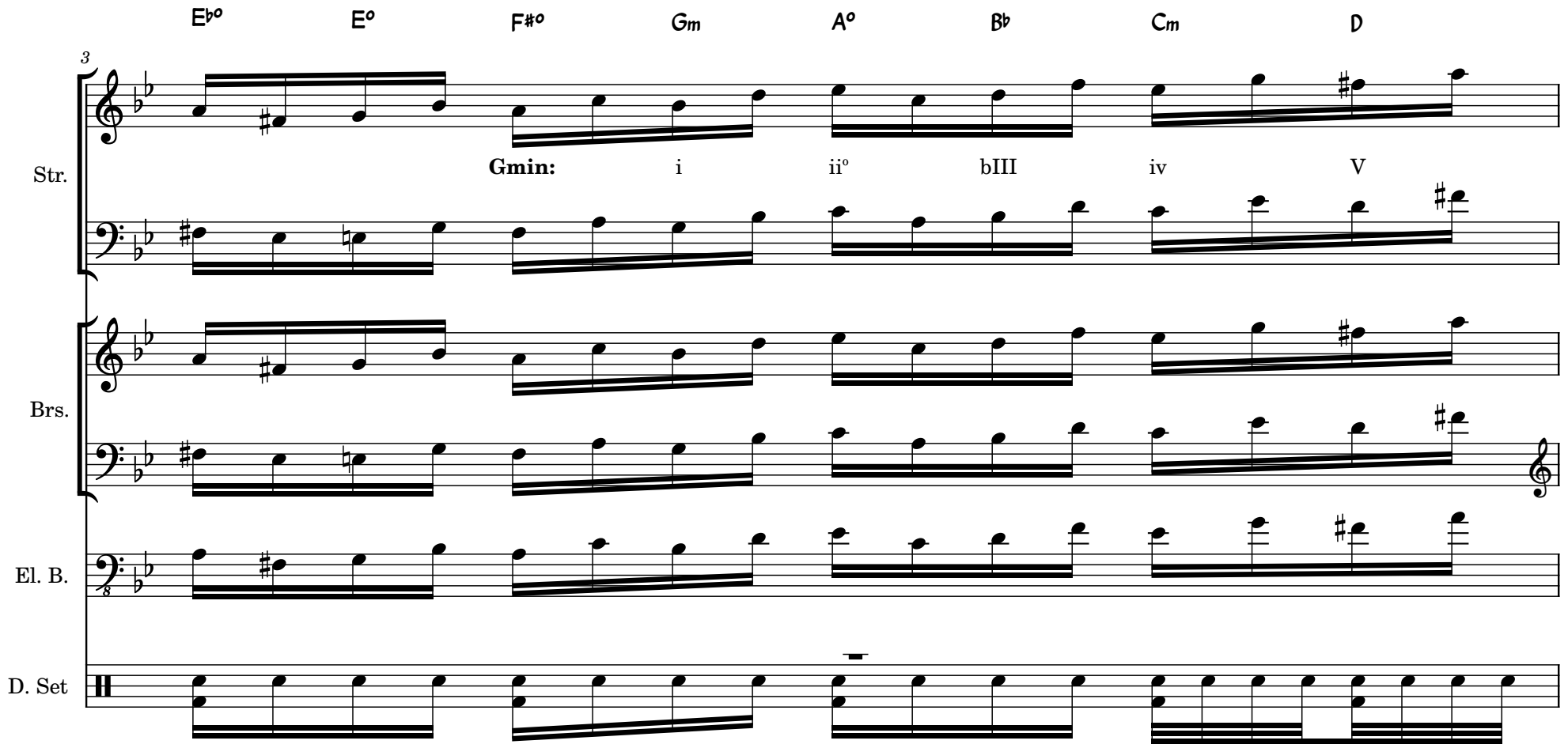
Composed by Nobuo Uematsu
Transcription/Analysis by Seventh Sam
www.seventhsam.com



During the intro section, Uematsu utilizes the "threatening" nature of diminished chords to subtly transition - via leading tones - to a more decisive, dramatic cadence that leads explosively into the A section. Since this is the final battle of the game, he settles for nothing less than a flurry of tritones and deceptive cadences to keep the listener on the edge of their seat.

The key of the track G Minor, but Uematsu begins with a tonally ambiguous, ominous cadence of rising diminished triads. In further detail:

- The bass (doubled lower voices of the strings and brass) adhere to the first five notes of the Ab Octatonic/Diminished Scale (H-W). This effectively creates both a melodic (via the use of the broken third motif) *and* harmonic impression of the Bdim7 chord, which resolves to the Cm chord at the end of the second measure.
- Yet, instead of resolving to an expected chord (like ii or V), Cm pivots by way of its third (Eb) to *another* diminished chord, prolonging the rising cadences of diminished harmony as the tempo quickens. See the next page.
- On top of all that, Uematsu (never one to shy away from the Rock Organ) creates an unsettling effect by way of a pFp trill between a M7 and m9 interval. The notes in the trill belong to both the diminished chords that are being alternated between in the orchestration, further introducing ambiguity and tension. A subtle but effective use of limited resources on Uematsu's part.

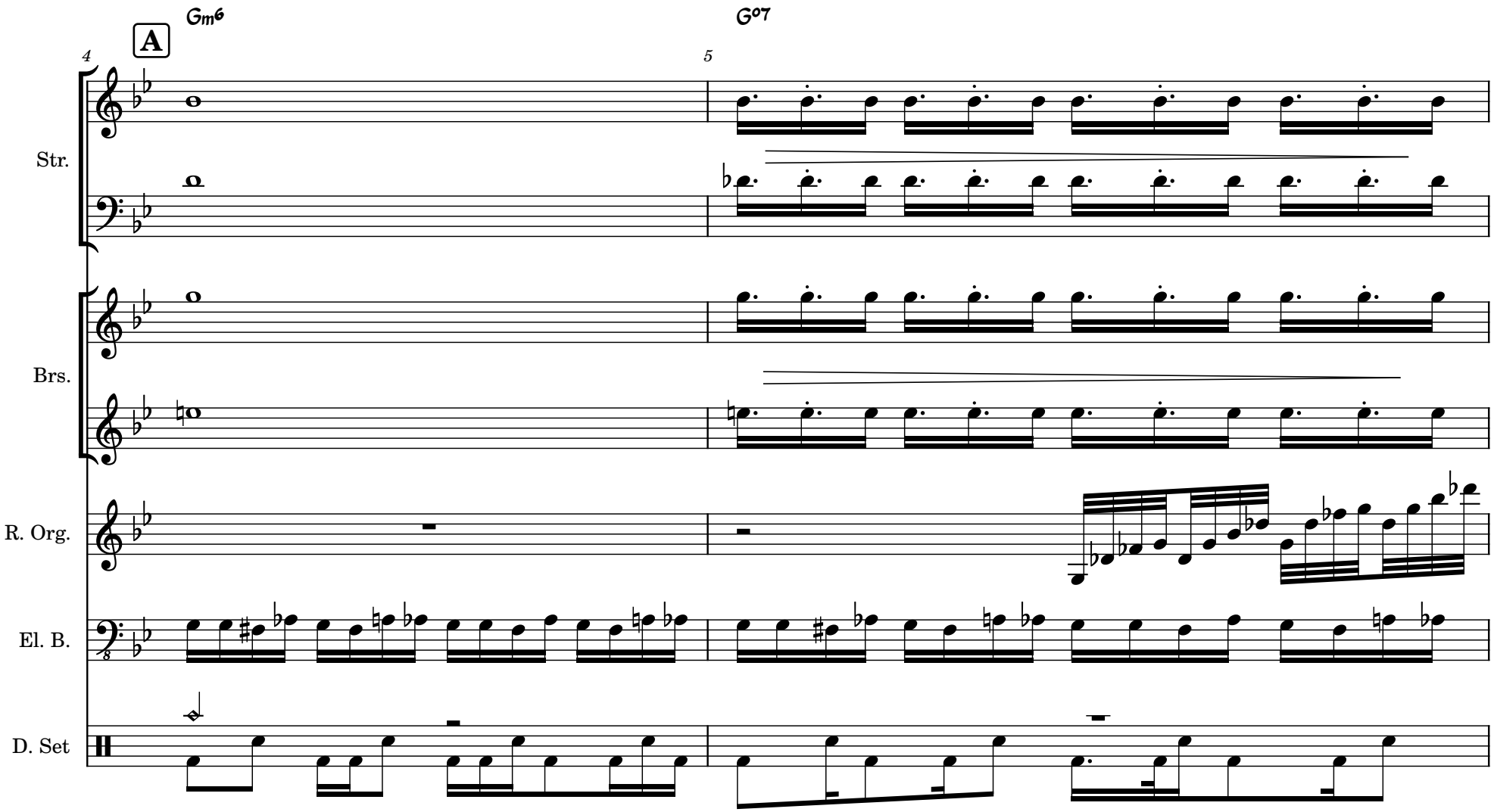


Two diminished triads rise chromatically to F#dim, which resolves to the tonic, Gm.

