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The Locrian Mode

A Comprehensive Survey of Its History and Use in Music

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SECTION 1 — ORIGINS AND HISTORY OF THE LOCRIAN MODE

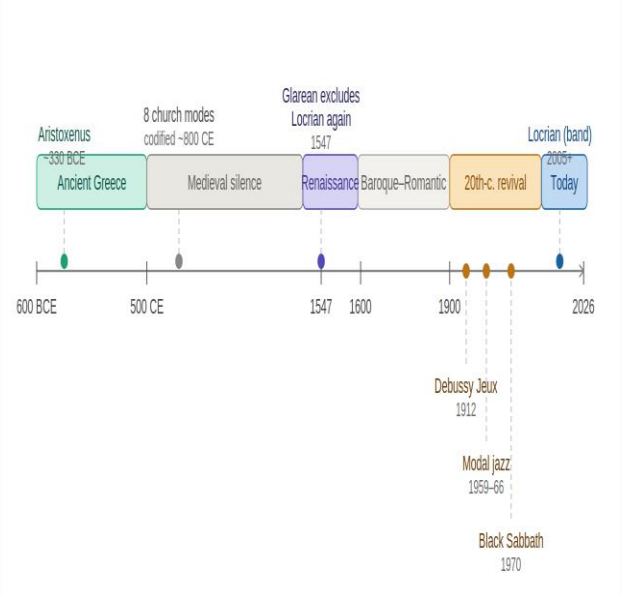

Figure 1. Historical arc of the Locrian mode from ancient Greece to the present day.

The Locrian mode occupies a singular place in the history of Western music theory: it is the only one of the seven diatonic modes built on the degrees of the major scale that was systematically excluded from practical use for over a millennium. Its history is a story of theoretical acknowledgment paired with practical avoidance, of a mode whose inherent structural instability — the diminished fifth above its tonic, the infamous tritone — rendered it incompatible with the harmonic ideals of nearly every era until the twentieth century. To understand why the Locrian mode was marginalized for so long, and why it was eventually embraced, requires tracing a path from ancient Greek music theory through medieval church practice, Renaissance humanism, the rise and dominance of tonal harmony, and finally the modernist revolution that shattered centuries of convention.

Defining the Locrian Mode

Before tracing its history, it is useful to define the mode precisely in both representations used by modern music theory. The Locrian mode is the seventh mode of the major scale. Its interval succession — expressed as half steps (H) and whole steps (W) — is H–W–W–H–W–W–W. Expressed in terms of scale degrees, the Locrian formula is:

1 ♭2 ♭3 4 ♭5 ♭6 ♭7

This means that compared to the natural minor scale (Aeolian), the Locrian mode lowers both the second degree (♭2) and the fifth degree (♭5). These two alterations are decisive: the ♭2 eliminates the major-second step from the tonic that gives other modes their sense of direction, and the ♭5 replaces the perfect fifth with a diminished fifth — creating a diminished tonic triad (e.g., B–D–F in B Locrian) that is uniquely unstable. No other diatonic mode has a diminished tonic triad.

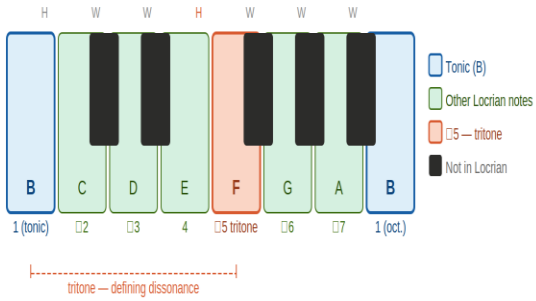

Figure 2. B Locrian on the piano keyboard — all white keys from B to B. The tritone relationship between the tonic (B) and the ♭5 (F) is shown by the bracket.

> *The Locrian mode on B uses only the white keys of the piano from B to B, and its tonic chord B–D–F is a diminished triad — the only diminished tonic triad among all seven diatonic modes.*

Ancient Greek Origins

The name "Locrian" derives from the ancient Greek region of Locris in central mainland Greece, inhabited by a tribe known as the Locrians. A harmonia bearing the Locrian name is said to have originated in the seventh or sixth century BCE, with one ancient source attributing it to the lyric poet Xenocritus of Locri — though this attribution, recorded by

Heraclides Ponticus, should be understood as reflecting the hazy legendary tradition of Greek music history rather than documented fact.

The fourth-century BCE philosopher Heraclides Ponticus referenced the mode as being in use during the era of poets Simonides and Pindar (late sixth to early fifth century BCE), noting its association with an expressive, lofty character, though it subsequently fell out of common practice.

However, an important distinction must be drawn between what the ancient Greeks called "Locrian" and what modern music theory means by the term. The modern Locrian mode — the diatonic scale built on the seventh degree of the major scale, with the interval pattern H–W–W–H–W–W–W — corresponds to what the ancient Greeks called the diatonic Mixolydian tonos. The Greeks themselves used "Locrian" as an alternative name for their Hypodorian or "common" tonos, a scale running from mese to nete hyperbolaion, which in its diatonic genus corresponds to the modern Aeolian mode (natural minor), not the modern Locrian. This terminological confusion arose from centuries of transmission and reinterpretation of Greek musical concepts.

The seminal theorist Aristoxenus, a disciple of Aristotle who flourished in the fourth century BCE, constructed a system based on seven "octave species" named after Greek regions and ethnicities — Dorian, Lydian, Phrygian, and others, including the Locrian (or Hypodorian). Aristoxenus innovated by using continuously variable quantities instead of discrete Pythagorean ratios to describe intervals, producing a more flexible theoretical framework. Ptolemy, writing in the second century CE, approached the tonoi differently in his foundational treatise Harmonics, presenting all seven octave species within a fixed octave through chromatic inflection of scale degrees.

By the sixth century CE, the Roman scholar Boethius attempted to preserve Greek musical learning during the transition from antiquity to the medieval period. His treatise De Institutione Musica drew extensively on Greek sources — particularly Nicomachus of Gerasa and Ptolemy —

synthesizing and adapting their ideas for a Latin-reading audience. This act of preservation nonetheless created inadvertent confusion: later medieval authors applied Boethius's descriptions of Greek modes to explain plainchant modes, which constituted an entirely different system developed within Christian liturgical practice.

Medieval Church Modes and the Exclusion of Locrian

The eight authentic and plagal church modes that dominated medieval liturgical music — Dorian, Hypodorian, Phrygian, Hypophrygian, Lydian, Hypolydian, Mixolydian, and Hypomixolydian — were firmly established by the time systematic modal theory codified plainchant practice. Notably absent from this canonical system were the Locrian and Hypolocrian modes. The Locrian mode, built on B as its final, created a fundamental harmonic problem: when B served as the finalis and F as the secondary tonal center, these two pitches formed a tritone — an interval of an augmented fourth or diminished fifth. The tonic triad built on B within the diatonic system is diminished (B–D–F), lacking the perfect fifth that all other modes possess. Medieval theorists recognized that the tritone sounded dissonant and jarring, and singers found it extraordinarily difficult to intonate accurately without fixed-pitch instruments.

The Tritone Prohibition and Musica Ficta

The tritone became notorious under the epithet "diabolus in musica" (the devil in music). The medieval admonition "mi contra fa est diabolus in musica" referred specifically to the clash of B natural (mi in the hexachord system) against F (fa) — the most problematic tritone in the diatonic system. It is important to understand that this condemnation referred to practical acoustic and vocal considerations: the tritone was genuinely difficult to sing in tune, not a literal invocation of demonic forces. The Church's avoidance was pragmatic: singers could not reliably produce the interval.

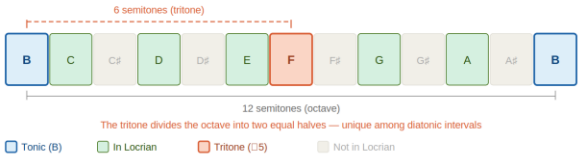

Figure 5. The twelve semitones of an octave (B Locrian). The tritone uniquely bisects the octave into two equal halves of six semitones each — no other diatonic interval shares this property.

From this prohibition grew the important Renaissance practice of musica ficta — the systematic chromatic alteration of notes in performance to avoid tritone relationships. Because the Locrian mode's very identity depends on the tritone, musica ficta would effectively destroy it: altering B to B♭ would transform the Locrian passage into Phrygian, while altering F to F♯ would move it toward other modal territory. The Locrian mode thus had no viable existence within the musica ficta system.

It is also worth noting that the term "modus lascivus" (the "lascivious" or "wanton" mode), sometimes incorrectly associated with Locrian, actually referred to the mode corresponding to C major — later known as the Ionian mode — which was avoided in Church music for its secular associations rather than its harmonic instability. The Ionian mode was not dissonant; it was simply too cheerful and worldly for sacred use.

Glarean's Dodecachordon and the Push to Twelve Modes

For nearly a thousand years, the eight-mode system remained relatively unchallenged. The most significant theoretical intervention came from Heinrich Glarean (1488–1563), a Swiss humanist and music theorist working in Basel. In 1547, Glarean published the Dodecachordon ("twelve strings"), a comprehensive treatise proposing that the eight traditional modes were insufficient to account for the harmonic and melodic practices of contemporary polyphonic music. He argued for expanding the modal system to twelve modes by adding the Aeolian and Hypoaeolian (natural minor modes) and the Ionian and Hypoionian (major modes). Crucially, however, Glarean excluded the Locrian and Hypolocrian modes from his expanded system, calling them

"hyperaeolian." Though he printed a few musical examples in this division of the octave, he did not accept it as a legitimate mode. His Dodecachordon contained over 120 musical examples by Josquin des Prez, Obrecht, Ockeghem, and other Renaissance masters — none in the Locrian mode.

