



BACHELOR THESIS

Compositional and production-related strategies for integrating the electric guitar into orchestral video game music, using Final Fantasy VII Remake as a case study

Bachelor of Arts in Music

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Vienna, 2026.04.28

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Abstract

This thesis examines the integration of the electric guitar in orchestral video game music based on selected tracks drawn from the soundtrack of *Final Fantasy VII Remake*. The focus is on identifying the compositional and production-related strategies that enable the creation of hybrid sound environments that combine orchestral and electric elements.

The analysis suggests that the electric guitar primarily fulfills a functional role within the overall texture. It rarely appears as a dominant solo instrument, but instead serves as a rhythmic, structural, and timbral component. It is closely connected to the rhythm section and is often integrated into the mix in a way that does not consistently foreground it as a distinct sound source.

In addition to the analytical approach, the thesis includes a practical artistic component. Based on the identified strategies, an original hybrid orchestral piece was composed in which the different roles of the electric guitar are implemented. The process demonstrates that a clear functional integration of the guitar, the reduced use of musical material, and a balanced overall sound are key factors for achieving a convincing hybrid aesthetic.

The results indicate that the electric guitar in orchestral video game music primarily functions as part of a larger sonic structure. Its impact is defined less by soloistic presence and more by its interaction with other instrumental layers as well as by targeted production techniques.

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1 Introduction

1.1 Problem Statement and Significance

Since the chiptune-based soundtracks of the 1980s and 1990s, video game music has evolved into a stylistically diverse field with expanded technological and compositional possibilities (Summers, 2023). In many contemporary productions, orchestral textures are combined with electronic, synthesized, and amplified instruments. A particularly notable example is the 2020 release of *Final Fantasy VII Remake*, whose soundtrack integrates orchestral writing with a wide range of electronic and amplified sound sources, including the electric guitar (Final Fantasy, 2020).

The relevance of this topic lies partly in the fact that the role of the electric guitar in orchestral video game music has received little scholarly attention. It is also of artistic interest to understand how such hybrid sound worlds are realized in practice, both compositionally and in terms of production. For composers working in this field, analyzing the strategies employed can provide valuable guidance for implementing similar sonic aesthetics in their own projects.

1.2 Objective of the Study

The objective of this study is to identify the compositional and production strategies by which the electric guitar is harmonically and texturally integrated into the orchestral tracks of *Final Fantasy VII Remake*. At the same time, the study follows a practice-based artistic approach: based on the analysis, an original hybrid orchestral piece that combines electric guitar and orchestra is composed. The compositional process is documented and critically reflected upon to demonstrate how the previously examined strategies can be creatively applied and further developed.

1.3 Research Question

The central research question of this study is as follows:

How is the electric guitar integrated both compositionally and in terms of production in selected orchestral tracks of *Final Fantasy VII Remake*, and which strategies can be derived from this integration for creating an original hybrid orchestral composition?

1.4 Structure of the Study

The structure of this study is as follows:

First, the theoretical background section presents the development of video game music toward modern hybrid orchestral productions, complemented by a discussion of the role of the electric guitar in these contexts. This is followed by an explanation of the methodology, particularly the selection of tracks and the approach to listening and stem analysis. Next, the study provides a detailed analysis of the scores of *Final Fantasy VII Remake*, focusing on both compositional and production aspects. The subsequent practice-based artistic section documents the conception and implementation of an original hybrid composition and reflects on the application of the previously identified strategies. Finally, the conclusion summarizes the key findings and highlights potential avenues for application.

2 Research Framework and Methodology

2.1 Research Focus

The research question formulated in the introduction serves as a guiding framework for the methodological investigation. It examines how the electric guitar is harmonically and texturally integrated into selected orchestral tracks of *Final Fantasy VII Remake* and which strategies can be derived from this integration for developing an original hybrid orchestral composition. Based on this question, the methodological approach is developed, combining analytical and artistic-practical perspectives.

2.2 Methodological Approach

2.2.1 Selection and Analysis of the Tracks

The starting point was a complete review of the official releases of *Final Fantasy VII Remake*. In addition to the original soundtrack album containing 156 tracks, the supplementary *Final Fantasy VII Remake Original Soundtrack Plus*, which includes another 106 pieces, was also considered. This approach allowed the musical spectrum to be comprehensively captured and relevant examples to be systematically identified.

The analysis indicates that the combination of orchestral instrumentation and electric guitar primarily occurs in combat-oriented gameplay situations. The preliminary selection therefore focused on pieces in which orchestra and electric guitar appear together, allowing for a meaningful functional analysis.

This initial selection was subsequently refined. Several battle themes were found to be very similar in terms of structure, melody, and harmonic foundation. Some tracks differed only in minor instrumental variations or short transitions, without providing additional insights. To avoid redundant observations and highlight distinct compositional approaches, such variants were excluded.

The decisive factor for the final selection was the functional role of the electric guitar within the overall sound. The focus is not on analyzing individual sequences of notes, but rather on understanding the functions the guitar fulfills in the arrangement. This includes its use as a rhythmic foundation, melodic carrier, orchestral layer, or solo element. Not all of these functions appear in every track, but across the selected tracks, a broad spectrum of guitar applications emerges.

It is also notable that the examined pieces generally have a high energy level and are strongly characterized by percussion and distorted guitar sounds. This corresponds to their function within the game: the combination of orchestral richness with rock and metal elements supports the fast-paced and intense dynamics of combat situations.

Moreover, the selected tracks exhibit a clear sonic and structural character that is relevant for the subsequent practice-based artistic section. They provide clear examples of hybrid sound strategies and serve as a source of inspiration for the development of an original composition.

2.2.2 Transcription of Representative Passages

For a more in-depth investigation, short representative passages of approximately four to eight measures were transcribed from the selected tracks. The purpose of these transcriptions is not to provide a complete notation of the orchestral score, but to illustrate characteristic musical functions within the overall sound.

The selection of passages was based on analytical criteria. Only sections in which the electric guitar fulfills a clearly identifiable functional role in interaction with the orchestration were considered. Sections without guitar involvement or without a relevant contribution to the overall texture were deliberately excluded. Since many tracks are loop-based and fundamental functions recur within the sections, analyzing short segments allows conclusions to be drawn about the compositional principles of the entire track.