From there, as the pace quickens, a simple but effective harmonic minor key cadence launches the listener into the A section proper.

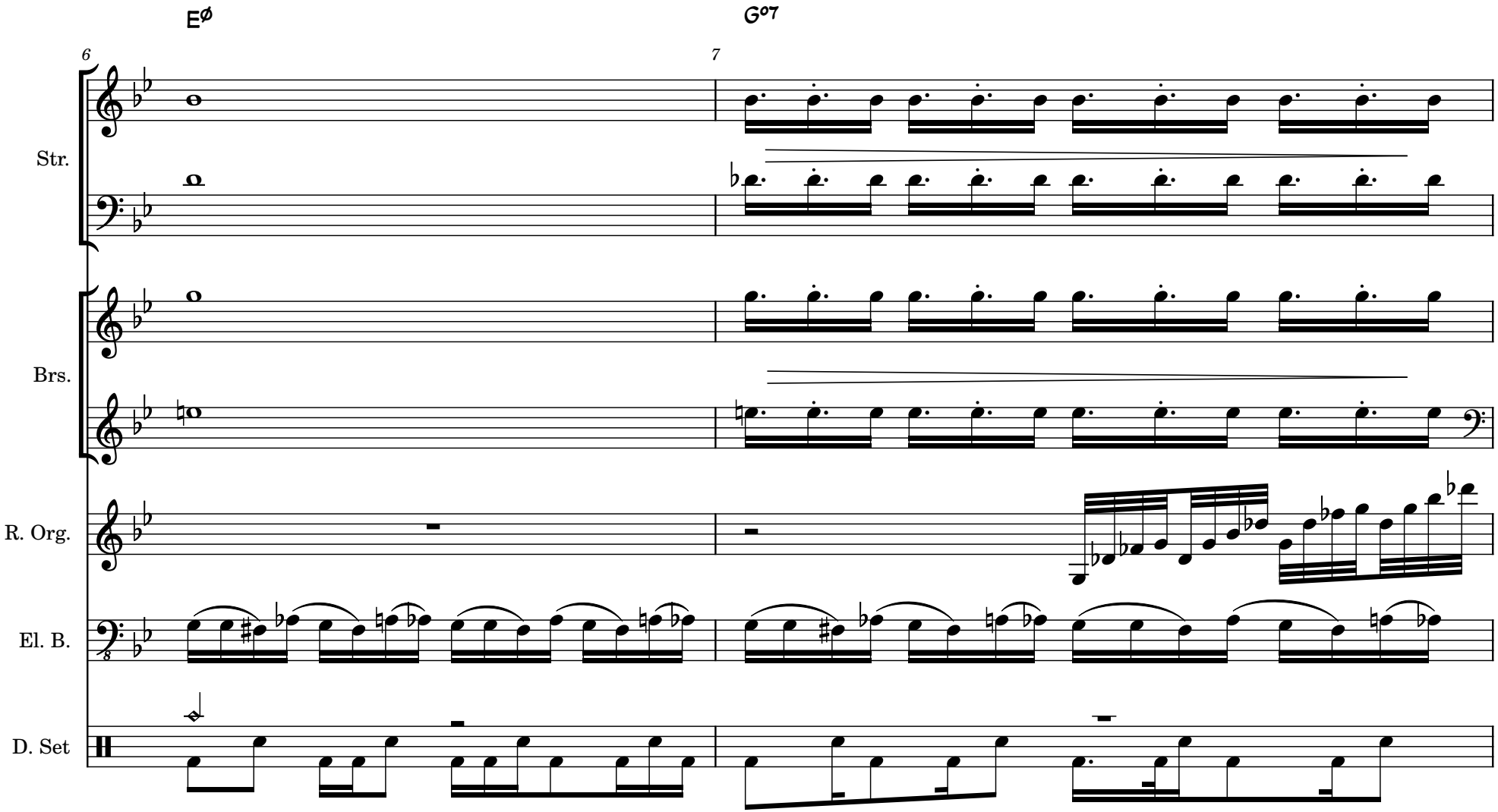
This mixture of chromatic, tonally ambiguous diminished harmony combined with tonally assertive and dramatic minor key harmony creates a lovely mixture of fear and decisiveness that capture the spirit of an "all-or-nothing" final battle.

- If Uematsu had stuck with purely diminished harmony, the track would sound too scary and portentious, leaving the player less-than-inspired to rise to the challenge presented.
- However, without the chromatic intermingling of the tritone-heavy diminished chords, the track would sound too "safe", as if the foe was merely an afterthought as opposed to the GIANT SPACE ALIEN THREATENING ALL LIFE AND HOPE!



Lots of stuff going on here. On this page, I will focus on the *harmonic* devices being used.

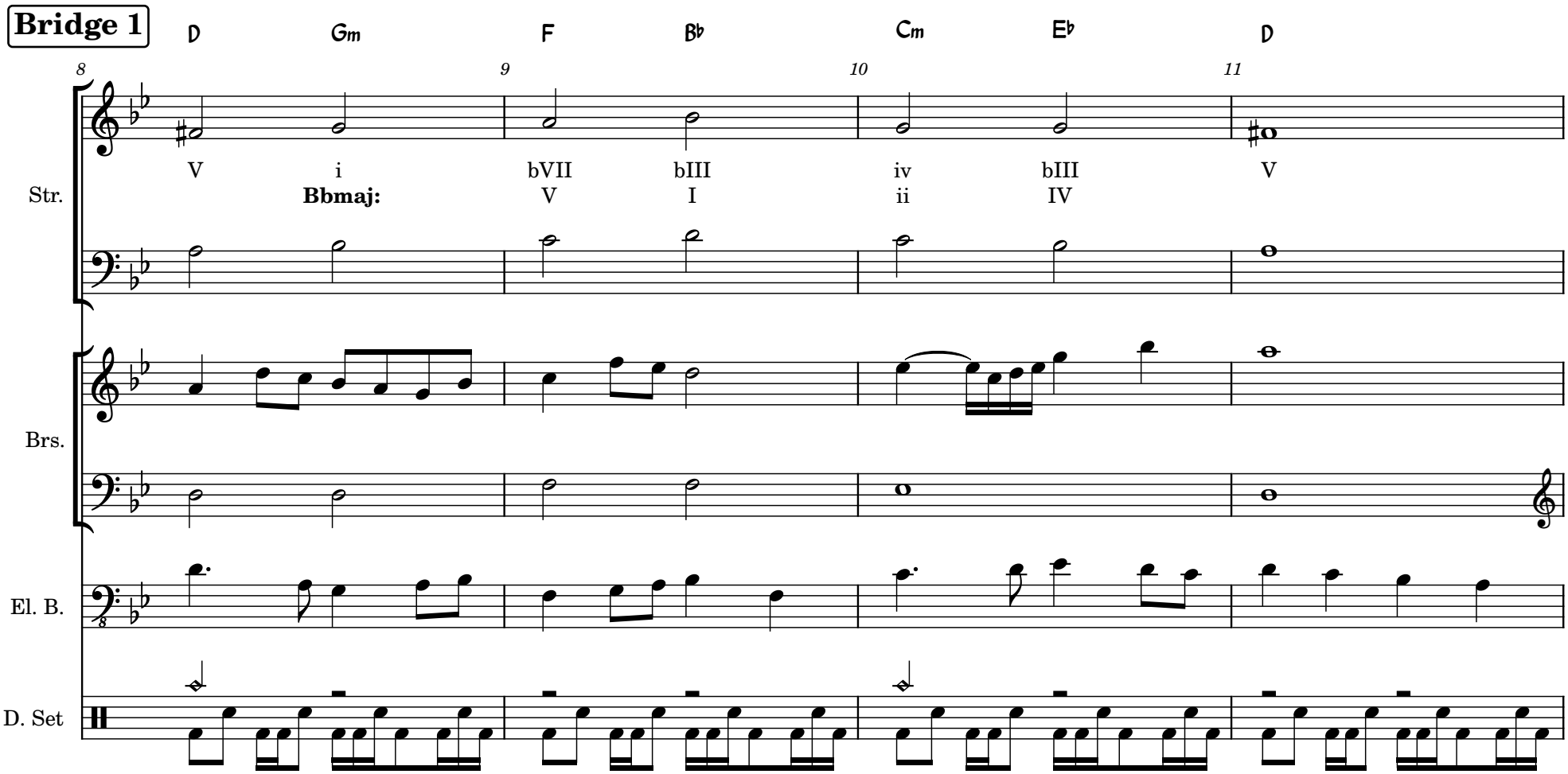
- Uematsu resolves to a Gm6 chord (which has the same notes/sound as a Em7b5 chord in first inversion). This accomplishes two things:
1) It tonicizes G minor as the key (since three of the four notes of the chord are the tonic triad)
2) It adds - via the E natural - an element of instability and tension into the harmony. This continues the trend from the Intro.
- In the second measure, a single note (Lower strings, D to Db), shifts chromatically to the tonic diminished seventh. This increases the tension and danger in the listener's ear.
- The Rock Organ arpeggio serves to reinforce the G diminished 7th chord, ending on a Db which leads up a semitone back to Gm6 (Db -> D)
- The bass hovers chromatically around the tonic note (G). The agitated chromaticism further adds to the "danger" factor.