> *The term "Locrian" as equivalent to Glarean's hyperaeolian was not actually used until the nineteenth century. In all earlier theoretical literature, the mode now called Locrian went by other names or was simply unnamed.*

The Baroque Through Romantic Periods

As standardized tonal harmony solidified in the seventeenth century, the modal system gradually receded from the foundation of musical practice. The rise of major-minor tonality rendered the older modal framework increasingly obsolete. The Locrian mode virtually disappeared from mainstream musical consciousness. Isolated instances of Locrian-like harmonic structures did appear sporadically: Girolamo Frescobaldi, in his toccatas and other keyboard works, occasionally incorporated Locrian-flavored cadences featuring diminished fifths as passing dissonances. Through the Classical period (approximately 1750–1820), finding a work composed in the Locrian mode is effectively impossible. The Romantic era similarly shows little systematic use, though as the nineteenth century progressed toward modernism, the conditions were laid for the mode's eventual revival.

The Twentieth-Century Revival

The twentieth century witnessed a fundamental reassessment of modal music, driven by modernist rejection of Romantic tonality, explorations of non-Western musical systems, nationalist folk-music movements, and the development of jazz. Claude Debussy's orchestral work Jeux (1912) contains three extended Locrian passages, and his piano prelude "La sérénade interrompue" (1910) uses Locrian on F for exotic harmonic effect. Jean Sibelius's Symphony No. 4 in A minor (1911) is suffused with

Locrian characteristics, particularly in its opening movement. Sergei Rachmaninoff's Prelude in B minor, Op. 32, No. 10, contains passages with Locrian-like coloring. Paul Hindemith's "Turandot Scherzo" (1943) and Ludus Tonalis (1942) represent the most systematic twentieth-century engagement with the mode.

In jazz, the Locrian mode gained significant functional importance as the natural scale for improvisation over half-diminished (m7♭5) chords. In heavy metal, Tony Iommi and Black Sabbath intuited the tritone's sonic power before any modal analysis was applied, pioneering what would become the foundational sound of an entire genre. Film and game composers embraced the mode for scoring tension, horror, and unease.

SECTION 1B — HARMONIC FRAMEWORK OF THE LOCRIAN MODE

Understanding the Locrian mode requires more than knowing its scale degrees. Because the mode centers on a diminished triad rather than a major or minor triad, its entire harmonic vocabulary differs fundamentally from other modes. This section presents the diatonic chord sequence built within Locrian, explains the crucial role of the ♭II chord as a substitute tonic, discusses the relationship between Locrian and the half-diminished chord in jazz practice, and catalogues the principal variants of the mode used in contemporary music.

Diatonic Chords of the Locrian Mode

When triads are built on each degree of the Locrian scale, using only the pitches available within the mode, the following chord sequence results (shown here in B Locrian, the "white-key" form):

Scale Degree	Chord (B Loc.)	Notes	Quality	Function & Use
i° (tonic)	**Bdim**	B–D–F	Diminished	Rarely used directly; unstable, requires resolution
♭II (supertonic)	**C major**	C–E–G	Major	*Most stable chord; functions as substitute tonic; key to Locrian cadences*
♭iii (mediant)	**Dm**	D–F–A	Minor	Moderate tension; used for passing motion
iv (subdominant)	**Em**	E–G–B	Minor	Half-diminished feel; bridges ♭II and ♭V
♭V (dominant)	**F major**	F–A–C	Major	No dominant function; used for color and contrast
♭VI (submediant)	**G major**	G–B–D	Major	Bright contrast chord; common in metal riff cycles
♭VII (leading)	**Am**	A–C–E	Minor	Smooth voice-leading back to ♭II or i°

The most structurally significant relationship in Locrian harmony is between the tonic chord (i°, diminished) and the ♭II chord (C major in B Locrian). Because the diminished tonic triad is too unstable to function as a resting point, composers and improvisers consistently use the ♭II as the "home" chord — a substitute tonic that provides stability without abandoning the modal identity. This is why many Locrian compositions sound as if they gravitate around a major chord a semitone above the nominal tonic.

> *In heavy metal riffs using Locrian, the "dark home" chord that sounds most stable is almost always the ♭II — for example, in E Locrian, the F major chord. This gives metal Locrian riffs their characteristic sense of weight and finality even amid extreme dissonance.*

The Locrian Mode and the Half-Diminished Chord in Jazz

In jazz harmony, the Locrian mode has a specific and well-established function: it is the standard improvisation scale over the half-diminished seventh chord (ø7 or m7♭5). A half-diminished chord — for example, Bm7♭5 (B–D–F–A) — contains all four pitches of the B Locrian scale's most characteristic tones. In the ii–V–i progressions of minor-key jazz, the ii chord is typically a half-diminished chord. For example, in D minor: Bm7♭5 – E7 – Dm. The Bm7♭5 chord invites Locrian improvisation, creating a moment of instability before the dominant E7 resolves to the tonic Dm. Many jazz players prefer the Locrian ♮2 variant, which raises the second degree to a natural whole step, providing more melodic flexibility while retaining the characteristic ♭5.

Locrian Variants

The Locrian mode has spawned several important variants, each with its own modal origin, characteristic sound, and practical applications:

Variant	Scale Degrees	Modal Origin	Character & Use
Pure Locrian	1 ♭2 ♭3 4 ♭5 ♭6 ♭7	—	Max dissonance; rare in practice; used in extreme metal and avant-garde writing
Locrian ♮2 (♯2)	1 2 ♭3 4 ♭5 ♭6 ♭7	*Mode 6 of melodic minor*	Most common variant; standard jazz choice over ø7 chords; balances tension with usability
Locrian ♮6	1 ♭2 ♭3 4 ♭5 6 ♭7	*Mode 5 of harmonic major*	Used in progressive metal (e.g. Opeth); raised 6th allows a major subdominant chord
Locrian ♮2 ♮6	1 2 ♭3 4 ♭5 6 ♭7	*Mode 2 of harmonic minor*	Smooth Locrian variant; both tension notes raised; used in film scoring and fusion
Ultra Locrian	1 ♭2 ♭3 ♭4 ♭5 ♭6 ♭♭7	*Mode 7 of melodic minor*	Theoretical; highly chromatic; rarely encountered outside academic contexts

Of these variants, the Locrian ♮2 (also called Locrian ♯2 or the half-diminished scale) is by far the most practically significant. As mode 6 of the melodic minor scale, it appears in virtually every modern jazz curriculum as the standard choice over half-diminished chords when melodic smoothness is desired.

SECTION 2 — COMPREHENSIVE LIST OF COMPOSITIONS USING THE LOCRIAN MODE

This section catalogs compositions that use the Locrian mode — in whole, in part, or as a significant structural or coloristic element. The chart below gives a genre overview of all catalogued entries.

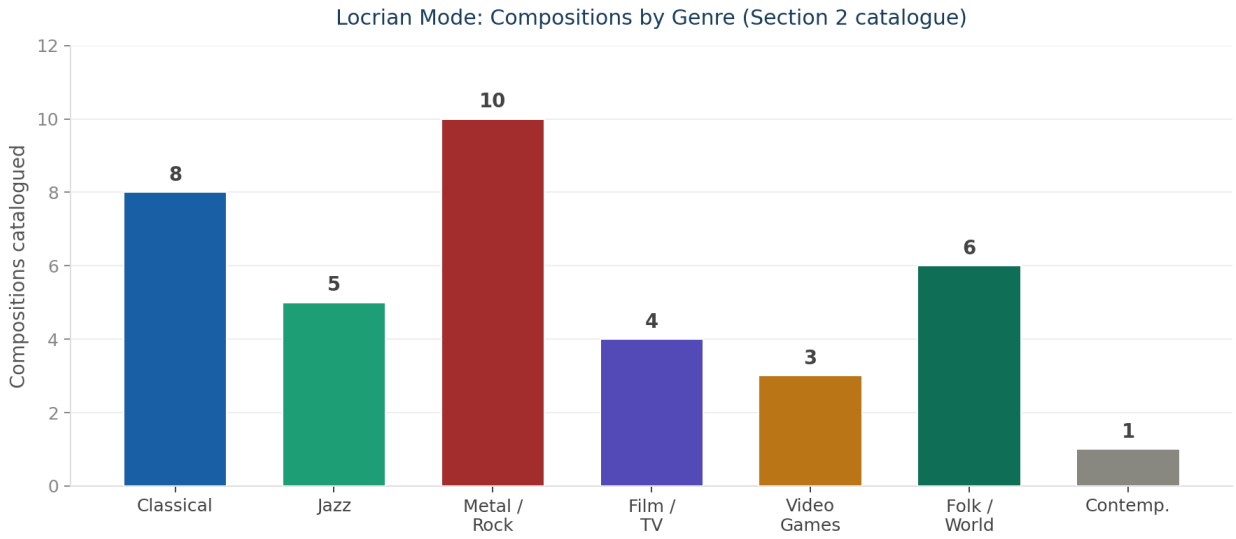

Figure 4. Distribution of catalogued Locrian compositions by genre. Metal/Rock and Classical account for the majority of documented uses; Contemporary experimental remains a thin category.

2.1 — Western Classical Music

Medieval and Renaissance

No confirmed compositions from the Medieval or Renaissance periods employ the Locrian mode as a structural element. The mode was theoretically described but universally avoided in practice due to its diminished fifth and the instability of its tonic triad. Heinrich Glarean's Dodecachordon (1547), despite expanding the modal system to twelve modes, explicitly excluded the Locrian and Hypolocrian modes.