The transcriptions are intentionally reduced and focus on functional voices. They generally include:

- the electric guitar in lead and/or rhythm function
- a melody-carrying voice
- rhythmic or percussive elements
- if applicable, ostinato or arpeggiated accompaniment structures

This reduction enables a clear representation of the distribution of sonic roles and supports the investigation of how the electric guitar is embedded within orchestral textures.

Notation was created using MuseScore. Guitar parts are presented in standard notation with supplementary tablature to accurately reflect performance techniques. All other instruments are notated in standard notation. Rhythmic and percussive elements are presented in conventional drum notation on a single staff to represent both electronic and orchestral percussion functionally and compactly.

2.2.3 Production-Oriented Listening Analysis

In addition to the compositional analysis, a production-oriented listening analysis was conducted to examine the sonic integration of the electric guitar in the overall mix. This involved repeated critical listening and software-assisted track separation techniques, using the Stem Splitter feature in Logic Pro, to analyse positioning, volume balance, and spatial placement more precisely.

Listening was performed using both studio monitors and headphones. While monitors provide a balanced overall view, headphones facilitate the perception of fine details and spatial layers within the stereo field.

The analysis focused particularly on:

- the position of the guitar in the stereo field
- its sonic presence relative to the orchestra
- panning and layering strategies such as double tracking
- the rhythmic interplay between guitar, bass, and drums
- fundamental sonic characteristics of the guitar sounds

Since the guitars in many tracks are strongly embedded in the overall sound, the focus is not on reconstructing specific effect chains, but on their functional role within the mix and the hybrid sound architecture.

2.2.4 Comparative Examination

The analyzed tracks are compared with each other to identify similarities and differences in the use of the guitar. The aim is to identify overarching integration strategies that occur independently of the specific musical context.

2.2.5 Artistic-Practical Transfer

The insights obtained form the basis for the practice-based artistic section of the study. Building on the identified compositional and sonic strategies, an original hybrid orchestral piece incorporating electric guitar is composed. The compositional process is documented and critically reflected upon to demonstrate how analytical findings can be translated into concrete compositional decisions.

3 Theory, History, and Definition of Terms

3.1 Hybrid Production Techniques in Video Game Music

3.1.1 Hybrid Production Methods

The development of modern video game music is now strongly influenced by hybrid production techniques, in which orchestral instruments are intentionally combined with electronic, synthetic, or amplified sound sources. This hybridization is not only a result of technological advancements but also reflects changing aesthetic expectations of game music, which increasingly navigates between cinematic dramaturgy, popular music influences, and interactive requirements.

3.1.2 Aesthetic Features of JRPG Music

Particularly in the realm of Japanese role-playing games (JRPGs), a distinctive musical aesthetic has developed over several decades. This style is often characterized by melodic clarity, clear thematic material, and a relatively direct emotional appeal to players.

Unlike many Western soundtracks, which tend to focus more on atmospheric or textural qualities, JRPG compositions often maintain clearly defined leitmotifs and concise harmonic progressions that can function as standalone pieces outside the game. Additionally, there is a stylistic openness to influences from rock, pop, and

electronic music, for example through the use of drums, synthesizers, or electric guitar (Borst, 2020). This combination of orchestral and popular music elements provides an important aesthetic framework for understanding Final Fantasy VII Remake.

3.1.3 Production Practice in the Context of the Remake

Statements from the production process of the remake itself are particularly insightful for the analysis. Mitsuto Suzuki describes the game's musical reorientation as a deliberate balancing act between nostalgia and contemporary sonic aesthetics. The aim was to preserve the emotional connection of long-time fans to the original while developing a sound that meets the expectations of a modern audience (Native Instruments, 2020).

The remake's music is therefore not merely a reorchestration of existing compositions but a conceptual expansion, in which familiar themes are recontextualized, harmonically enriched, and sonically transformed.

3.1.4 Technical Conditions

A central factor for this expansion lies in changed technical conditions. The music of the original 1997 game was largely shaped by the limitations of the PlayStation hardware at the time, particularly limited polyphony, memory restrictions, and the use of sample-based sound generators.

The composers of the remake explicitly note that these limitations contributed to the characteristic sound of the original, whereas modern production environments allow for a significantly broader sonic range (CBR, 2020). This new freedom affects not only the level of detail in orchestral instrumentation but also the integration of synthetic, electronic, and amplified sound sources, which can now be used on an equal footing with the orchestra.

3.1.5 Adaptive Music and Dynamic Systems

Another relevant aspect for this study concerns the production logic of the remake. In several making-of materials, the developers emphasize that the game's music is dynamically structured and often consists of multiple layers that fade in or are layered in depending on gameplay context (GameSpot, 2020).

Such dynamic music systems are described in the literature as modular adaptive scores, in which musical parameters and individual sound modules are activated or deactivated based on game states. The aim of these systems is to enable flexible transitions and gradual changes in intensity and energy without losing musical coherence (Lopez Duarte, 2020).

This adaptive system allows hybrid soundscapes to be used flexibly and to represent varying energy levels or dramatic intensities.

3.1.6 Function of Hybrid Timbres

In this context, it becomes apparent that hybrid timbres in *Final Fantasy VII Remake* are not merely stylistic choices but functional components of an interactive music system.

The combination of the aesthetic openness of the JRPG tradition, expanded technical possibilities, and dynamic production logic creates a musical context in which the electric guitar can be incorporated into an orchestral soundscape not only plausibly but also in a structurally meaningful way.

The following chapters elaborate on this connection by analyzing how the guitar is harmonically, texturally, and dramaturgically integrated into the overall structure of selected tracks.

3.2 The Electric Guitar in the Hybrid Context

3.2.1 Fundamentals of the Electric Guitar

The electric guitar is a central instrument in the hybrid sonic aesthetic of the *Final Fantasy VII Remake*. Unlike the acoustic guitar, it generates sound primarily through electromagnetic pickups that convert string vibrations into electrical signals.