Rhythmically:

- The Drum set plays a fairly standard rock groove, rooting the track in 4/4.
- The bass line plays a syncopated grouping of 3+3+2. To see what I mean, look at how I've written the slurs in the above measures.
- The orchestra plays a rhythmically diminished form (note lengths are halved) of this grouping (3+3+2).

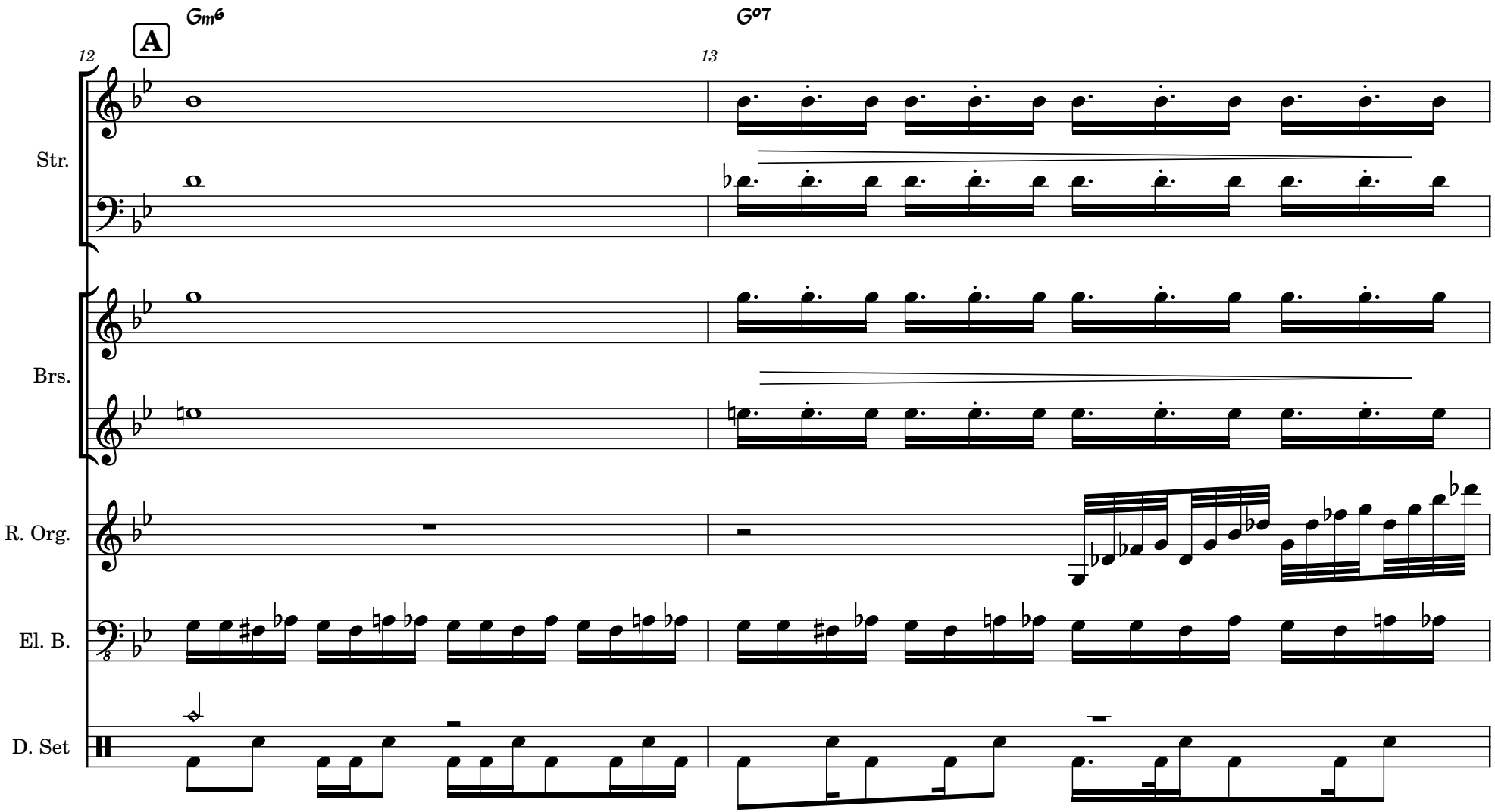
These asymmetrical groupings and their juxtaposition against straight, 4/4 groupings will play a larger role in the sections to come. More on that as the music proceeds.