Baroque and Classical

No compositions from the Baroque (1600–1750) or Classical (1750–1820) periods are documented as employing the Locrian mode in a sustained

or structural way. Girolamo Frescobaldi's keyboard toccatas contain fleeting Locrian-flavored passing dissonances, but these represent momentary harmonic color within predominantly tonal frameworks.

Romantic and Early Modern

"Prelude in B minor, Op. 32, No. 10"	
Composer / Artist	Sergei Rachmaninoff
Date / Period	1910
Genre	Solo piano
Locrian Usage	Brief passages exhibit Locrian characteristics through the flattening of the second and fifth degrees of B natural minor. These episodes represent coloristic departures within a predominantly tonal framework. Confirmed as Locrian by Vincent Persichetti's Twentieth Century Harmony (1961).
YouTube	https://www.youtube.com/watch?v=GhBXx-2PadI

20th Century

"La sérénade interrompue (Préludes, Book I, No. 9)"	
Composer / Artist	Claude Debussy
Date / Period	1910
Genre	Solo piano
Locrian Usage	Employs the Locrian mode on F to create exotic, unresolved harmonic effects within Debussy's impressionistic language. The Locrian passages contribute to the piece's evocation of an interrupted Spanish serenade, with the mode's instability reinforcing the sense of disruption.
YouTube	https://www.youtube.com/watch?v=VmzpEHCZIks

"Jeux (Poème dansé for Orchestra)"	
Composer / Artist	Claude Debussy
Date / Period	1912
Genre	Orchestral ballet music
Locrian Usage	Contains three extended passages deliberately employing the Locrian mode — confirmed by multiple musicological analyses including Larín (2005). Debussy uses Locrian to darken and intensify sections originally conceived in the Dorian mode, a technique of modal substitution.
YouTube	https://www.youtube.com/watch?v=vCSSYI20VcQ

"Symphony No. 4 in A minor, Op. 63"	
Composer / Artist	Jean Sibelius
Date / Period	1911
Genre	Symphony / Orchestral
Locrian Usage	The first movement opens with a somber passage rich in Locrian characteristics. The tritone — the defining interval of the Locrian mode — permeates the work, creating a foreboding, austere atmosphere unlike any other symphony of the period. Confirmed as Locrian by Persichetti (1961).
YouTube	https://www.youtube.com/watch?v=czplsmKtVFI

"The Rite of Spring (Le Sacre du printemps)"	
Composer / Artist	Igor Stravinsky
Date / Period	1913
Genre	Orchestral ballet music
Locrian Usage	Integrates fragments of Locrian variants into the score, contributing to the work's primal tension and rhythmic drive. [NOTE: Specific rehearsal numbers cited in some analyses have not been universally confirmed; readers are directed to consult the full score for detailed analysis.]
YouTube	https://www.youtube.com/watch?v=EkwqPJZe8ms

"Symphonic Metamorphosis of Themes by Carl Maria von Weber — II. "Turandot Scherzo""	
Composer / Artist	Paul Hindemith
Date / Period	1943
Genre	Orchestral
Locrian Usage	A landmark Locrian composition. The "Turandot Scherzo" alternates extended sections in Mixolydian and Locrian modes, concluding decisively in Locrian. Gene Anderson's 1996 analysis in College Music Symposium documents this modal structure in detail. One of the most extensively analyzed examples of sustained Locrian writing in the orchestral repertoire.
YouTube	https://www.youtube.com/watch?v=Qz86T-Q7cTo

"String Quartet in E minor, Op. 121 — Second Movement"	
Composer / Artist	Gabriel Fauré
Date / Period	1924
Genre	Chamber music

Locrian Usage	The opening melody in the second movement, played by Violin 1, uses A Locrian mode. Notable as one of the rare uses of Locrian in French chamber music and composed in the final year of Fauré's life.
YouTube	https://www.youtube.com/watch?v=UyXvO9dqrok

"Ludus Tonalis"	
Composer / Artist	Paul Hindemith
Date / Period	1942
Genre	Solo piano (fugues and interludes)
Locrian Usage	This suite of twelve fugues connected by interludes explicitly demonstrates Hindemith's systematic modal exploration. Brief passages employ the Locrian mode as part of the work's comprehensive survey of tonal centers and harmonic relationships. Confirmed as Locrian by Persichetti (1961).
YouTube	https://www.youtube.com/watch?v=5SllkeTYJiw

"A Ceremony of Carols, Op. 28 — No. 9: "In Freezing Winter's Night""	
Composer / Artist	Benjamin Britten
Date / Period	1942
Genre	Vocal / Choral
Locrian Usage	Employs the Locrian mode to evoke the bleak, frozen atmosphere described in the text. The mode's instability and darkness serve Britten's word-painting, creating a stark contrast with the warmer modes used in surrounding movements.
YouTube	https://www.youtube.com/watch?v=SqK2M-dnHKw

"String Quartet No. 10 in A-flat major, Op. 118 — Second Movement"	
Composer / Artist	Dmitri Shostakovich
Date / Period	1964
Genre	Chamber music
Locrian Usage	The second movement in E minor makes extensive use of the Locrian mode, contributing to the quartet's characteristically dark, sardonic, and emotionally complex character.
YouTube	https://www.youtube.com/watch?v=BUFLGM1iSS0

2.2 — Jazz

> *Jazz Pedagogy Note: In jazz improvisation, the Locrian mode is taught as the standard scale over half-diminished (ø7 / m7♭5) chords. In a ii–V–i progression in a minor key, the ii chord is typically half-diminished, making Locrian fluency essential. The Locrian ♯2 variant is also widely used for smoother melodic lines.*

""Stella by Starlight""	
Composer / Artist	Victor Young (jazz standard, widely performed)
Date / Period	1944 (original); countless versions since
Genre	Jazz standard
Locrian Usage	The Em7(♭5) chord in the progression invites E Locrian improvisation over the half-diminished chord. One of the most performed jazz standards requiring Locrian fluency.
YouTube	https://www.youtube.com/watch?v=RK6J-lDfP-U

""Naima""	
Composer / Artist	John Coltrane
Date / Period	1959
Genre	Modal jazz / Ballad
Locrian Usage	Features an E♭ Locrian passage over an A♭/E♭ chord that creates a profoundly dark, introspective atmosphere. One of the defining examples of Locrian in jazz.
YouTube	https://www.youtube.com/watch?v=QTMqes6HDqU

""Inner Urge""	
Composer / Artist	Joe Henderson
Date / Period	1965 (album: Inner Urge on Blue Note)
Genre	Modal jazz / Post-bop
Locrian Usage	Begins with an unmistakable Locrian sound, followed by Lydian chords held for four bars. The opening Locrian passage is one of the most recognized examples of intentional Locrian use in jazz composition.
YouTube	https://www.youtube.com/watch?v=pjb6JhOXHiQ

""Blue in Green""	
Composer / Artist	Miles Davis / Bill Evans
Date / Period	1959 (album: Kind of Blue)
Genre	Modal jazz
Locrian Usage	The half-diminished chord voicings employed here invite Locrian-based melodic movement. Part of the landmark Kind of Blue album that popularized modal jazz.
YouTube	https://www.youtube.com/watch?v=PoPL7BExSQU

""Footprints""	
Composer / Artist	Wayne Shorter
Date / Period	1966 (album: Adam's Apple on Blue Note)
Genre	Modal jazz / Post-bop
Locrian Usage	Shorter's modal approach in his 1960s Blue Note recordings opened harmonic territory that includes Locrian-based improvisation over half-diminished chord changes.
YouTube	https://www.youtube.com/watch?v=JOsB8fNJP2Q

2.3 — Rock, Metal, and Progressive Music

""Army of Me""	
Composer / Artist	Björk
Date / Period	1995 (album: Post)
Genre	Electronic pop / Industrial
Locrian Usage	The entire song is composed in C Locrian — one of the only hit pop songs to be based entirely in the Locrian mode. The bassline serves as the primary carrier of the mode. The track reached the UK top ten.
YouTube	https://www.youtube.com/watch?v=3biZkA-TNvs

""Black Sabbath""	
Composer / Artist	Black Sabbath
Date / Period	1970 (album: Black Sabbath)
Genre	Heavy metal / Doom metal

Locrian Usage	The iconic opening riff centers on three notes built around the tritone (G and C♯/D♭), creating a Locrian-flavored sound that became the sonic template for heavy metal. Tony Iommi's intuitive use of tritone-based riffs established the darkest sound in rock music.
YouTube	https://www.youtube.com/watch?v=ISez3OCmbs8

""Symptom of the Universe""	
Composer / Artist	Black Sabbath
Date / Period	1975 (album: Sabotage)
Genre	Heavy metal
Locrian Usage	Uses the Locrian mode's characteristic diminished fifth to create an aggressive, dissonant riff. Frequently cited as a proto-thrash metal composition and one of the earliest sustained uses of Locrian in heavy rock.
YouTube	https://www.youtube.com/watch?v=y--FmqE2vQ8

""YYZ""	
Composer / Artist	Rush
Date / Period	1981 (album: Moving Pictures)
Genre	Progressive rock
Locrian Usage	The synthesizer melody in the introduction uses C Locrian. The opening uses a 5/4 time signature spelling "YYZ" in Morse code, with the root C for dashes and the tritone F♯ for dots — an ingenious structural use of the Locrian tritone.
YouTube	https://www.youtube.com/watch?v=LdpMpfp-J_I