When combined with amplifiers and effects, the electric guitar can produce a wide range of timbres, from clean, transparent tones to heavily distorted, aggressive sounds (Dill, 2005; Lemme, 1995). This versatility allows it to function melodically, harmonically, and rhythmically, serving as a connective element between orchestral and electronic components.

3.2.2 Sound Design and Effects

Beyond playing techniques, the electric guitar's processed sound defines its character within the overall mix:

- Distortion effects: Sounds ranging from crunchy to high-gain result primarily from amplifier gain settings and vary from slightly overdriven to fully saturated tones (Lemme, 1995).
- EQ adjustments: Techniques such as “scooped mids” open up the sound and help position the guitar clearly within the orchestral mix (Mahler, 2018).
- Double tracking: Recording the same guitar passage multiple times and distributing it across the stereo field increases density, creates spatial depth, and ensures clarity within complex arrangements without overpowering other instruments (Tidey, 2025).

3.2.3 Function of the Electric Guitar in the Overall Sound

In this way, the electric guitar fulfills not only a stylistic function but also an integral component of the hybrid sonic aesthetic. It supports the dramaturgical structure of the music and accentuates emotional climaxes in the analyzed tracks.

4 Analysis of Selected Tracks

4.1 The Airbuster

The Airbuster is one of the most distinctive boss battle pieces in the soundtrack, characterized by a continuously driving sense of dramaturgy. Rather than featuring clearly delineated sections, the piece develops progressively, with rhythmic figures and motivic elements reappearing in varied orchestral textures. This continuous expansion builds high tension and enhances the dramatic intensity of the battle scenario.

The track is notable for combining a symphonic soundscape with metal-style rhythmic energy. Choir, brass, and strings contribute an epic scale, while drums, bass, and electric guitars generate constant forward momentum. The triplet-based pulse significantly contributes to the flowing yet urgent energy of the piece.

Role of the Electric Guitar

The electric guitar holds a central position, performing both rhythmic and melodic functions. It remains present throughout much of the track, serving not only as a

supporting rhythm instrument but also as a carrier of thematic material. This integration creates a close interlock of rock aesthetics and orchestral language.

In many passages, the rhythm guitar stabilizes the metric pulse alongside bass and drums, while the lead guitar reinforces or independently presents melodic lines. This dual function allows the guitar to operate as both an energetic driver and a melodic voice.

Interaction with Orchestra and Rhythm Section

The orchestra alternates with the guitar in taking melodic leadership and enriches thematic lines through doubling or counter-melody. Strings and brass contribute to textural density, while the choir provides dramatic accents. Bass and drums form a tightly interlocked rhythmic foundation with the rhythm guitar. The bass often follows an independent figure that aligns rhythmically with the drum patterns, enhancing forward motion.

Sound Design and Hybrid Character

The guitar sound exhibits a modern high-gain character and stands out clearly within the dense arrangement. Rhythm guitars create spatial depth through wide stereo field placement, while lead passages are positioned centrally for emphasis. The combination of orchestral richness, rock rhythm energy, and choral elements produces a powerful hybrid sound that reinforces the dramatic nature of the boss battle.

Functional Role within the Transcribed Passage

Figure 1 illustrates an eight-bar passage from the track (1:40–1:51). In this segment, the electric guitar leads melodically, presenting the main line while the orchestra provides a counter-melody, forming a dense contrapuntal texture. This combination enhances sonic richness and adds dramatic tension. The triplet pulse shapes both melodic phrasing and the rhythmic foundation. The lead guitar carries the thematic line, while drums and bass stabilize the rhythm. The bass follows an independent, interlocked figure that reinforces the section's driving momentum.

The passage exemplifies a characteristic sonic state: the guitar emerges as the primary melodic voice while the orchestra flexibly alternates between accompaniment

and independent melodic leadership, creating a dynamic interplay that defines the track's energetic and dense character.

Figure 1: Eight-bar passage from *The Airbuster* (1:40–1:51).

Note. Transcribed by the author.

4.2 Scorpion Sentinel

Scorpion Sentinel is among the highly energetic battle tracks, featuring a strong symphonic sound that merges with rock and metal elements. The introduction establishes an epic sonic space through powerful brass and choir, which is later intensified by driving drum rhythms, distorted guitars, and dense orchestral layers.

A defining compositional feature is the repeated use of chromatic mediant motion: motivic units are sequenced and shifted by minor thirds, producing characteristic tension. Rhythmically stable sections alternate with progressive passages and irregular meters, creating a dynamic and sometimes chaotic energy.

Role of the Electric Guitar

The electric guitar primarily functions as a rhythmic and structural element. It is tightly interlocked with drums and bass, and precise riff articulation enhances the energetic character of the battle music. The guitar is not constant but emerges strategically where additional rhythmic emphasis or textural density is needed.

In certain sections, it assumes an expanded role by reinforcing motivic material from other instrument groups, temporarily becoming a key thematic component without losing its connection to the rhythmic structure.

Interaction with Orchestra and Rhythm Section

The orchestra alternates with the guitar in taking melodic leadership. Strings, brass, and choir emphasize key accents and strengthen central rhythmic points. The guitar

is treated as an additional orchestral layer, able to accentuate rhythm, double melodic motifs, or stabilize metric structure. Its close integration with percussion is particularly significant, with drum and orchestral percussion elements underscoring the primary riff accents.

Sound Design and Hybrid Character

The guitar exhibits a modern high-gain tone and is relatively restrained in the overall mix. Double tracking provides spatial width, while integration with the orchestral mass fosters sonic cohesion. The hybrid character emerges from the interplay of symphonic fullness, choral accents, and rock rhythm energy.

Functional Role within the Transcribed Passage

Figure 2 shows a four-bar passage from a later section (6:15–6:20). Here, the guitar delivers a prominent riff that simultaneously carries the main melodic content. Although occupying the register and position of a rhythm guitar, it functions melodically by doubling thematic lines of other instruments. The riff features a triplet feel organized in alternating meters: a 4/4 bar followed by a 3/4 bar, creating rhythmic tension and enhancing the progressive energy. Percussion emphasizes key riff accents, highlighting structural focal points. This passage exemplifies how riff structures within battle themes can be rhythmically transformed, generating additional tension while ensemble doubling enhances sonic presence.