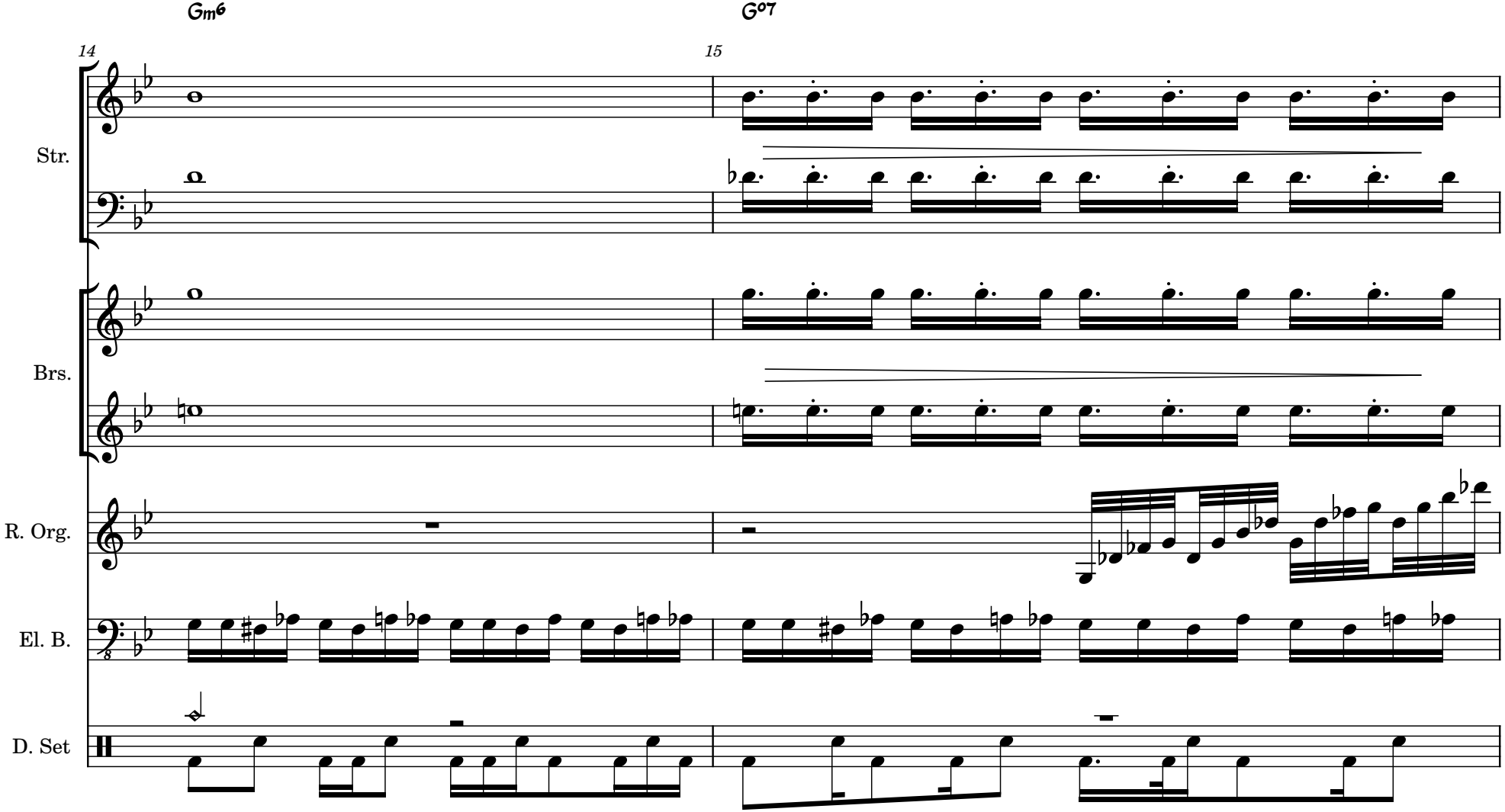


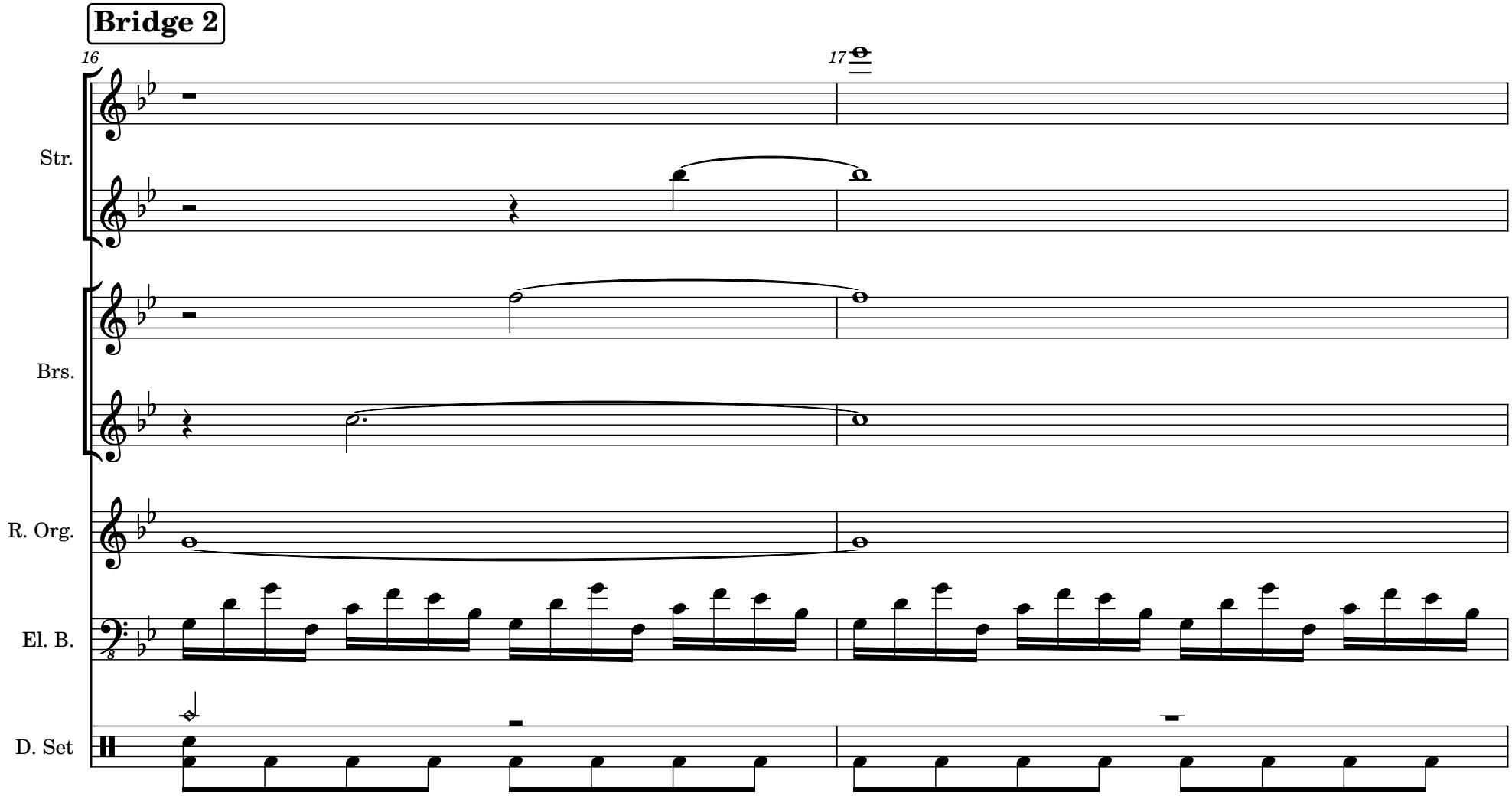
This four-measure bridge between the two A sections contains a fairly standard minor-key chord. The high brass voice takes the lead while the other voices provide homophonic accompinament. The bass-line provides a harmonically consistent counter-melody.

- The first measure resolves to the tonic
- The second measure temporarily modulates to the relative major key (Bb) by way of the bVII chord (Fmaj). This has the effect of giving a "ray of hope" to the listener, a temporary relief from the oppressive diminished tension of the A section. This contrast in mood is important to prevent the track from becoming stale (especially since it repeats indefinitely).
- The third and fourth measures modulate back by way of Cm (a pivot chord in this case) to Gm, setting up another V->i resolution.

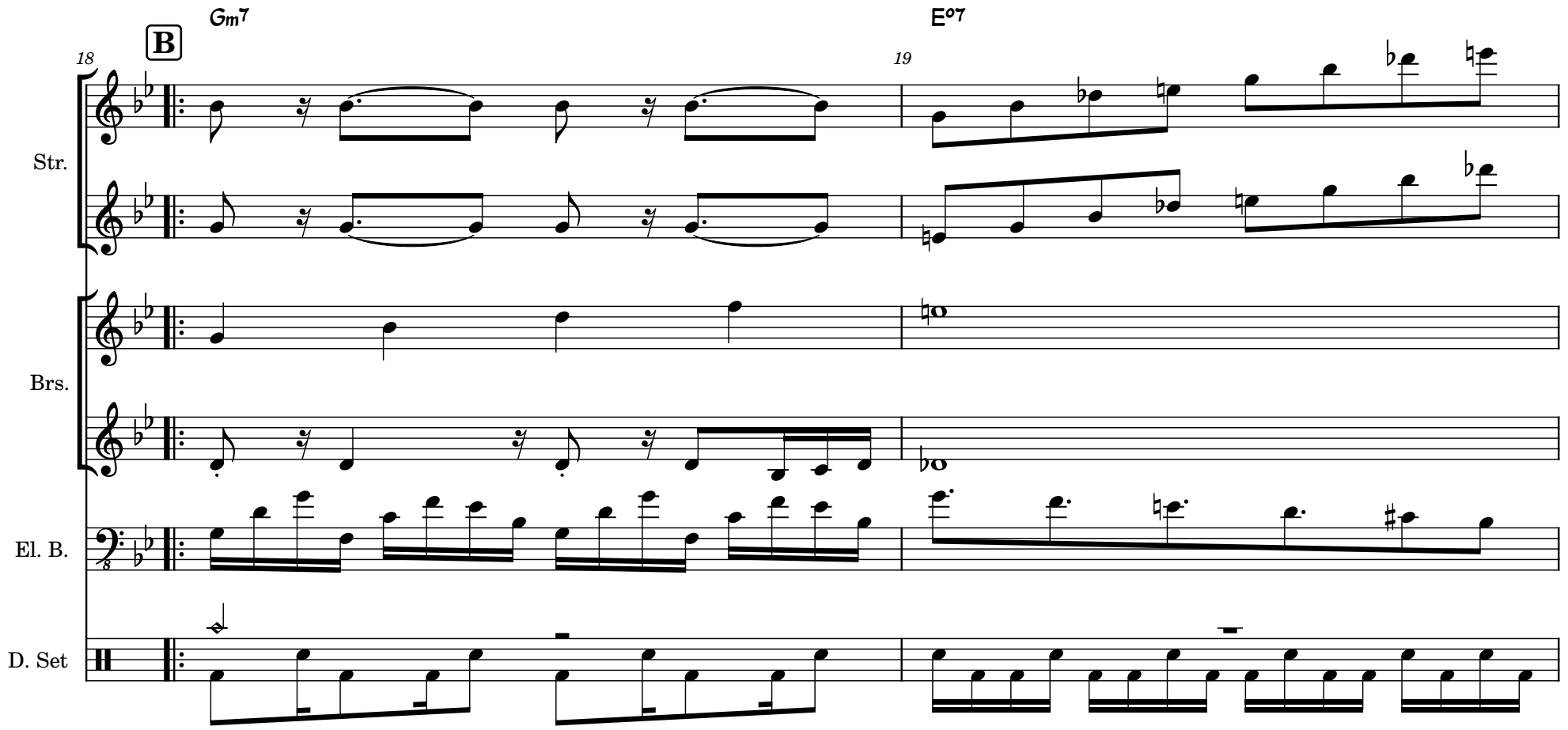
A few notes about the bassline:
In measure 9: Notice the ascending lead up to Bb, creating a melodic motion that reinforces the harmonic resolution to the relative major.
In measure 11: In the same vein, the melody descends back down the Gm scale to the tonic note.