""Enter Sandman""	
Composer / Artist	Metallica
Date / Period	1991 (album: Metallica / The Black Album)
Genre	Heavy metal / Thrash metal
Locrian Usage	The main riff employs E Locrian characteristics in a blues-inflected Locrian style, contributing to the song's dark, menacing atmosphere. One of the best-selling heavy metal songs of all time.
YouTube	https://www.youtube.com/watch?v=CD-E-LDc384

""Sad But True""	
Composer / Artist	Metallica

Date / Period	1991 (album: Metallica / The Black Album)
Genre	Heavy metal / Thrash metal
Locrian Usage	The introduction uses G Locrian, establishing a crushingly dark and heavy atmosphere.
YouTube	https://www.youtube.com/watch?v=A8MO7fkZc5o

""Wherever I May Roam""	
Composer / Artist	Metallica
Date / Period	1991 (album: Metallica / The Black Album)
Genre	Heavy metal / Thrash metal
Locrian Usage	Uses E Locrian, with the ♭2 and ♭5 degrees prominently featured. The sitar-influenced introduction and the main riff both exhibit Locrian characteristics.
YouTube	https://www.youtube.com/watch?v=sOPFMkFaMOw

""Angel of Death""	
Composer / Artist	Slayer
Date / Period	1986 (album: Reign in Blood)
Genre	Thrash metal
Locrian Usage	Contains elements in B Locrian, creating a dark, tension-filled atmosphere characteristic of Slayer's extreme approach to thrash metal.
YouTube	https://www.youtube.com/watch?v=K6_zsJ8KPP0

""Everything Ends""	
Composer / Artist	Slipknot
Date / Period	2001 (album: Iowa)
Genre	Nu metal / Heavy metal
Locrian Usage	Uses A Locrian scale with the fourth note sometimes flattened, creating a particularly dissonant variation on the already unstable mode. Confirmed by Wikipedia's article on the Locrian mode.
YouTube	https://www.youtube.com/watch?v=OqnFYdsOSSE

""Left Behind""	
Composer / Artist	Slipknot
Date / Period	2001 (album: Iowa)
Genre	Nu metal / Heavy metal
Locrian Usage	The main riff uses B Locrian. Additional Slipknot tracks using Locrian elements include "The Shape," "I Am Hated," "New Abortion," and "Duality."
YouTube	https://www.youtube.com/watch?v=D1gl46hh3sQ

""From Mars" and "Oroborus""	
Composer / Artist	Gojira
Date / Period	Various (2000s–2010s)
Genre	Progressive metal / Extreme metal
Locrian Usage	Both compositions use E Locrian scale. Gojira has been particularly deliberate in their use of the mode, employing it as a foundational element of their technical, environmentally themed extreme metal.
YouTube	https://www.youtube.com/watch?v=VPJLfPjU7jA

""Gliese 710""	
Composer / Artist	King Gizzard & the Lizard Wizard
Date / Period	2022 (album: Ice, Death, Planets, Lungs, Mushrooms and Lava)
Genre	Psychedelic rock / Progressive rock
Locrian Usage	Written in the Locrian mode as part of the album's concept of basing each track on one of the seven Greek modes. One of the most deliberate and conceptually explicit uses of the mode in contemporary rock.
YouTube	https://www.youtube.com/watch?v=jKUPdljXDJ0

""Blackwater Park""	
Composer / Artist	Opeth
Date / Period	2001 (album: Blackwater Park)
Genre	Progressive metal / Death metal
Locrian Usage	Features contrasting Locrian and Lydian scales. Opeth employs Locrian ♮6 (a variation with a raised natural sixth degree) for enhanced tension and resolution. The album Deliverance (2002) and The Last Will and Testament also contain significant Locrian passages.
YouTube	https://www.youtube.com/watch?v=S1KPqet89gk

2.4 — Film and Television Scores

"Various Cues — Psycho"	
Composer / Artist	Bernard Herrmann
Date / Period	1960
Genre	Film score
Locrian Usage	Herrmann's groundbreaking score for Hitchcock's Psycho pioneered chromatic and modal techniques in horror film scoring that prefigure Locrian's later dominance in the genre. His systematic use of tritone harmony, all-string orchestration, and chromatic modal language established a template drawn upon by virtually every subsequent composer of horror and thriller music.
YouTube	https://www.youtube.com/watch?v=e4hE4K_yFEI

"Tubular Bells (The Exorcist Theme)"	
Composer / Artist	Mike Oldfield
Date / Period	1973 (used in The Exorcist, 1973)
Genre	Film score / Progressive rock
Locrian Usage	The famous theme used in The Exorcist employs modal elements including Locrian characteristics that contribute to its profoundly unsettling effect. [NOTE: The time signature of the opening theme has been analyzed variously by different scholars; claims of a specific "15/8" meter are disputed and should be treated with caution.]
YouTube	https://www.youtube.com/watch?v=1hbQpjYtbps

"Batman (1989) and Various Dark Fantasy/Horror Scores"	
Composer / Artist	Danny Elfman
Date / Period	1989 onward
Genre	Film score
Locrian Usage	Elfman's gothic scoring for Tim Burton's films demonstrates how the ♭II chord — the most consonant available in Locrian — can be used to create menace and power without fully abandoning tonal grounding. His scoring demonstrates how Locrian-inflected passages generate psychological unease in film contexts.
YouTube	https://www.youtube.com/watch?v=kRZAk2rfESU

2.5 — Video Game Music

""The Mines of Narshe" (Final Fantasy VI)"	
Composer / Artist	Nobuo Uematsu
Date / Period	1994
Genre	Video game soundtrack (SNES/Super Famicom)
Locrian Usage	Opens with a bass pedal on B held for the first eight bars, creating an unambiguous Locrian sound. Combines jazzy swing with Locrian elements, using the mode's darkness to evoke the underground mine setting.
YouTube	https://www.youtube.com/watch?v=7UxAzDQcOBU

"DOOM (2016) — "At Doom's Gate" and Various Tracks"	
Composer / Artist	Mick Gordon
Date / Period	2016
Genre	Video game soundtrack
Locrian Usage	The progressive metal-influenced soundtrack captures the Locrian mode in guitar riffs combined with heavy synthesized and analog-processed instrumentation, maximizing intensity and aggression.
YouTube	https://www.youtube.com/watch?v=Jm932Sqwf5E

""Drowning" Jingle (Sonic Mania)"	
Composer / Artist	Tee Lopes (arrangement); original by Masato Nakamura
Date / Period	2017 (original: 1991)
Genre	Video game music
Locrian Usage	The Sonic Mania version adds a diminished fifth in the background to the classic Sonic drowning jingle, creating a Locrian-inflected variation that heightens the panicked, terrified effect of the countdown.
YouTube	https://www.youtube.com/watch?v=9Yw5jkAbrn8

2.6 — Folk and World Music

""Dust to Dust""	
Composer / Artist	John Kirkpatrick
Date / Period	Contemporary / Modern
Genre	English folk

Locrian Usage	Written entirely in the Locrian mode — a rare achievement in folk music. Performed with voice and concertina accompaniment only, the spare instrumentation reinforces the eerie, unsettling quality of the mode.

"Maqam Lami (Traditional repertoire)"	
Composer / Artist	Various performers
Date / Period	Traditional / Ongoing
Genre	Arabic maqam music
Locrian Usage	Maqam Lami is structurally equivalent to the Western Locrian scale. In the Arabic maqam system, the mode functions differently than in Western music because Arabic tonality does not depend on the perfect fifth. Within the Kurd family of maqamat, the ghammaz falls on the fourth degree, allowing the diminished fifth to coexist without undermining modal stability.

"Cins Kurdi-based Compositions (Traditional repertoire)"	
Composer / Artist	Various performers
Date / Period	Traditional / Ongoing
Genre	Turkish makam / Ottoman classical music
Locrian Usage	The Turkish concept of Cins Kurdi shares structural similarity with the first half of the Locrian mode. Turkish makam music prescribes not merely a pitch set but a complete melodic framework encompassing direction, ornamentation, emphasis notes, emotional character, and rules for ascending versus descending motion. Related makams Nikriz and Hicaz also contain Locrian-adjacent interval structures.

"Dastgah Shur (Persian classical music)"	
Composer / Artist	Various performers
Date / Period	Traditional / Ongoing
Genre	Persian classical music
Locrian Usage	Persian dastgah Shur, the most common of the twelve principal dastgahs, contains Locrian-adjacent material in specific modal segments. Performed across Iran, Afghanistan, and Tajikistan, Shur-based repertoire is one of the most widely disseminated musical traditions incorporating Locrian-related interval patterns.

"Ragas Meladalan, Parijat, Ritu, Nauhar Todi, and Antariksh"	
Composer / Artist	Various Hindustani classical musicians
Date / Period	Traditional / Ongoing

Genre	North Indian (Hindustani) classical music
Locrian Usage	These ragas are Locrian-congruent in their pitch content. Only six of the seven Western heptatonic modes correspond to Indian thaats, with Locrian standing alone as having no exact thaat counterpart. Raga Todi is the closest Hindustani equivalent, though it has distinct microtonal inflections and melodic grammar. These ragas incorporate specific rules for melodic movement, ornamentation, and emotional association (rasa) that go far beyond the pitch content of a Western scale.

"Iwato Scale Compositions"	
Composer / Artist	Various Japanese musicians
Date / Period	Traditional / Ongoing
Genre	Japanese traditional music
Locrian Usage	The Iwato scale is a Japanese pentatonic scale retaining the tonic (1), minor second (♭2), perfect fourth (4), diminished fifth (♭5), and minor seventh (♭7) while omitting the minor third and minor sixth. The retention of both the ♭2 and the ♭5 preserves the tritone relationship at the core of Locrian's characteristic dissonance within a leaner pentatonic framework.