The musical score for Figure 2 is a four-bar passage from a later section of *Scorpion Sentinel* (6:15–6:20). The tempo is marked as 182 BPM. The score includes staves for E-Guitar, E-Guitar (Tablature), Melody, E-Bass, and Drums. The guitar part features a prominent riff with triplet feel, alternating between 4/4 and 3/4 meters. The tablature shows fret numbers and pickup markings (P.M.). The melody, bass, and drums provide harmonic and rhythmic support.

Figure 2: Four-bar passage from a later section of *Scorpion Sentinel* (6:15–6:20).

Note. Transcribed by the author.

4.3 J-E-N-O-V-A – Quickening

J-E-N-O-V-A – Quickening evolves from an atmospheric orchestral soundscape to an energetic hybrid section where rock and electronic elements progressively dominate. The beginning features a mysterious and tragic tone, gradually intensifying through drums, synthesizers, and distorted electric guitar. By the end, a fusion-like texture emerges, blending orchestral, electronic, and rock elements.

The track's form relies on recurring sections that are varied and re-instrumented. This cyclical structure allows for loopable sections without becoming monotonous, reflecting the functional design of combat music in video games.

Role of the Electric Guitar

The electric guitar becomes prominent in the later sections, signaling a shift toward rock-oriented sonic aesthetics. It primarily functions as a rhythmic foundation, closely interlocked with drums and bass. Rather than dominating melodic lines, palm-muted patterns and power chord structures stabilize the metric pulse and enhance the arrangement's energy.

Occasionally, it expands on rhythmic material through short fills or lead fragments but generally focuses on supporting the overall groove. Its function is closely aligned with the tonal center and rhythmic framework of the arrangement.

Interaction with Orchestra and Synthesizers

The orchestra continues to provide melodic and dramaturgical leadership, while synthesizers add depth and atmospheric layers. The guitar integrates into this texture by reinforcing the lower frequency range rhythmically and occupying sonic space where appropriate. This functional division illustrates a typical hybrid principle: orchestra and synthesizers carry melody and atmosphere, while the guitar enhances energetic drive and rhythmic stability.

Sound Design and Hybrid Character

The guitar exhibits a modern high-gain tone and is broadly distributed across the stereo field. Double tracking adds spatial depth, while lead fragments are slightly emphasized in the midrange. Overall, the guitar remains embedded in the mix and rarely emerges as a dominant element.

The hybrid character arises from the combination of orchestral richness, rock rhythm energy, and electronic textures, enabling a gradual increase in intensity and reinforcing the dramatic impact of the combat scenario.

Functional Role within the Transcribed Passage

Figure 3 presents an eight-bar passage from the hybrid section (4:19–4:30). Here, the guitar assumes a clear rhythmic role. Palm-muted eighth-note patterns on open strings establish a continuous pulse tightly integrated with the drums. Accented articulation enhances the metric drive and imparts a percussive quality that supports the passage's propulsion.

Above this rhythmic foundation, a melodic line unfolds, while a synthesizer expands the harmonic space in the background. The guitar deliberately recedes behind the melodic layer, acting as a structural link between the rhythm section and the sonic texture.

This passage exemplifies how, in the remake, the electric guitar is used primarily as a rhythmic engine rather than a melodic instrument within a layered hybrid arrangement.

The image shows a musical score for an eight-bar passage. The score is written for five parts: E-Guitar, E-Guitar (Drop D) (Tablature), Melody, Synthesizer, and Drums. The tempo is marked as 178 BPM. The guitar part features palm-muted eighth-note patterns on open strings, while the drums provide a steady pulse. The melody and synthesizer parts are also visible.

Figure 3: Eight-bar passage from the hybrid section of *J-E-N-O-V-A – Quickening* (4:19–4:30).

Note. Own elaboration.

4.4 Infinity's End

The track *Infinity's End* is characterized by a clearly defined, rhythmically driven sound, alternating between dense, accent-driven passages and more open, textural sections. Electronic percussion elements, orchestral layers, and electric guitars combine to form a hybrid texture, which is structured less through melodic development and more through rhythmic impact and sonic density.

A defining feature of the piece is the contrast between heavily accented sections and calmer, sustained passages without prominent percussion. These contrasts create a pulsating dramaturgy, where energy emerges through rhythmic densification followed by the subsequent opening of the sonic space.

Role of the electric guitar

The electric guitar fulfills multiple functional roles in the track. A rhythm guitar establishes a stable rhythmic foundation through a consistently repeated, palm-muted riff pattern. This pattern acts as a driving impulse and is closely interlocked with the percussion.

Additionally, a second guitar voice appears, initially not leading the melody but embellishing and extending it. By adding non-melodic notes, it creates harmonic density that enhances tension and depth within the overall sound. As the track progresses, this guitar line gradually aligns with the melodic lead, reinforcing the thematic material. This flexible use demonstrates that the guitar in *Infinity's End* is employed not solely as a melodic or rhythmic instrument but also as a sonic extension of the orchestral fabric.

Interaction with orchestra and percussion

The main melody is predominantly carried by orchestral instruments. The guitars complement this layer by providing rhythmic stability or harmonically enriching the melodic line. Percussion emphasizes precise accents and structures the musical flow through pronounced hits, often reinforced by multiple instrumental groups simultaneously.

The interplay of these elements produces a dense, rhythmically focused sound in which orchestral and rock-based structures mutually enhance one another.

Tonal design and hybrid character

The guitar tone exhibits a modern high-gain character while remaining integrated within the overall mix despite its rhythmic prominence. The combination of orchestral fullness, electronic percussion, and distorted guitars creates a hybrid sound that unites rhythmic precision with atmospheric depth.

Functional Role within the Transcribed Passage

Figure 4 presents an eight-bar excerpt from the track (1:15–1:28). In this passage,

the rhythm guitar establishes a consistently repeated, palm-muted pattern that, together with percussion, stabilizes the driving pulse. Simultaneously, a second guitar voice initially complements the orchestral melody through harmonic extensions before aligning with and reinforcing the melodic lead.