A
Gm6
G07
12
13
Str.
Brs.
R. Org.
El. B.
D. Set


Gm6
G07
14
15
Str.
Brs.
R. Org.
El. B.
D. Set



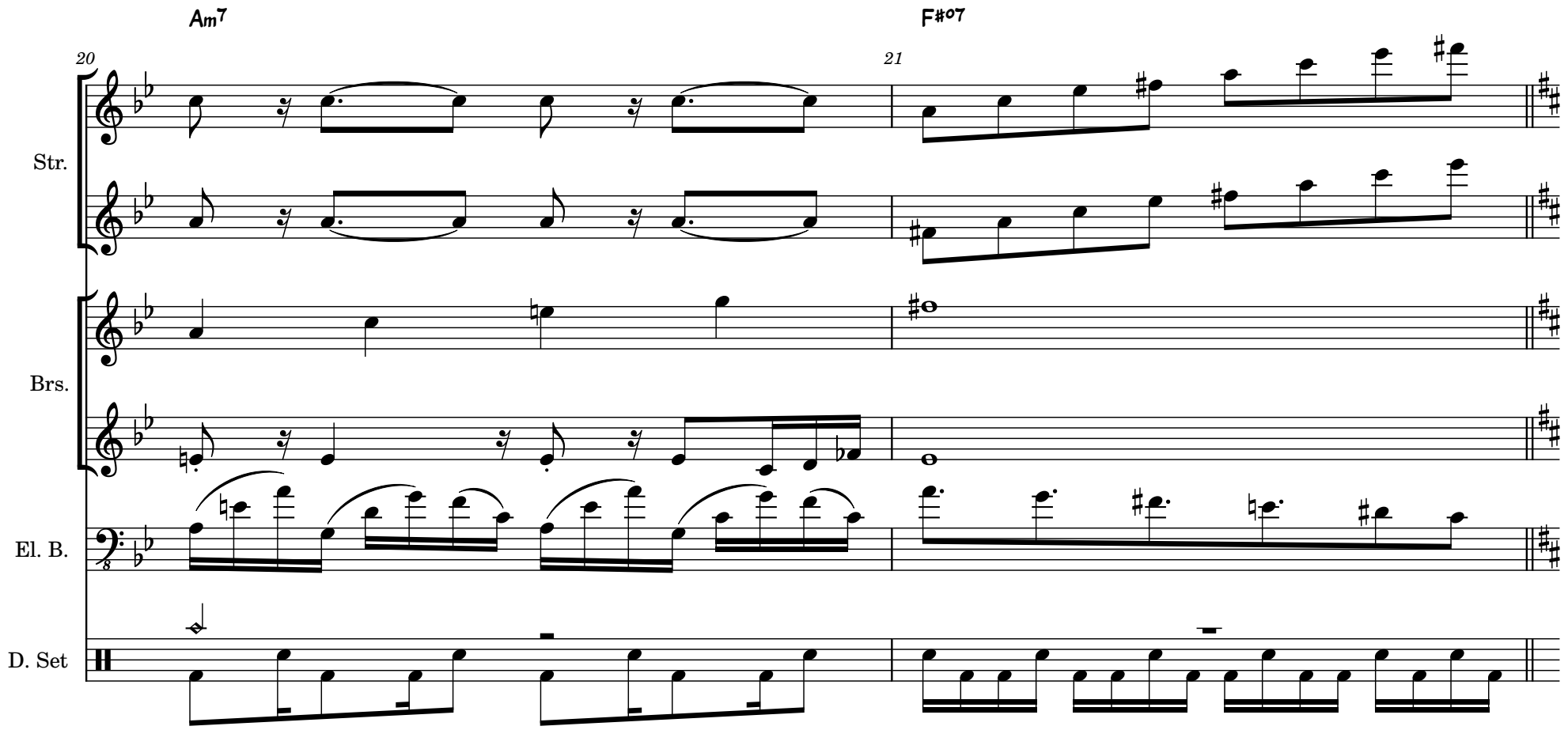
Uematsu shifts from tonal to quartal/quintal harmony in these measures:
- The orchestra employs an ascending fourths motif (a motif he would later repeat in FF6 and beyond).
- The bass line, continuing the 3+3+2 grouping, switches to playing "hollow chords" (chords without a third). These hollow chords, voiced as they are, contain the intervals of a perfect fifth and fourth - hence, quartal/quintal harmony.
They could technically be notated as G5 and F5 or G(omit3) and F(omit3), but there's little point. Other than reinforcing important tones in the Aeolian scale (tonic - G, dominant - D, subtonic - F), which will become important in the following measures, the function these chords serve is to create the unique sound quartal/quintal harmony produces, especially in this fast, arpeggiated form.
It's worth noting that the perfect fourth - the interval that forms the bedrock to quartal harmony - does *not* appear in the naturally occuring overtone series. This lends at an "otherworldly" quality that many composers of all genres love to explore in the form of quartal harmony. Since the enemy faced in this battle is a giant space alien made of hatred, I wonder if this was a conscious choice on Uematsu's part...



The high brass takes the melody, which is the lietmotif/main theme of the game itself:

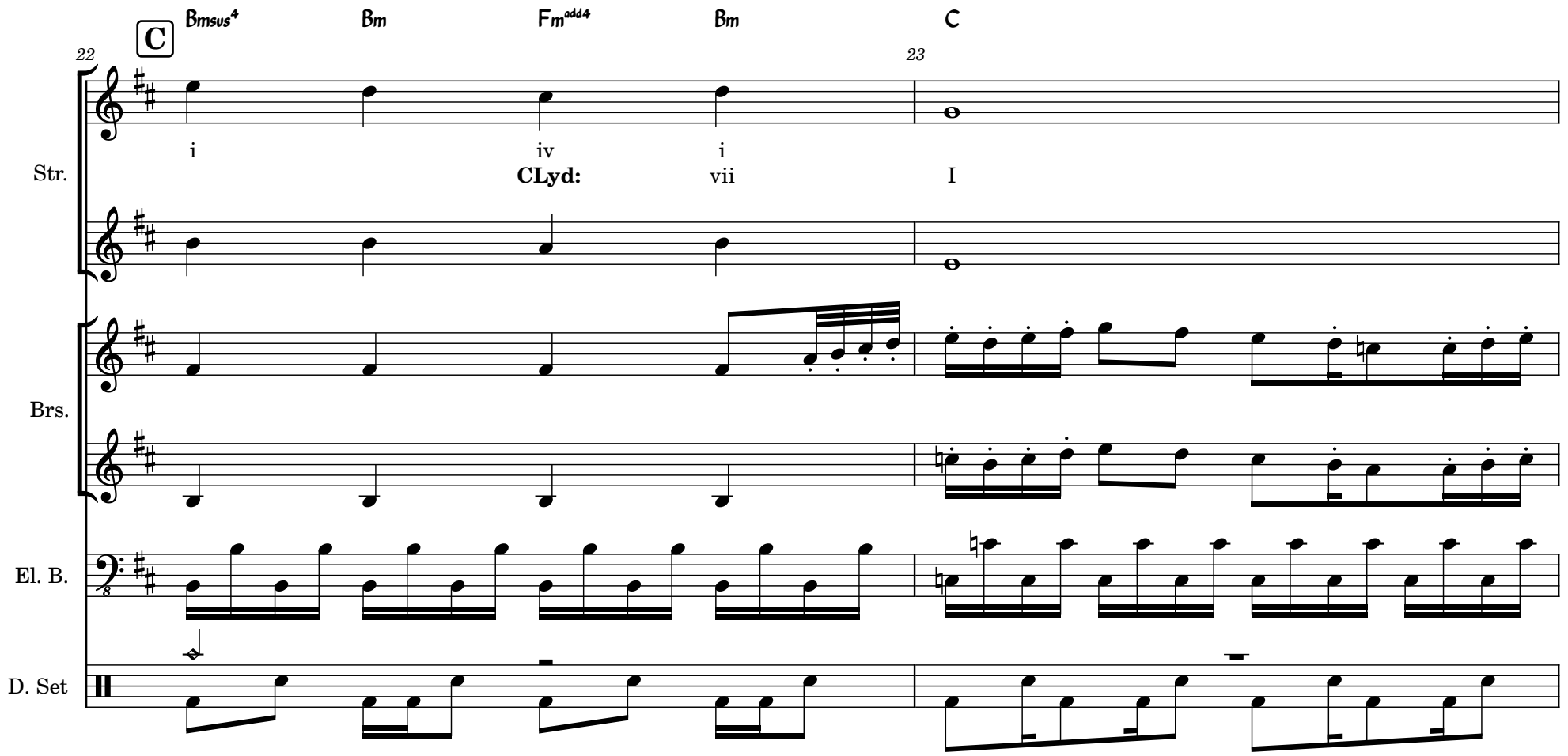
- When encountered in other parts of the game (such as the Overworld theme), the motif is a rising minor seventh chord followed by a half step down, resulting in a mellow, Dorian-esque sound.
- Here, however, the half-step down leads into an ascending diminished chord (Edim7), which subverts the normally mellow mood of the game's theme and flips the mood into one of desperation. It's as if the heroes, at this point in the music, are reminded of the world they love and how it will be destroyed/conquered if they fail this final battle.
- Finally, the ascending Edim7 arpeggio is over a descending bass-line that walks down the A phrygian dominant scale (the 5th mode of D Harmonic Minor). More so than straight Phrygian, this scale has a very dark and dramatic feel to it.
- This is a brief foray into Chord-Scale technique, in which the scale and the chord are, in essence and functionality, one and the same. In this case, the (non-traditional) function is to resolve into the melodically sequenced lietmotif in the following measure, this time a whole step up (Am7 instead of Gm7).