2.7 — Contemporary and Experimental Music

"Discography of Locrian (band)"	
Composer / Artist	Locrian (Terence Hannum, Steven Hess, André Foisy)
Date / Period	2005–present
Genre	Experimental / Drone / Black metal / Noise rock
Locrian Usage	An experimental music project formed in Chicago, literally named after the mode. Their output blends black metal, electronics, drone, and noise rock into an eclectic mixture that embodies the mode's dark, unstable character. Key releases include The Crystal World (2011), Return to Annihilation (2013), and Infinite Dissolution (2015).
YouTube	https://www.youtube.com/results?search_query=Locrian+band

SECTION 3 — MAJOR COMPOSERS AND THEORISTS WHO HAVE USED THE LOCRIAN MODE

Ancient and Medieval Theorists

Aristoxenus of Tarentum (c. 375–335 BCE)

Aristoxenus is the most important music theorist of ancient Greece and the foundational figure in the theoretical history of the Locrian mode. A student of Aristotle at the Lyceum, he wrote Elements of Harmony — the earliest surviving systematic treatise on Greek music theory. Aristoxenus innovated by describing intervals as continuously variable quantities rather than discrete Pythagorean ratios, producing a more practically flexible framework. His construction of seven octave species named after Greek regions — including the Hypodorian / Locrian — established the terminological tradition that, however transformed by later centuries, eventually led to the modern Locrian mode's name.

Heinrich Glarean (1488–1563)

Glarean is the pivotal figure in the Locrian mode's theoretical history. A Swiss humanist scholar, poet laureate, and music theorist, he spent most of his career in Basel and Freiburg im Breisgau, where he befriended Erasmus. His Dodecachordon (Basel, 1547) — a monumental three-volume treatise — proposed expanding the eight-mode system to twelve by adding Aeolian, Hypoaeolian, Ionian, and Hypoionian modes, creating the theoretical framework that most closely anticipates the modern tonal system. His deliberate exclusion of the Locrian (which he called "hyperaeolian") — principled, based on the impossibility of the tritone-plagued tonic — reinforced the mode's marginal status for centuries while simultaneously establishing the theoretical vocabulary through which all later modal discussion would pass.

Medieval and Renaissance

No prominent Medieval or Renaissance composers are documented as having used the Locrian mode in practical composition. The music of Palestrina, Lassus, Josquin, and their contemporaries avoids the Locrian mode entirely.

Baroque

The Baroque period (1600–1750) produced no documented uses of the Locrian mode. Girolamo Frescobaldi's keyboard works contain fleeting Locrian-flavored dissonances in passing, but these do not constitute sustained modal composition.

Classical

The Classical period (1750–1820) shows no documented use of the Locrian mode. Composers such as Haydn, Mozart, and Beethoven worked within functional tonal harmony, rendering the Locrian mode effectively irrelevant to their compositional practice.

Romantic

Sergei Rachmaninoff (1873–1943)

While primarily a late Romantic tonal composer, Rachmaninoff's Prelude in B minor, Op. 32, No. 10, contains passages where the flattening of the second and fifth degrees produces Locrian-like coloring. These episodes represent momentary departures within a tonal framework.

20th Century — Classical / Art Music

Claude Debussy (1862–1918)

Debussy was arguably the first major Western composer to employ the Locrian mode deliberately and extensively. His orchestral work Jeux (1912) contains three extended Locrian passages — confirmed by

multiple musicological sources — and his piano prelude "La sérénade interrompue" uses Locrian on F for exotic harmonic effect.

Jean Sibelius (1865–1957)

Sibelius's Symphony No. 4 in A minor (1911) is suffused with Locrian characteristics, particularly in its opening movement. The tritone that permeates the work creates a foreboding, austere atmosphere that sets this symphony apart from all others in the repertoire.

Igor Stravinsky (1882–1971)

In The Rite of Spring (1913), Stravinsky integrated fragments of Locrian variants into the score. These Locrian elements contribute to the work's revolutionary dissonance and rhythmic intensity.

Gabriel Fauré (1845–1924)

In his final completed work, the String Quartet in E minor, Op. 121 (1924), Fauré employed A Locrian in the second movement's opening melody. This late use of the mode suggests Fauré's harmonic adventurousness continued to the end of his life.

Paul Hindemith (1895–1963)

Hindemith's engagement with the Locrian mode is the most systematic among twentieth-century composers. His Ludus Tonalis (1942) surveys all tonal centers and modal possibilities, including Locrian passages. More significantly, his "Turandot Scherzo" (1943) alternates Mixolydian and Locrian sections and concludes in Locrian — one of the most sustained and clearly documented Locrian compositions in the orchestral repertoire.

Benjamin Britten (1913–1976)

Britten employed the Locrian mode in "In Freezing Winter's Night," the ninth song from A Ceremony of Carols (1942). The mode's bleakness serves his text-painting.

Dmitri Shostakovich (1906–1975)

Shostakovich's String Quartet No. 10 (1964) makes extensive use of the Locrian mode in its second movement. His broader engagement with dissonant modality, sardonic humor, and emotional darkness made Locrian a natural resource within his harmonic vocabulary.

Jazz Composers and Improvisers

John Coltrane (1926–1967)

Coltrane's "Naima" (1959) features an E-flat Locrian passage of profound darkness and introspection. His extensive modal explorations during his classic quartet period (1960–1965) helped establish the harmonic contexts in which Locrian became a practical improvisational resource.

Joe Henderson (1937–2001)

Henderson's "Inner Urge" opens with one of the most recognized Locrian passages in jazz. The composition deliberately begins with a Locrian sound before transitioning to Lydian chords, demonstrating sophisticated modal contrast.

Miles Davis (1926–1991) and Bill Evans (1929–1980)

The Kind of Blue sessions (1959) popularized modal jazz and created the artistic space in which Locrian improvisation became possible over half-diminished chord changes.

Wayne Shorter (1933–2023)

Shorter's compositional imagination during his Blue Note period explored modal territory that encompassed Locrian-based improvisation. His compositions create harmonic contexts where Locrian fluency is essential for performers.

McCoy Tyner (1938–2020)

As pianist for Coltrane's classic quartet, Tyner developed a distinctive approach to modal piano voicings that became enormously influential across jazz. His harmonic language encompassed the full range of diatonic modes, including Locrian over half-diminished chords.

Rock, Metal, and Progressive Artists

Tony Iommi / Black Sabbath (formed 1968)

Iommi's pioneering use of the tritone — the defining characteristic of the Locrian mode — became foundational to heavy metal. The opening riff of "Black Sabbath" (1970) and "Symptom of the Universe" (1975) center on tritone-based figures. Iommi did not initially conceptualize his riffs in modal terms, but his intuitive gravitation toward the tritone defined the sonic identity of an entire genre.

James Hetfield and Kirk Hammett / Metallica (formed 1981)

Metallica's Black Album (1991) contains multiple Locrian-influenced compositions, including "Enter Sandman" (E Locrian), "Sad But True" (G Locrian), and "Wherever I May Roam" (E Locrian).

Geddy Lee and Alex Lifeson / Rush (formed 1968)

Rush's "YYZ" (1981) uses C Locrian in its synthesizer melody, with the tritone serving a structural role in the piece's Morse code-inspired opening.

Björk (born 1965)

Björk's "Army of Me" (1995) is composed entirely in C Locrian — one of the only genuine pop hits to be based wholly in the Locrian mode. The track reached the UK top ten.

Gojira (formed 1996)

The French progressive metal band has been particularly deliberate in using the Locrian mode, employing E Locrian on songs such as "From Mars" and "Oroborus." [NOTE: Title corrected from "Ouroboros" to Gojira's official spelling "Oroborus."]

Film and Game Composers

Bernard Herrmann (1911–1975)

Herrmann's score for Psycho (1960) established the harmonic vocabulary of musical horror that laid the groundwork for Locrian's dominance in later film scoring. His systematic use of tritone harmony, all-string

orchestration, and chromatic modal language created a template drawn upon by virtually every subsequent composer of horror and thriller music.

Mike Oldfield (born 1953)

Oldfield's Tubular Bells (1973), selected by William Friedkin for use in The Exorcist, employs modal elements including Locrian characteristics that contribute to its profoundly unsettling atmosphere.

Nobuo Uematsu (born 1959)

"The Mines of Narshe" from Final Fantasy VI (1994) opens with an unambiguous B Locrian bass pedal, combining jazzy swing with the mode's darkness to evoke the underground mine setting.

Mick Gordon (active 2010s–present)

Gordon's soundtrack for DOOM (2016) features Locrian guitar riffs within a progressive metal-influenced framework. The Locrian mode's intensity perfectly matches the game's frenetic gameplay.

Contemporary and Living Composers

Locrian (band) — Terence Hannum, Steven Hess, André Foisy (formed 2005)

The Chicago-based experimental project Locrian is perhaps the most sustained engagement with the mode's aesthetic possibilities in contemporary experimental music. Formed in 2005, the trio blends black metal, drone, electronics, noise rock, and ambient soundscapes into a distinctive sonic identity that takes Locrian's instability and darkness as foundational principles rather than coloristic effects. Their work — including The Crystal World (2011), Return to Annihilation (2013), and Infinite Dissolution (2015) — represents the most thorough artistic investigation of what sustained Locrian instability sounds and feels like as a listening experience.