This example illustrates how the guitars serve both as a rhythmic engine and as a sonic augmentation of the melodic layer. The interaction of the constant riff, orchestral main melody, and harmonic embellishments generates a dense, rhythmically driven texture that reinforces the track's energetic character.

The musical score is for an eight-bar passage from the track 'Infinity's End' (1:15–1:28). It is written for guitar and drums. The tempo is 153 BPM, and the key signature has one sharp (F#). The guitar parts consist of a lead line, a rhythm line with palm muting (P.M.), and a corresponding tablature line. The drums part is shown in a simplified notation. The passage is transcribed by the author.

Figure 4: Eight-bar passage from *Infinity's End* (1:15–1:28).

Note. Transcribed by the author.

4.5 Final Experiment

The track *Final Experiment* combines an epic orchestral sound with industrial-style percussion and rock-oriented guitar structures. At a tempo of approximately 160 BPM, it unfolds a powerful, forward-driving sonic space defined by rhythmic densification and clearly articulated accents. The opening functions as a gradual build-up, with individual musical layers introduced sequentially and eventually coalescing into a dense overall sound.

A characteristic feature is the combination of orchestral force, sequenced percussion elements, and a continuous rhythmic underpinning. The music relies less on extended melodic lines and more on sharp rhythmic impulses and motivic fragments. Orchestral instruments, choir, and percussion create a monumental and dramaturgically driven sound aesthetic, where tension emerges through layering and progressive densification.

Role of the electric guitar

Within this framework, the electric guitar provides a clearly structuring role. Its riff is primarily based on sustained tones shaped through palm muting, accentuation, and rhythmic articulation. The focus is on motoric drive rather than harmonic movement. The continuous eighth-note motion establishes a stable, energetic foundation that supports the overall rhythmic structure.

In combination with orchestral and percussive elements, the track demonstrates a strong emphasis on rhythmic layering. Different instrumental groups contribute individual accent patterns that interlock, producing a dense, mechanically pulsing texture. This layering significantly contributes to the tension and the modern hybrid aesthetic of the piece.

Functional Role within the Transcribed Passage

Figure 5 shows an eight-bar excerpt from the beginning of the track (0:07–0:18). The passage illustrates the layering of multiple rhythmic planes. The electric guitar plays a palm-muted eighth-note riff predominantly on constant pitches. At the end of the four-bar phrase, the pattern is slightly expanded, creating a natural transition that supports the riff's loopable structure.

The melodic line enters at the start of each phrase, employing short motifs. In the transcribed excerpt, this line is performed in unison by brass, choir, and strings. This consolidation produces a sonic densification that emphasizes the melodic impulses. Following these entries, pauses occur in which the rhythmic layers dominate the musical space.

The string accompaniment adds staccato accents with an independent rhythmic profile, creating an additional layer that contrasts with the guitar motion and increases metric tension. Percussion emphasizes distinct hits and short tom fills, further defining the rhythmic grid and densifying the passage's energy. The interaction of these layers results in a dense, mechanically driven pulse. This example demonstrates how the track builds tension and develops a hybrid sound architecture through rhythmic layering, minimal melodic content, and a motoric guitar riff.

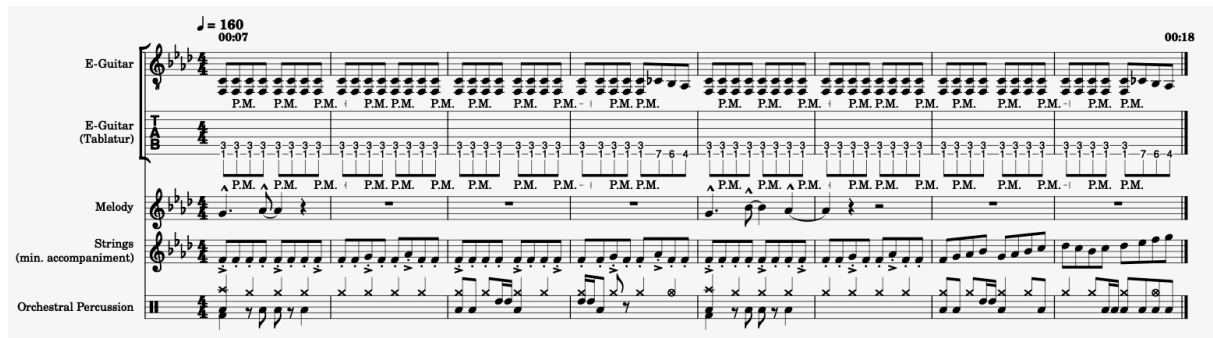


Figure 5: Eight-bar passage from the beginning of *Final Experiment* (0:07–0:18).

Note. Transcribed by the author.

4.6 Midgar Expressway

The track *Midgar Expressway* is among the most energetically intense pieces of the soundtrack, combining orchestral power with electronic rhythm and metal-influenced guitar language. At approximately 190 BPM, it generates an almost continuous forward motion, giving the piece a restless, high-energy character. Unlike many other tracks, it forgoes a prolonged introduction and establishes its intensity immediately.

The track is characterized by the combination of electronic drum patterns, orchestral hit structures, and synthetic textures. The music relies heavily on accentuated impulses rather than extended melodic lines. Strings and brass deliver precise hits and motivic fragments that are rhythmically interlocked with percussion, reinforcing the track's driving energy.

Synthesizers serve a connecting role within this dense texture. Through gliding pitch transitions and pitch-bend effects, they create fluid connections between orchestral accents, resulting in a dialogue-like interaction between electronic lines and orchestral impulses that accentuates the hybrid sound aesthetic.

Role of the electric guitar

Throughout the track, the electric guitar primarily fulfills a structural and energetic function. A recurring riff establishes the piece's rhythmic foundation and remains consistently present over extended sections. This ostinato-like pattern stabilizes the dense overall sound and reinforces the driving impact of the rhythmic layers. The guitar serves less as a melodic instrument and more as a motoric element within the hybrid sound architecture.

The combination of electronic rhythms and orchestral accent structures produces a sonic landscape focused less on thematic development and more on continuous energy and rhythmic density. This design supports the dynamic gameplay mechanics and conveys a sense of uninterrupted motion.