NOTE: In measure 18, the quintal/quartal bass line now reinforces the notes G and F, the first and seventh of the Gm7 chord.



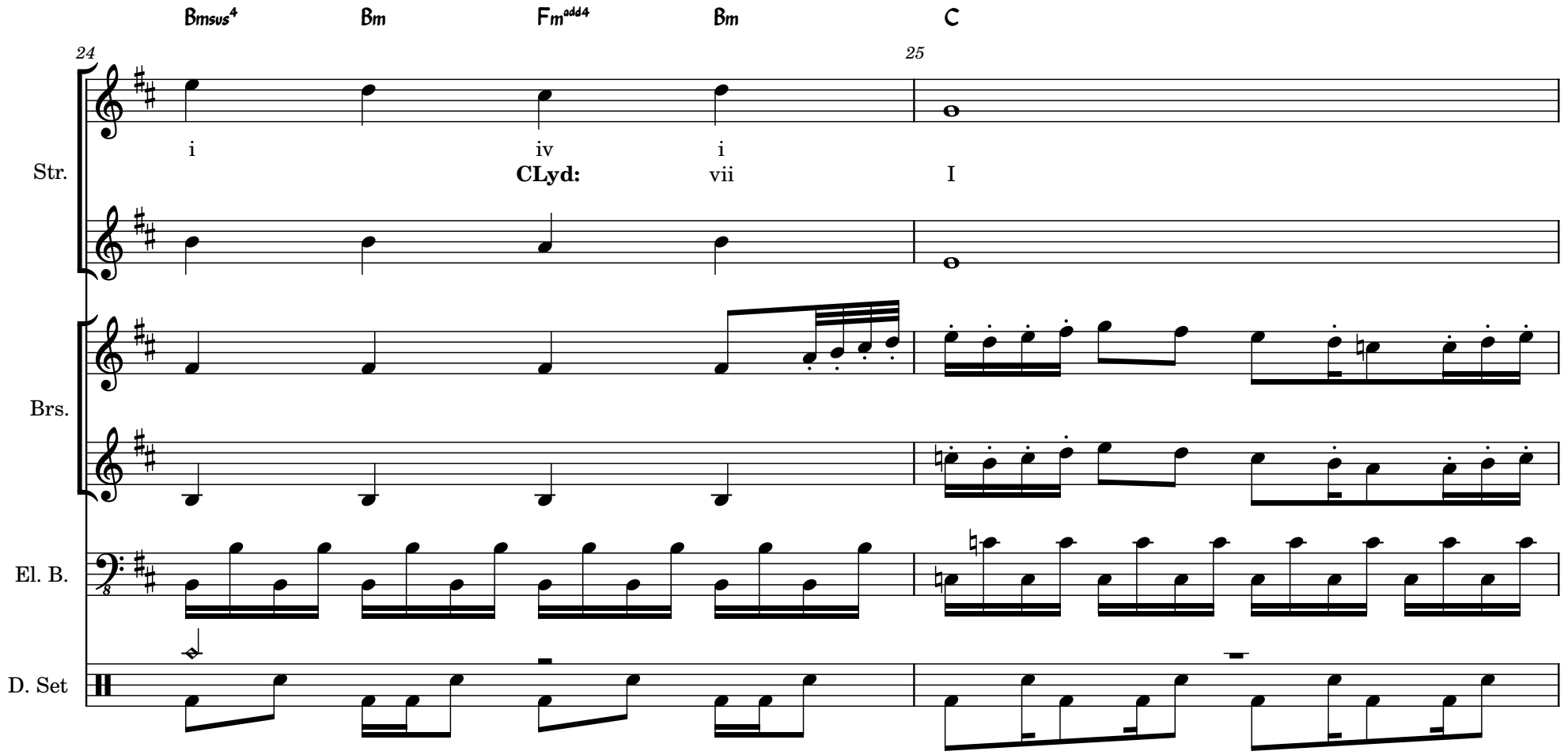
Rhythmically:

- The bass line continues the 3+3+2 grouping in measures 18 and 20.
- The bass line changes slightly to a 3+3+3+3+2+2 grouping in measures 19 and 21. For extra clarity, Uematsu reinforces this with a snare-kick kick pattern on the drum-set that matches perfectly. However, the strings play straight eight notes (grouping of 2+2+2+2+2+2+2+2) against these asymmetrical groups. The result is a polyrhythmic effect that introduces tension by way of rhythmic instability.