SECTION 4 — THE LOCRIAN MODE IN FILM COMPOSITION: CRAFT AND TECHNIQUE

The relationship between the Locrian mode and film music is not accidental. Film scoring — particularly for horror, psychological thriller, science fiction, and dark fantasy — demands something that the major-minor tonal system provides only awkwardly: sustained emotional states of unease, dread, alienation, and psychological fragmentation that do not resolve. Tonal harmony is fundamentally a grammar of tension and resolution; it is built around the expectation of the dominant returning to the tonic. Film scoring for sustained fear cannot afford resolution. The Locrian mode, which offers no such resolution from within its own structure, answers that requirement naturally. Where tonal harmony creates a gravitational pull toward stability, Locrian creates a gravitational pull toward instability — and in film, instability is often exactly what is required.

This chapter examines how film composers actually deploy the Locrian mode as a compositional tool, moving beyond the catalog of works in Section 2 to analyze the specific harmonic, melodic, rhythmic, and orchestrational techniques through which Locrian's characteristic qualities — its tritone, its diminished tonic triad, its ♭2 — are harnessed for narrative and emotional effect. The discussion traces a lineage of practice from Bernard Herrmann's foundational innovations in the 1950s through the heavily processed hybrid metal-orchestral scoring of Mick Gordon in the 2010s, identifying common techniques that persist across decades and the innovations that each generation of composers has added to the vocabulary.

Why Film Scoring Liberated the Locrian Mode

Throughout its history, the Locrian mode's fundamental problem was always the same: it could not cadence on its own tonic. Medieval chant required stable conclusions; Renaissance polyphony required consonant

cadences; tonal harmony required dominant-to-tonic motion. In every context, the Locrian mode's lack of a perfect fifth above the tonic made it structurally incompatible with the cadential demands of the genre. Film scoring removed that constraint almost entirely.

Film music is primarily atmospheric rather than architectural. Where a symphony must move through a large-scale tonal journey and return satisfyingly home, a film cue must sustain a specific emotional temperature for a precise duration — often thirty seconds, often looping or fading under dialogue — without necessarily going anywhere. The function of a horror cue is not to arrive; it is to hover. This hovering quality — sustained harmonic ambiguity without forward momentum — is precisely what the Locrian mode does naturally. A Locrian ostinato over a bass pedal on the tonic does not need to resolve. It can simply persist, and in persisting it generates a low-level, constant sense of wrongness that is more psychologically effective for horror than any dramatic dominant-seventh chord could be. The Locrian mode finally had a home in an art form that did not need it to behave.

The ♭II Chord: Menace with a Safety Net

The most important single harmonic device in Locrian film scoring is the ♭II chord — the major triad built on the flattened second degree. In B Locrian, this is C major; in E Locrian, it is F major. Understanding why this chord is so central requires understanding a paradox at the heart of Locrian harmony: the mode's tonic triad (diminished) is too unstable to serve as any kind of anchor, yet abandoning the tonic entirely loses the modal identity. The ♭II chord resolves this paradox by providing a major chord — consonant, stable, psychologically grounding — that is nonetheless harmonically wrong by the standards of any other key. A sudden C major chord in a passage that has established B as the root does not sound like relief; it sounds like a threat. It is too consonant for the context, arriving with the wrong kind of weight, like a door opening in a room that should have no doors.

Bernard Herrmann was the first composer to systematically exploit this quality. In his scores for Alfred Hitchcock — Vertigo (1958), North by Northwest (1959), and most famously Psycho (1960) — Herrmann repeatedly uses major chords a semitone above or below a chromatic center to create what film music scholars have called the "wrong key" effect: a moment of unexpected consonance that is more disturbing than the surrounding dissonance because it implies that something stable is present but fundamentally displaced. In more explicitly Locrian contexts, later composers made the ♭II chord the structural pillar of entire cues. Danny Elfman's scoring for Tim Burton consistently alternates between a dark modal tonic and its ♭II, creating a harmonic pendulum that conveys both menace and the dark grandeur of characters like Batman and Edward Scissorhands. The oscillation ♭II → i° became a signature gesture of the "dark superhero" scoring aesthetic of the 1990s and 2000s — fundamentally a Locrian device.

Pedal Points and Ostinatos

The single most common Locrian device in film scoring is the sustained bass pedal — a held or repeated low note on the tonic pitch, over which harmonically mobile material moves in the upper voices. In tonal music, a bass pedal typically holds the dominant or tonic, creating harmonic tension that resolves when the upper voices align. In Locrian film scoring, the bass pedal holds the tonic — but because the tonic in Locrian is a diminished triad root, the harmonies that form above it never produce resolution. Every chord that appears over the pedal is, by definition, not in a stable relationship with it. The result is a continuously unresolved harmonic environment where the bass note functions as an anchor of location (we know where we are) but not of stability (we cannot rest here). This distinction — knowing where you are while being unable to feel safe there — is the emotional signature of great horror film scoring.

Herrmann's string writing for Psycho uses a related technique: divided strings producing held pitches at the boundary of Locrian and chromatic

space, with sul ponticello bowing (near the bridge) making the string tone harsh and scratchy — moving the sound toward noise while retaining enough pitch identity to anchor the listener in something close to E Locrian. Mick Gordon extended this idea into electronic synthesis for DOOM (2016), using a synthesized bass pedal saturated with harmonic distortion — so that the tonic is present but surrounded by a cloud of its own overtones — to create a Locrian environment that is simultaneously pitched and textural.

Tritone Oscillation: The Minimum Locrian Gesture

If the pedal point is the most sustained Locrian device, tritone oscillation is the most economical. A single melodic or harmonic gesture alternating between the tonic and its tritone — B and F in B Locrian, E and B♭ in E Locrian — requires only two notes but immediately establishes the mode's characteristic interval and the psychological state it generates. The power of the tritone oscillation lies in its symmetrical ambiguity: the interval divides the octave exactly in half, meaning it could resolve equally in two directions. This double-resolution potential means the tritone always implies a choice that is never made — it hovers between two possible tonal worlds, belonging to neither. In film scoring, this tonal hovering maps directly onto narrative hovering: the moment before we know whether the threat is real, the point of suspended dread before the revelation.

Brad Fiedel's score for The Terminator (1984) built an entire aesthetic around tritone-adjacent bass riffs in a mechanically regular rhythm, creating a sense of relentless, inhuman purpose that perfectly matched the film's antagonist. The rhythmic regularity denied any sense of human breathing or phrase-ending; the tritone content denied any sense of harmonic arrival. The effect was a musical representation of something that would not stop. John Carpenter similarly used minimal tritone-based modal figures as the foundation of his own scores for Halloween (1978)

and The Thing (1982), establishing a tradition of composer-directors in genre film who understood the tritone's narrative efficiency.

The ♭2: The Step That Goes Wrong

The ♭2 is Locrian's most melodically distinctive degree — a note that sits a mere semitone above the tonic, giving the scale an immediate sense of compression right at its starting point. Film composers exploit the ♭2 primarily through scalar descent: a melody descending stepwise through ♭5, 4, ♭3, ♭2, and back to the tonic traces a path that sounds increasingly menacing as it approaches home — the ♭2, arriving a semitone above the tonic, creates a moment of maximum melodic compression just before resolution, as if the melody were being forced through a too-small space. Howard Shore's score for The Lord of the Rings trilogy uses descending modal lines through ♭2-inflected territory to evoke the corrupting influence of Mordor; while Shore's language is complex and rarely purely modal, the ♭2 semitone above tonal centers of menace is a consistent device throughout.

In dialogue with silence, the ♭2 becomes particularly effective when a melody rests there rather than resolving to the tonic — leaving the listener in a state of harmonic suspension that is psychologically identical to held breath. Several of Jerry Goldsmith's horror cues for The Omen (1976) and Alien (1979) end phrases on the ♭2 rather than resolving, allowing the sound to fade on the wrong note. The effect is of something left unfinished, a thought interrupted, a door not quite closed.

Orchestration: Timbre as Amplifier

Low strings are the primary vehicle of Locrian menace across the history of film scoring. The cello and contrabass in their lower registers produce a complex, dark overtone spectrum that inherently suggests instability; adding tritone intervals in this register creates acoustic beating effects (interference patterns between nearby frequencies) that are physically

unsettling in a way higher registers are not. Herrmann's all-string orchestra for Psycho — with its emphasis on lower strings and use of col legno, sul ponticello, and tremolo — established the low-string Locrian texture as the foundational sound of orchestral horror.

Brass add a different quality: weight and inevitability. Where strings suggest anxiety and fragility, brass in a Locrian context suggest implacable power. Jerry Goldsmith's use of brass multiphonics in The Omen created a sound of supernatural authority that was simultaneously musical and noise-like. James Horner's Aliens (1986) combined Herrmann-influenced string writing with militaristic brass in tritone-inflected fanfares to create a sense of overwhelm — the alien threat as an orchestral force that simply cannot be defeated. The integration of electronic synthesis opened further timbral possibilities from the 1980s onward: synthesized drones in the lowest registers, often tuned to the tonic of a Locrian passage and enriched with slowly evolving harmonic distortion, create a continuous presence felt as much as heard. Hans Zimmer's scoring aesthetic, developed through scores like Interstellar (2014) and Dunkirk (2017), uses sustained organ and brass tones in chromatic-modal contexts that frequently touch Locrian territory, creating a sense of cosmic scale and dread.

Locrian in Interaction with Silence and Sound Design

Modern film scoring operates in a hybrid environment where the boundary between music and sound design is deliberately blurred. The most sophisticated Locrian film writing of the past three decades uses this ambiguity as a compositional resource, exploiting the Locrian mode's proximity to noise — its tritone creates acoustic beating, its ♭2 creates dissonant intervals with the tonic, its diminished tonic triad is harmonically closest to a cluster chord — to place music at the edge of recognizable pitch. Mick Gordon's score for DOOM (2016) represents the most thorough integration of Locrian modal writing with industrial sound design, layering distorted electric guitar riffs in E Locrian over synthesized

bass drones, electronic percussion, and processed orchestral samples to create a texture in which pitched material and noise continuously interpenetrate. This is Locrian at its most evolved: a mode experienced not as a scale but as a quality of sound.