Functional Role within the Transcribed Passage

Figure 6 shows an eight-bar excerpt from the track's intro (0:16–0:26). The passage illustrates the layering of rhythmic planes: the electric guitar plays a repeating riff that provides structural stability, while the melodic layer mainly consists of accentuated hit figures performed by strings and brass.

Between these accent groups, a synthesizer introduces gliding pitch transitions, filling the gaps and connecting the orchestral hits, creating a flowing interplay between electronic lines and orchestral accents. The drum kit establishes a dense eighth-note grid, further densified with short sixteenth-note hi-hat fills. Combined with the persistent guitar riff, this produces a stable metric orientation, while the orchestral hits punctuate the energy.

This passage exemplifies the track's high-energy opening and demonstrates how repeating guitar structures, orchestral accentuation, and electronic sound design merge into a highly dynamic hybrid effect.

Figure 6: Eight-bar passage from the intro of *Midgar Expressway* (0:16–0:26).

Note. Transcribed by the author.

4.7 The Turks: Rude

The track *The Turks: Rude* features a contrasting dramaturgy of sound, juxtaposing atmospheric passages with heavy, metal-influenced sections. Following a calm, guitar-driven introduction, the piece develops into an energetic hybrid sound with

electronic drums, low-tuned guitars, and orchestral elements. Progressive rhythmic structures and occasional meter changes enhance the sense of tension and instability.

Unlike the large-scale orchestrated boss themes, the track's intensity often emerges from the combination of reduced rhythmic textures with heavy guitar riffs, producing a compact yet energetically dense sound.

Role of the electric guitar

The electric guitar assumes a central rhythmic role. A low-tuned, palm-muted pattern creates a motoric foundation that defines the passage's characteristic groove. This pattern is based on accentuated rhythmic figures and repeats in short cycles, giving it a loop-like character.

The guitar's low register and precise articulation reinforce the track's heaviness and, together with the kick drum, form the arrangement's energetic core. Melodic functions take a subordinate role to this rhythmic function.

Interaction with melody and rhythm section

The drum accompaniment is deliberately minimal, following a steady pulse with continuous kick drum and even hi-hat eighth notes. This minimalism provides stability and directs attention toward the guitar pattern as the primary energy driver.

The melodic voice becomes more prominent later in the passage. While parts of the melody function ostinato-like, contributing to structural stability, it also serves as the arrangement's sonic focus. This creates a tension between rhythmic repetition and melodic development.

Tonal design and hybrid character

The low-tuned guitar contributes significantly to the track's heavy sound aesthetic. In combination with electronic drums and limited orchestral presence, it forms a hybrid sound that is more groove- and riff-oriented than the symphonically influenced combat tracks. Energy arises primarily through rhythmic clarity and sonic compactness rather than orchestral density.

Functional Role within the Transcribed Passage

Figure 7 presents an eight-bar excerpt from the track (1:54–2:05). In this passage,

the electric guitar establishes a low, palm-muted rhythm pattern that repeats in short cycles, defining the groove. Continuous kick drum and consistent hi-hat eighth notes reinforce the stable pulse, while the guitar adds rhythmic tension through accentuation.

The melodic voice emerges sporadically, combining ostinato elements with melodic fragments to create a clear sonic focus above the repetitive guitar pattern. This excerpt illustrates how rhythmic reduction and a looped guitar riff generate a compact, energetic hybrid sound in which groove and tonal weight take precedence over orchestral densification.

The musical score is presented in a standard notation format. The top staff is for the E-Guitar, showing a palm-muted (P.M.) eighth-note pattern. The second staff is for the E-Guitar (7 Strings Drop A) in Tablature, showing the fret numbers (0, 2, 3, 0, 2, 3, 1, 0) for each eighth note. The third staff is for the Melody, showing a simple line of eighth notes. The bottom staff is for the Drums, showing a consistent pattern of eighth notes for the kick and hi-hat. The tempo is marked as 170 BPM, and the time signature is 4/4. The score is divided into eight measures, with a time stamp of 01:54 at the beginning and 02:05 at the end.

Figure 7: Eight-bar passage from *The Turks: Rude* (1:54–2:05).

Note. Transcribed by the author.

4.8 Comparative Analysis of the Analyzed Tracks

The analysis of the selected tracks reveals recurring strategies in the use of the electric guitar within hybrid orchestral structures. Although the pieces vary in tempo, instrumentation, and dramaturgical design, overarching patterns emerge that characterize the guitar's role within this sound aesthetic.

The examined tracks predominantly originate from combat-oriented gameplay situations and are accordingly highly energetic. A typical feature is the combination of orchestral fullness, intense percussion, and distorted guitar sounds, frequently incorporating stylistic elements from rock and metal. Within this hybrid sonic space, the electric guitar assumes diverse functional roles, realized in interaction with orchestra, percussion, and electronic elements.

The following sections summarize these roles, with reference to the analyzed tracks.

4.8.1 The electric guitar as a rhythmic foundation

A common function of the electric guitar is to establish a rhythmic foundation within the overall texture. In multiple tracks, it acts as a motoric element, stabilizing energy through repeated riff patterns.

Typical implementations include palm-muted patterns, ostinato riffs, or consistent eighth-note motion sustained over extended sections. In these cases, the guitar functions less as a melodic instrument and more as a structural basis for the rhythmic layer, often working closely with bass and drums to form a compact rhythm section.

Examples include *J-E-N-O-V-A – Quickening*, *Midgar Expressway*, and *Final Experiment*, where recurring riff structures stabilize the musical pulse and energetically support the dense orchestral texture.

4.8.2 The electric guitar as a melodic voice

In addition to its rhythmic role, the electric guitar occasionally functions as a melodic instrument, carrying central thematic lines or doubling the main melody alongside orchestral instruments.

A clear example is *The Airbuster*, in which the guitar repeatedly assumes melodic responsibilities and sometimes occupies a prominent position within the overall sound. Orchestral voices at times take on accompanying or contrapuntal roles, granting the guitar an unusually dominant position within the hybrid texture.

In other tracks, the guitar occasionally assumes a melodic role, often in close interaction with orchestral instruments. This doubling creates sonic densification and enhances the prominence of the melodic line.