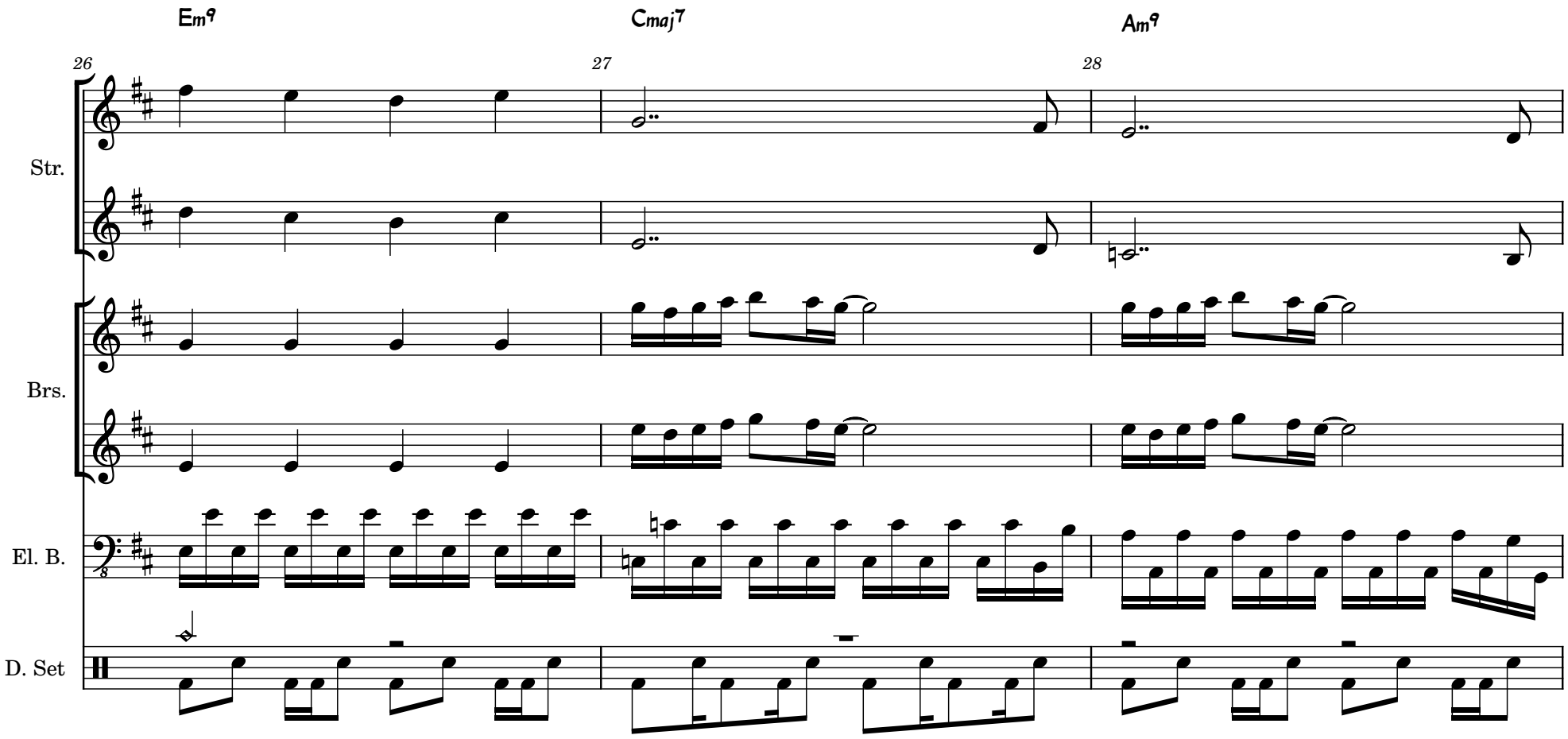


The previous measure's descending Phrygian Dominant scale lands squarely on B as the tonic, resulting in an abrupt modulation to the key of B minor. However, we're not actually in the key of B minor, despite the notation. Instead, measure by measure, the track is switching between the vii chord of C Lydian (Bm) and the tonic of C Lydian (C). Why? Because this is a turning point in the track - the point at which the heroes over-come their fear and charge triumphantly into battle, hopeful that they will win the day. Lydian lends itself well to this mood, especially the vamp between the vii and I chord. It is also worth noting that the Lydian mode is used extensively throughout the FF4 soundtrack, so it is thematically consistent.

The melody switches both between the scales of B Minor and C Lydian as well as the instrumentation that plays it, creating a wonderfully antiphonal call and response that heightens both the clarity and drama of this section of the track.
- The strings, in the first measure, play in B minor.
- The brass takes over in the following measure, playing thirds in C Lydian.

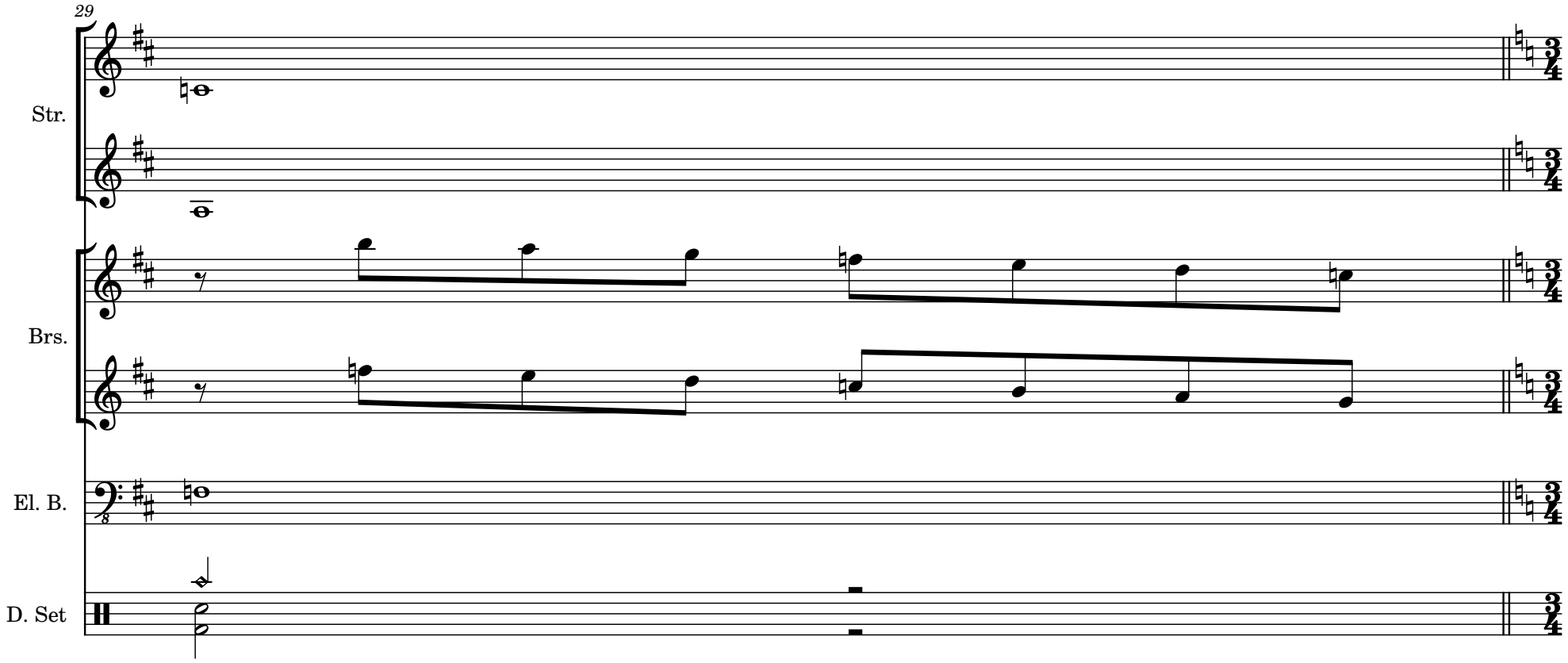


The broken octaves of the bassline are a data-efficient way that composers of the 16-bit era created movement from a single voice. Predictably, the notes B and C natural are emphasized by the bassline, reinforcing the vamp between Bm and C Lydian.



Em9 is both the iv chord of B minor and the "rootless" tonic chord of C Lydian.

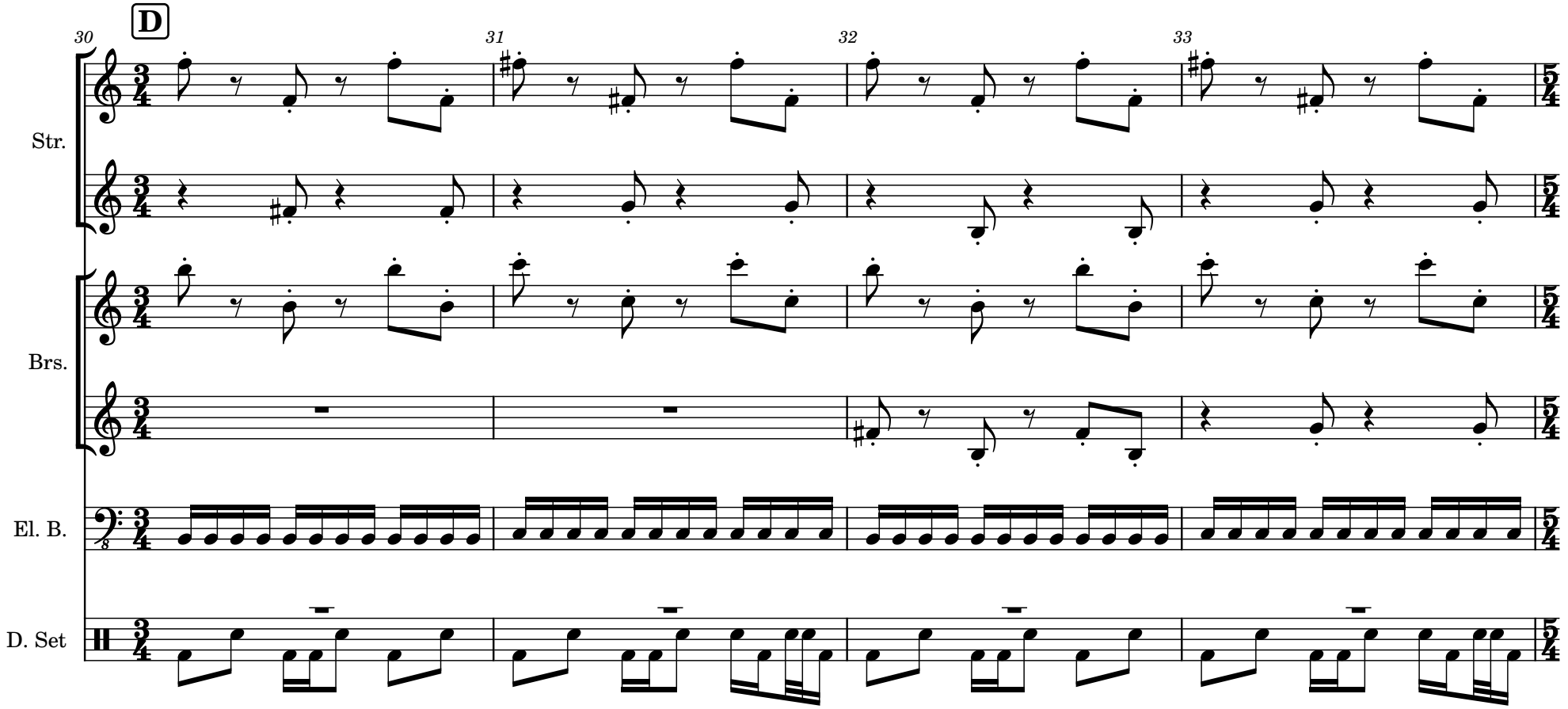
Slight voice leading changes result in a smooth cadence to an Am9 chord, a mellow sound that signals a false sense of security in the tone of the track, since the following measure will disrupt that completely...