Silence itself becomes a Locrian device when deployed correctly. A sustained Locrian texture that cuts abruptly to silence leaves the listener in heightened alertness — the ear, trained by the unresolved modal environment to expect continued unease, cannot relax when the sound stops. The silence feels temporary rather than conclusive. John Carpenter exploited this systematically: his scores for Halloween and The Fog alternate minimal Locrian-adjacent motifs with complete silence, training the audience to fear the absence of music as much as the music itself. When silence follows a Locrian phrase rather than a resolved tonal phrase, it does not feel like an ending. It feels like waiting.

A Lineage of Practice: From Herrmann to Gordon

The history of Locrian film scoring is a coherent tradition in which each generation of composers absorbed the vocabulary of its predecessors and extended it in response to new technical means and narrative demands.

Composer	Period	Key Locrian Innovations	Representative Scores
Bernard Herrmann	1950s–1970s	Low-string tritone writing; "wrong key" ♭II displacement; chromatic modal cells; col legno / sul ponticello textures	*Psycho (1960), Vertigo (1958), Taxi Driver (1976)*
Jerry Goldsmith	1960s–2000s	Brass multiphonics over Locrian bass; ♭2 phrase endings; choir in tritone-based clusters; irregular metre over modal ostinatos	*The Omen (1976), Alien (1979), Poltergeist (1982)*
John Carpenter	1970s–1990s	Minimal tritone ostinatos; Locrian as loop; strategic silence extending Locrian unease; synthesizer self-scoring	*Halloween (1978), The Fog (1980), The Thing (1982)*

James Horner	1980s–2000s	Locrian brass fanfares over tritone pedals; hybrid orchestral-electronic Locrian textures; modal writing at massive dynamic scale	*Aliens (1986), Braveheart (1995), Avatar (2009)*
Danny Elfman	1980s–present	♭II ↔ i° oscillation as dark-fantasy signature; waltz time over Locrian bass; whimsical-menacing duality	*Batman (1989), Edward Scissorhands (1990)*
Howard Shore	1990s–present	Descending ♭2 lines as corruption signifier; Locrian in leitmotif transformation; choir over Locrian modal pedals	*The Lord of the Rings (2001–2003), A History of Violence (2005)*
Hans Zimmer	1990s–present	Organ-and-brass Locrian drones; modal writing at extreme dynamic range; Locrian as cosmic-scale menace	*The Dark Knight (2008), Interstellar (2014), Dune (2021)*
Jóhann Jóhannsson	2000s–2010s	Locrian-adjacent modal writing for alien-intelligence scenarios; minimalist Locrian textures with field recordings	*Arrival (2016), Sicario (2015)*
Mick Gordon	2010s–present	Locrian guitar riffs integrated with industrial sound design; mode as timbral quality; adaptive/interactive game scoring	*DOOM (2016), DOOM Eternal (2020)*

Locrian by Genre: A Practical Taxonomy

Not all film genres deploy the Locrian mode in the same way. The specific technique — how sustained the Locrian writing is, which devices are foregrounded, how the mode interacts with tonal material elsewhere in the score — varies systematically by genre and narrative context.

Genre	Typical Locrian Usage	Primary Devices	Effect Sought
Horror	Sustained; entire cues in Locrian without tonal relief	Low-string pedal, tritone oscillation, ♭2 neighbor tones, silence	Unresolvable dread; the presence of something wrong

Psychological thriller	Momentary; Locrian inflections within broadly tonal cues	♭II displacement, ♭2 phrase endings, chromatic modal cells	Unreliability; surfaces that conceal threat
Science fiction (alien)	Sustained but hybridized with electronic texture	Tritone drone, Locrian melody over noise, pitch-to-noise continuum	Otherness; contact with the non-human
Dark fantasy / superhero	Episodic; Locrian for villain themes, tonal for heroism	♭II ↔ i° oscillation, Locrian leitmotifs, modal transformation	Grandeur of evil; menace as spectacle
Action / war	Momentary; tritone figures within driving tonal writing	Tritone fanfares, Locrian ostinatos under rhythmic drive	Danger and aggression; enemy presence
Video games (action/horror)	Sustained and looping; adaptive/interactive contexts	Loopable Locrian ostinatos, layered stems, riff-based modal writing	Sustained aggression; environmental menace without narrative resolution

The Avoided Resolution: Locrian's Deepest Contribution to Film

The most profound contribution of the Locrian mode to film composition is not any specific harmonic device or orchestrational technique but a fundamental approach to musical time: the avoided resolution. Tonal music is organized around expectation and fulfillment — the dominant creates an expectation that the tonic will fulfill. Even dissonant, chromatic music tends to create local moments of resolution, brief points of arrival that allow the listener to orient. Locrian film scoring, at its most effective, withholds these moments systematically.

A cue that remains in Locrian throughout — never touching a major tonic, never producing a perfect cadence, never resolving the tritone in the bass — creates a listening experience in which the normal temporal landmarks of musical progress are absent. The listener cannot locate themselves in musical time: there is no sense of arrival, no sense of departure, only the sensation of being suspended in a permanent present of unease. This suspension of musical time mirrors the suspension of narrative time that occurs in the most effective horror sequences,

when normal cause-and-effect has been replaced by something that simply is.

Bernard Herrmann grasped this principle earlier and more completely than any of his contemporaries, and it is why his scores have retained their power for seven decades. The Psycho shower scene is not tense because it is loud or fast; it is tense because it never resolves. The strings shriek and slash, but they never land — they circle the tonal center without touching it, hover above it without coming to rest. When the scene ends, the music does not conclude; it stops. That distinction — between a conclusion that has arrived somewhere and a cessation that has simply stopped — is the Locrian contribution to film music, and it remains the most powerful tool in the film composer's arsenal for conveying genuine, sustained, unresolvable dread.

SECTION 5 — CONCLUSION

The Locrian mode's long marginalization was not the result of arbitrary prejudice but of a genuine structural limitation: its diminished fifth above the tonic — the tritone, the most dissonant interval in the diatonic system — deprived it of the stable harmonic foundation that every other mode possesses. In a musical world built on the consonance of perfect fifths and the gravitational pull of stable tonic triads, the Locrian mode had no functional home. Medieval church musicians excluded it because it could not support the stable, singable melodies that liturgical chant required. Renaissance theorists acknowledged it intellectually but dismissed it as impractical. The rise of functional tonal harmony in the Baroque and Classical eras only deepened its irrelevance, as major-minor tonality demanded the very consonances that the Locrian mode lacks.

What changed was not the mode itself but the values and aesthetic goals of the musicians who began to use it. The twentieth century's rejection of Romantic tonal conventions, combined with the rise of jazz improvisation over complex chord types, the birth of heavy metal's embrace of dissonance and darkness, and the expansion of film and game scoring into psychological and atmospheric territory, created multiple contexts in which the Locrian mode's instability became an asset rather than a liability. Its tritone, once condemned as the "devil in music," became precisely the quality that attracted composers seeking to evoke unease, menace, introspection, or otherworldly atmosphere.

Today, the Locrian mode thrives in jazz education (as the standard scale for half-diminished chords), in metal and progressive rock (as a foundation for darkness and aggression), in film and game scoring (as a tool for tension and horror), and in experimental and contemporary classical music (as part of the expanded palette of post-tonal harmony). The Locrian ♮2 variant has become one of the most important scales in modern jazz pedagogy. The cross-cultural existence of Locrian-

equivalent scales in Arabic maqam, Turkish makam, Persian dastgah, Indian raga, and Japanese pentatonic traditions further demonstrates that this pattern of intervals speaks to something universal in human perception of sound. The Locrian mode's journey from obscurity to creative resource stands as a reminder that the boundaries of musical expression are never fixed.

APPENDIX A — COMPARATIVE MODAL TABLE

The following table presents all seven diatonic modes side by side, showing their scale degree formulas, tonic triad quality, fifth quality, and characteristic emotional/aesthetic associations. The diagram below places them on a brightness-to-darkness spectrum.

Mode	Scale Degrees	Tonic Triad	5th Quality	Character
Ionian (Major)	1 2 3 4 5 6 7	Major	P5	Bright, happy, resolved
Dorian	1 2 ♭3 4 5 6 ♭7	Minor	P5	Cool, soulful, bittersweet
Phrygian	1 ♭2 ♭3 4 5 ♭6 ♭7	Minor	P5	Dark, exotic, Spanish
Lydian	1 2 3 ♯4 5 6 7	Major	P5	Dreamy, ethereal, floating
Mixolydian	1 2 3 4 5 6 ♭7	Major	P5	Bluesy, open, rock
Aeolian (Minor)	1 2 ♭3 4 5 ♭6 ♭7	Minor	P5	Sad, melancholic, natural
LOCRIAN	**1 ♭2 ♭3 4 ♭5 ♭6 ♭7**	**Diminished**	**dim5**	**Unstable, dark, dissonant**

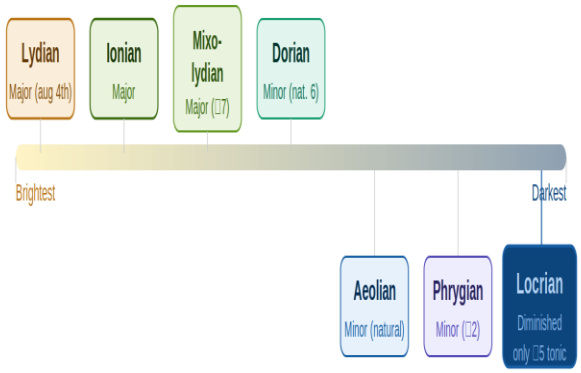

Figure 3. The seven diatonic modes arranged from brightest (Lydian) to darkest (Locrian). Locrian is the only mode with a diminished tonic triad, placing it in a qualitative category distinct from all others.