4.8.3 The electric guitar as an orchestral layer

Another common strategy is using the electric guitar as a sonic layer within the orchestral texture. In this function, it blends more closely with the overall sound and appears less as an independent instrument.

The guitar frequently doubles existing lines or supports orchestral chords and rhythmic figures, contributing to sonic density without necessarily standing out in the foreground.

This principle is evident in passages of *Infinity's End*, where the guitar initially provides harmonic augmentation to the orchestral melody before partially assuming or reinforcing it. Similar applications occur in other tracks, where the guitar functions as part of an expanded orchestral layer.

4.8.4 Rhythmic layering and hybrid sound architecture

A central feature of the analyzed tracks is the layering of multiple rhythmic planes. Guitar riffs, orchestral accent figures, electronic elements, and percussion interact to form complex rhythmic structures.

The electric guitar often serves as a bridging element between rock or metal aesthetics and orchestral design. Its rhythmic precision and sonic presence allows interaction with both percussion and orchestral instruments.

This principle is particularly clear in tracks such as *Midgar Expressway* and *Final Experiment*, where multiple rhythmic layers operate simultaneously. The guitar forms a constant motion layer, while orchestra and percussion introduce accents and rhythmic variation.

4.8.5 Production observations

On a production level, recurring strategies in the handling of the electric guitar are also evident. In many cases, the guitar is less dominant in the mix than its stylistic significance might suggest.

It is often positioned widely in the stereo field and densified through double-tracking or similar layering techniques. Simultaneously, its volume frequently remains slightly behind the main orchestral voices, achieving a balanced relationship between orchestral fullness and the rock-oriented rhythm section.

This approach allows the guitar's energy and character to be utilized without overshadowing the orchestral sound.

4.8.6 Interim conclusion

The analysis demonstrates that the electric guitar in the hybrid soundscape of *Final Fantasy VII Remake* does not occupy a single, fixed role but flexibly shifts between functions.

It can act as a rhythmic foundation, a melodic voice, an orchestral layer, or a structural element within complex rhythmic layers. Most frequently, it contributes to the rhythmic base, while melodic functions generally emerge in conjunction with orchestral instruments.

Overall, the guitar is used less as an isolated rock instrument and more as an integral component of a hybrid sonic architecture, where orchestral, electronic, and rock-oriented elements merge.

These observations form the basis for the subsequent practical-artistic section of this thesis, which investigates how these strategies can be applied within an original composition.

5 Artistic-Practical Section

The preceding analysis has demonstrated that the electric guitar assumes a variety of functional roles within the examined tracks, operating as an integral component of hybrid orchestral structures. Both recurring compositional principles and diverse production strategies became apparent through this study.

Building on these insights, the artistic-practical section aims to apply the identified design principles in an original composition and to reflect systematically on their implementation within the creative process. The artistic component therefore includes an original musical work developed as part of this thesis. The complete piece is accessible via a QR code provided in the appendix.

5.1 Objectives and Concept

For the practical-artistic section, an original piece was developed that incorporates central compositional and sonic strategies observed in the analyzed battle themes, adapting them within an independent musical context. The intention was explicitly not to replicate existing works but to create an example that demonstrates typical functional roles of the electric guitar within hybrid orchestral structures.

The piece carries the working title *Thesis Breaker* and stylistically aligns with combat-oriented video game music, particularly the tracks from *Final Fantasy VII Remake*. At its core is the integration of orchestral textures with elements derived from rock and metal contexts. A key conceptual goal was to unify multiple roles of the electric guitar

identified during the analysis within a single composition. At the same time, the work deliberately employs reduced motivic material to maintain clear structural coherence and avoid overloading the arrangement.

5.2 Form and Structural Design

The piece has a duration of approximately two minutes and is conceived as a modular form whose individual sections allow seamless repetition, extension, and recombination. Unlike linear song forms, it does not prioritize a directed trajectory of tension but instead employs a flexible structural design suited to interactive contexts.

The formal design revolves around a central riff that functions as a leitmotif, appearing in various forms and roles throughout the piece. This approach mirrors the analyzed tracks, in which recurring motivic elements play a central structural role. Initially, the riff is introduced in a minimalistic opening section. As the piece progresses, it is complemented by drums and orchestral layers, gradually evolving into a denser overall texture.

A subsequent section features a more open texture, temporarily shifting melodic leadership to the orchestral instruments while the electric guitar assumes a supportive role. This role reversal reflects the interactions between guitar and orchestra observed in the analysis.

A central structural element is the later transformation of the riff. By transferring it into an irregular meter, the originally regular material is rhythmically varied. This technique directly references comparable metric shifts found in the analyzed tracks, creating additional tension while retaining the motivic core.

In a further section, the riff is used in an ostinato function. The guitar maintains a consistent pattern while the harmonic context in the orchestral layers evolves. This principle corresponds to the practice identified in the analysis, in which static guitar structures are combined with variable harmonic layers.

The composition concludes with a more melodically oriented section in which orchestral voices dominate and the guitar assumes only a minimal, supportive role.

5.3 Compositional Strategies

A defining feature of the piece is the continuous triplet pulse, inspired by *The Airbuster*. This pulse shapes both the central riff and the overall rhythmic framework, contributing significantly to the piece's energetic effect.

Harmonically, the piece centers on D minor, which is enriched through the targeted use of chromatic mediants. This approach allows for variation within repeated material without relying on complex chord progressions, reflecting the analytical observation that harmonic movement in the examined tracks often arises from shifting textures rather than functional harmony.

Another key strategy is the use of reduced motivic material. Rather than employing numerous distinct themes, the composition develops a few concise motifs, which are varied, transformed, and integrated into different contexts over time. This approach proved particularly effective in the composition process, providing both structural clarity and flexibility.

5.4 Role of the Electric Guitar in the Composition

The electric guitar assumes multiple roles directly derived from the analytical observations. At the outset, it occupies a central position, presenting the main riff as both the primary energy driver and structural foundation. Over the course of the piece, its role gradually shifts to the background, providing continuous rhythmic and harmonic support.