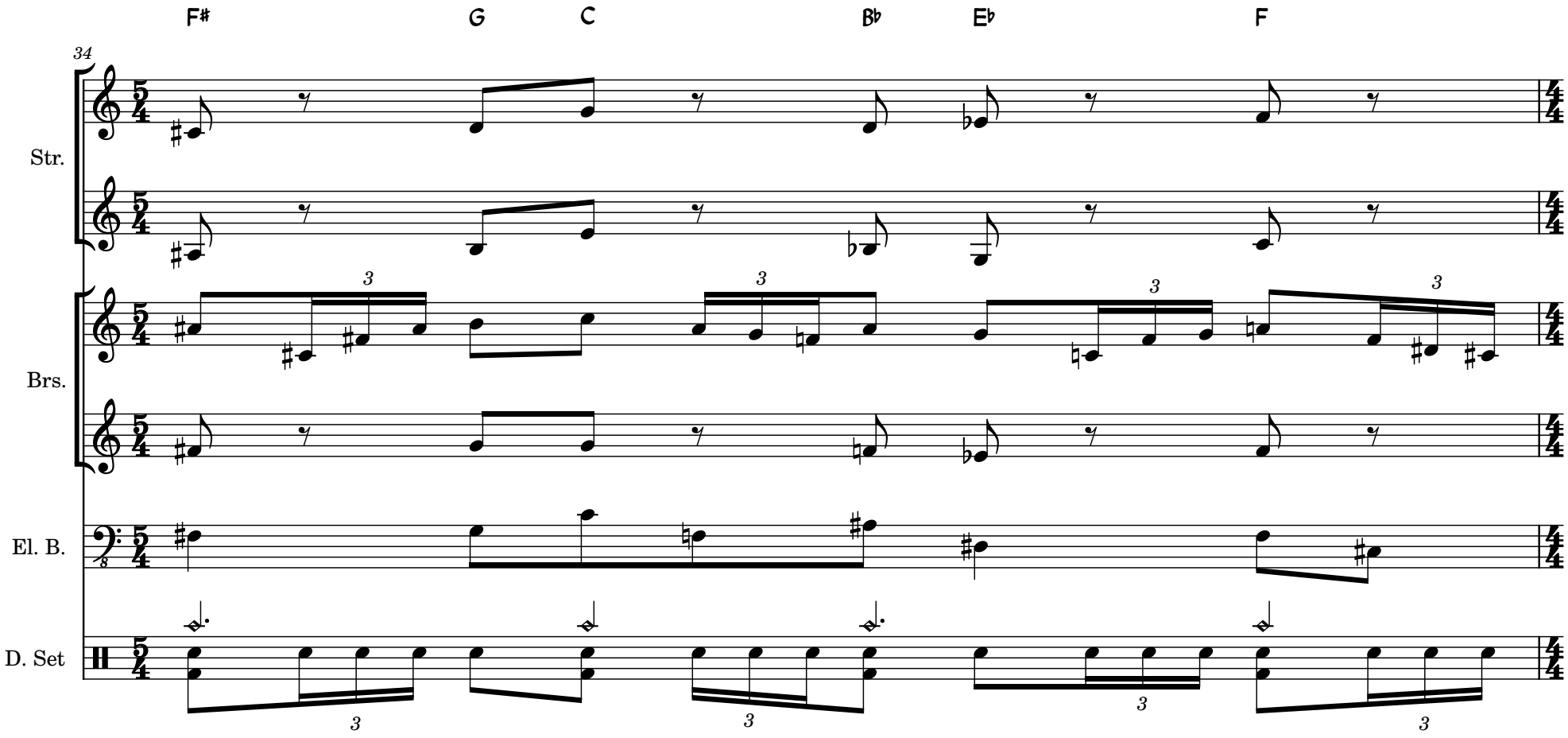
The above measure uses the B Locrian scale to abruptly transition into the highly atonal, dissonant D section to follow.

- The high strings take C natural, the bII of B Locrian, which leads a half step down to the "tonic", B.
- The low strings take A natural, the bVII of B Locrian, which takes a whole step up to the "tonic", B.
- The bass takes F natural, the bV or "dominant" of the B Locrian scale. It resolves a tritone down, as opposed to the normal perfect fifth, in the following section, making this resolution jarring, dissonant, and tonally unstable.

The brass descends in fourths down the B Locrian scale. Normally, this would set up a resolution to C major, since B Locrian naturally wants to lead into C Major. Instead, the music dwells in B Locrian, using the diminished fifth interval of B-F and its inversion to create an onslaught of dissonance that lets the player know, in no uncertain terms, that the battle is definitely *not* over...

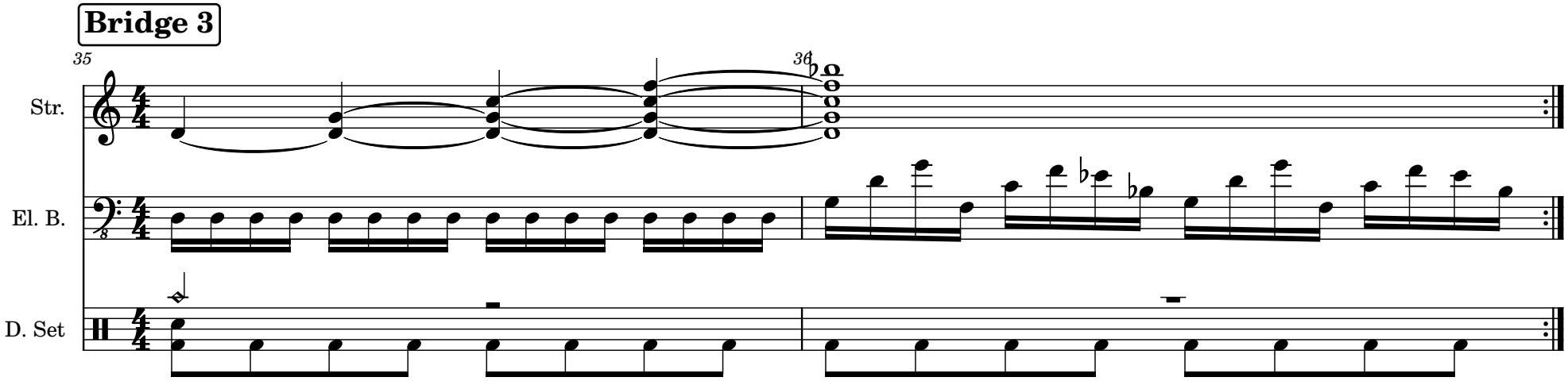


- The above four measures use the interval of a tritone and a m2 to create a wall of dissonance that is sharp, unsettling, and almost atonal.
- The change to 3/4 from 4/4 disrupts the rhythm that the listener has been used to thus far, further contrasting this dissonant section and yanking the listener out of the comfort of the prior Lydian tonalities.



An angular chord progression navigates via harmonic sequence back to G minor:
- F# rises chromatically to G
- G *descends* a fifth to C, a V->I
- C *descends* a major second, to Bb, a jazz-ish modulation via whole tone
- Bb *descends* a fifth to Eb, a V->I
- Eb *ascends* to F (the bVII of G Minor), a slightly less common jazz-ish modulation via whole tone
- The final 16th triplet in the high brass follows the whole-tone scale to then chromatically land on D in the following Bridge, which is the dominant of G minor.

The switch to 5/4 allows for an extra beat at the beginning of the measure to allow for the F# -> G transition, which is quite abrupt compared to the rest of the sequence. Imagine if the measure *started* at the G chord (second beat). The meter would sound much more symmetrical, but the harmonic shift from the previous measures would be really jarring, and not in a good way.



The above measures mirror Bridge 2, with the exclusion of the Rock Organ. This provides an effective loop point for the track, flowing effortlessly back to the B section.