Within the ostinato section, the guitar pattern remains constant while the harmonic context evolves, emphasizing the instrument as a stabilizing element rather than a melodic voice. At selected points, the guitar emerges in a melodic function, such as doubling orchestral lines or contributing brief independent motifs. These interventions are carefully integrated to avoid transforming the guitar into a dominant soloist.

In the final section, the guitar subtly supports the melodic development and contributes to overall sonic density. Collectively, this flexible role distribution mirrors the characteristics of the analyzed tracks, alternating between foreground and background functions.

5.5 Instrumentation and Sonic Design

The instrumentation combines a band setup consisting of electric guitar, bass, and drums with orchestral elements including strings, brass, and choir, as well as supplementary synthesizers. Orchestral voices are primarily used functionally rather than in terms of detailed traditional orchestration. They fill frequency ranges, create contrasts, and expand the arrangement's sonic depth.

The electric guitar is predominantly realized with a distorted high-gain tone and is positioned thoughtfully within the stereo field. Rhythm guitars are often widely panned, while lead elements are placed in contrast to melodic orchestral voices to balance the stereo image.

A hybrid production approach was employed. Rhythm guitar parts were partially realized using virtual instruments, while lead elements were performed manually. This method allowed precise control over timing and articulation while maintaining sonic flexibility.

5.6 Production and Mixing

A key challenge during production was the dense midrange frequency region resulting from overlapping distorted guitars and orchestral instruments. Equalization was applied to mitigate masking, with reductions in the 100 to 500 Hz range, particularly around 300 Hz, to enhance clarity. Sub-bass frequencies below 100 Hz were also reduced to relieve the low end.

High frequencies were adjusted to enhance guitar presence, with a slight boost around 8 kHz and a reduction near 4 kHz to limit harshness. This process balanced assertiveness with tonal smoothness.

Instrument placement followed a detailed stereo concept. Rhythm guitars were widely panned, lead elements positioned in relation to orchestral voices, and bass largely retained in mono, supplemented by a synth bass with subtle stereo spread. This approach resulted in a denser and more stable low-frequency structure.

The overall guitar volume was deliberately kept lower than in typical rock productions, consistent with the analyzed tracks in which the guitar functions as an integrated element rather than a dominant feature.

5.7 Reflection

The practical section demonstrates that the strategies identified in the analysis can be transferred into an original compositional context, although the degree of integration varies across different sections. The electric guitar plays a central role both structurally and sonically, which at times leads to a strong focus on the instrument at the expense of a more balanced orchestral hierarchy.

Production decisions such as frequency distribution, volume balance, and spatial positioning were essential in shaping the overall result and highlight the importance of mixing as a compositional tool in hybrid contexts. At the same time, these decisions also reveal certain constraints of a sample-based workflow, particularly in terms of the time required to achieve convincing interaction between layers and the fine-tuning of ensemble balance.

Furthermore, the orchestration remains relatively functional and reduced in scope, reflecting the project's focus on guitar integration rather than fully developed orchestral writing. While MIDI-based instruments allow for a high degree of control and precision, this also influences the compositional process by encouraging a more iterative and technical approach to orchestration.

The hybrid character of the piece is therefore achieved primarily on a structural and textural level, while a fully seamless integration between electric guitar and orchestral elements is not consistently present throughout the work. Nevertheless, the project illustrates key aspects of hybrid orchestral-guitar writing and demonstrates how analytical strategies can inform compositional decisions within clearly defined aesthetic and production-related constraints.

6 Conclusion and Outlook

The objective of this thesis was to examine how the electric guitar is integrated compositionally and in terms of production within selected orchestral tracks from the *Final Fantasy VII Remake*, and to identify strategies for applying these principles in an original hybrid orchestral composition.

The analysis revealed that the electric guitar primarily serves a functional role within the larger orchestral texture. Unlike in traditional rock or metal contexts, it seldom

occupies the compositional center, instead acting as a structural and sonic component. Often, it is part of the rhythm section, closely linked to bass and drums, stabilizing the metric pulse through riff-based structures and repeated power chords, while significantly contributing to the tracks' energetic impact.

A key finding is that the guitar's perceptual prominence depends heavily on its mix placement. In many passages, it is deliberately embedded subtly, identifiable only upon close listening, allowing orchestral and melodic elements to remain foregrounded while the guitar functions as a supportive, often subliminal layer. Exceptions exist in which the guitar assumes a dominant role, though these are rare and highlight the soundtrack's stylistic diversity.

The study also demonstrated the guitar's flexibility, alternating between rhythm, melody, and textural reinforcement of orchestral structures. Soloistic passages often emulate idiomatic guitar techniques rather than strict compositional rigor, introducing a performative character.

Another important observation concerns the interdependence of the guitar with the overall orchestral structure. Its function arises contextually, often doubling, contrasting, or complementing orchestral lines where space exists in the frequency spectrum and texture, exemplifying a defining feature of hybrid orchestral production.

The artistic-practical section successfully translated these insights into an original composition, showing that a reduced motivic approach and layered, block-wise construction are effective strategies for hybrid textures. The guitar was deliberately employed in multiple roles, both as a structural core and as a background textural layer, with careful mix placement proving crucial for integration.

The practical process also revealed limitations, including balancing distorted guitars with orchestral instruments, especially in the midrange. Additionally, the study's scope focused on a limited selection of tracks and primarily on the guitar, intentionally leaving detailed orchestration strategies less explored. This focus aligns with the research objectives and enabled a deeper investigation of the specific question.

Future research could examine hybrid orchestration in greater detail, analyzing interactions between instrument groups, or explore genre influences, such as rock, metal, or electronic styles, on video game music. Production-focused studies using

live recordings rather than sample-based instruments could further illuminate hybrid integration.

In conclusion, the electric guitar in the *Final Fantasy VII Remake* functions not as a dominant solo instrument but as a versatile element within a complex hybrid soundscape. Its strength lies in adaptability, shifting seamlessly between foreground and background roles within an orchestral framework. The study shows that the guitar's integration is guided less by strict compositional rules and more by flexible interaction between arrangement, sonic design, and production decisions.

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9 Appendix



QR code linking to the original composition developed as part of this thesis.