> *The Locrian mode is the only diatonic mode in which the fifth above the tonic is diminished rather than perfect. This single structural fact — that the tonic and "dominant" are separated by a tritone rather than a fifth — explains the entire history of the mode's exclusion and eventual rehabilitation.*

APPENDIX B — GLOSSARY OF KEY TERMS

The following glossary defines technical terms from Greek, Latin, Arabic, Turkish, and Sanskrit musical traditions used throughout this report.

Term	Definition
Ambitus	The range of a chant melody, measured from its lowest to highest note; used to distinguish authentic from plagal modes.
Augmented Fourth	An interval spanning six semitones — one of the two forms of the tritone. In B Locrian, this appears between B and F.
Dastgah	The Persian modal framework, comparable to an Arabic maqam or Indian raga. Persian classical music uses twelve principal dastgahs.
Diabolus in Musica	Literally "the devil in music"; a medieval epithet for the tritone (augmented fourth or diminished fifth), reflecting its perceived harshness and difficulty to sing accurately.
Diminished Fifth	An interval of six semitones. In B Locrian, the interval B–F is a diminished fifth and defines the mode's characteristic instability.
Finalis	In medieval plainchant theory, the final note on which a chant concludes. The Locrian mode's finalis on B created the problematic B–F tritone.
Ghammaz	In Arabic maqam theory, the secondary tonal centre of a maqam. In Maqam Lami (Arabic Locrian), the ghammaz falls on the fourth degree rather than the fifth.
Harmonia	In ancient Greek music theory, a specific arrangement of pitches within an octave, associated with particular ethnic groups, emotional characters, and musical styles.
Half-Diminished Chord (ø7)	A four-note chord built from a diminished triad plus a minor seventh (e.g., Bm7♭5 = B–D–F–A). In jazz, the Locrian mode is the standard scale choice over this chord type.
Maqam	The modal framework of Arabic music; plural maqamat. Each maqam prescribes a specific pitch set, characteristic melodic movements, ornamentation, and emotional character.
Makam	The Turkish equivalent of the Arabic maqam; a melodic framework specifying pitch content, characteristic phrases, ornamentation patterns, and ascending vs. descending contours.
Melodic Minor Scale	A scale that raises the sixth and seventh degrees when ascending, returning to natural minor when descending. The sixth mode of melodic minor is the Locrian ♮2 scale.
Mi Contra Fa	The medieval Latin phrase describing the dissonant clash of B natural (mi) against F (fa). From this phrase came "mi contra fa est diabolus in musica."
Mode	A type of diatonic scale defined by its specific pattern of whole and half steps and by the position of its tonic.

Musica Ficta	The Renaissance practice of chromatically altering notes in performance to avoid the tritone. Musica ficta effectively rendered the Locrian mode unplayable without destroying its identity.
Modus Lascivus	Literally "the wanton mode"; the medieval name for the Ionian mode (C major), avoided in Church music for its secular associations. Often confused with the Locrian mode, but unrelated.
Pentatonic	A five-note scale. The Japanese Iwato scale is a pentatonic scale derived from the Locrian mode that retains the characteristic tritone interval.
Raga	In Indian classical music, a melodic framework specifying pitch content, ascending and descending melodic shapes, ornaments, emotional mood (rasa), and time of day for performance.
Rasa	In Indian aesthetics, the emotional flavour or sentiment conveyed by a raga. The rasas most associated with Locrian-adjacent ragas include karuna (pathos) and raudra (fury).
Thaat	In Hindustani classical music, one of ten parent scales from which ragas are derived. Only six of the seven Western diatonic modes have exact thaat equivalents; the Locrian does not.
Tonos	In ancient Greek music theory, a transposition level or pitch key. The diatonic Mixolydian tonos corresponds to the modern Locrian mode.
Tritone	An interval of exactly three whole tones (six semitones), dividing the octave exactly in half. The most dissonant interval in the diatonic system; fundamental to the Locrian mode's identity.

APPENDIX D — COMPARATIVE SCALE ANALYSIS: LOCRIAN AND ITS NEAREST RELATIVES

The Locrian mode does not exist in isolation. A family of scales from Western, Middle Eastern, South Asian, East Asian, and jazz traditions share one or more of its most defining interval characteristics — principally the tritone above the tonic (♭5), the minor second (♭2), or both in combination. This appendix presents those scales in structured comparison with the Locrian mode, identifying precisely where they converge, where they diverge, and what those differences mean in practice. The goal is to place Locrian within a broader intervallic landscape and to show that its characteristic qualities are not aberrations but variants on patterns that appear independently across the world's musical traditions.

How to Read This Appendix

Each scale is presented with its full formula in scale degrees (e.g., 1 ♭2 ♭3 4 ♭5 ♭6 ♭7 for pure Locrian), its tonic triad quality, its relationship to Locrian stated in terms of which degrees differ, and a discussion of its character, cultural context, and areas of overlap with the Locrian sound. A master comparison table leads the appendix, followed by individual entries for each scale.

> *Degrees shown in bold in the comparison table mark the two defining Locrian intervals: the ♭2 (minor second above tonic) and the ♭5 (tritone above tonic). Any scale that shares both of these degrees with Locrian will produce a similar sense of unease and tonal instability, regardless of its cultural origin.*

Master Comparison Table

The table below presents twelve scales — Locrian and eleven near-relatives — aligned by scale degree. Cells shaded in coral indicate degrees that are raised relative to pure Locrian; cells shaded in blue indicate degrees that are lowered. Cells matching Locrian exactly are

left unshaded. Pentatonic scales (five notes) show dashes where the Western heptatonic degree is absent.

Scale	1	♭2	♭3	4	♭5	♭6	♭7	Tonic triad
LOCRIAN (reference)	**1**	**♭2**	**♭3**	**4**	**♭5**	**♭6**	**♭7**	*Diminished*
Locrian ♮2 (half-dim. scale)	1	2	♭3	4	♭5	♭6	♭7	*Diminished*
Locrian ♮6	1	♭2	♭3	4	♭5	6	♭7	*Diminished*
Locrian ♮2 ♮6	1	2	♭3	4	♭5	6	♭7	*Diminished*
Ultra Locrian	1	♭2	♭3	♭4	♭5	♭6	♭♭7	*Diminished*
Phrygian	1	♭2	♭3	4	5	♭6	♭7	*Minor*
Phrygian dominant	1	♭2	3	4	5	♭6	♭7	*Major*
Double harmonic / Byzantine	1	♭2	3	4	5	♭6	7	*Major*
Neapolitan minor	1	♭2	♭3	4	5	♭6	7	*Minor*
Iwato (Japanese pentatonic)	1	♭2	—	4	♭5	—	♭7	— *(pentatonic)*
In-sen (Japanese pentatonic)	1	♭2	—	5	—	♭7	—	— *(pentatonic)*
Maqam Lami (Arabic)	1	♭2	♭3	4	♭5	♭6	♭7	*Dim. (context-dependent)*

Pure Locrian (reference)	Degree raised vs Locrian	Degree lowered vs Locrian	Degree absent (pentatonic)

1. Locrian Variants

The following scales are direct modifications of the Locrian mode, altering one or two degrees while retaining the modal identity. They are treated comprehensively in Section 1B of the main text; this appendix places them in comparison with the broader scale family.

Locrian ♮2 (also: Locrian ♯2, Half-Diminished Scale, Mode 6 of Melodic Minor)	
Formula	1 2 ♭3 4 ♭5 ♭6 ♭7
Tonic triad	Diminished (1–♭3–♭5)
Fifth quality	Diminished (tritone)
Cultural origin	Western (derived from melodic minor); universally present in jazz pedagogy
Relation to Locrian	Identical to Locrian except the second degree is raised from ♭2 to a natural 2 — a single semitone difference that substantially softens the scale's most abrasive quality.
Character	The Locrian ♮2 retains the tritone above the tonic (♭5) that gives Locrian its fundamental instability, but removes the compressed semitone step from tonic to ♭2. The result is a scale that is dark and tense but more melodically navigable than pure Locrian. It is the most widely used Locrian variant in jazz and film scoring, and is the standard scale over half-diminished (ø7) chords in modern jazz practice. As mode 6 of the ascending melodic minor scale, it belongs to the melodic minor family and benefits from that system's well-developed harmonic relationships.
Overlap with Locrian	Shares the tritone (♭5), the ♭3, ♭6, and ♭7 with pure Locrian — five of seven degrees identical. The ♭5 (tritone) is retained, so the fundamental tonal instability and the absence of a perfect fifth above the tonic are preserved. Improvisation over half-diminished chords sounds equally valid in either scale; the choice between them is a question of melodic preference rather than harmonic function.
Key divergence	The natural 2 (whole step above tonic) replaces the ♭2 (semitone above tonic). This removes the most extreme melodic compression of pure Locrian, making scalar ascending lines from the tonic feel less menacing and more usable. In film scoring contexts, Locrian ♮2 is preferred when the mood should suggest unease rather than active terror.

Locrian ♮6 (Mode 5 of Harmonic Major)	
Formula	1 ♭2 ♭3 4 ♭5 6 ♭7
Tonic triad	Diminished (1–♭3–♭5)
Fifth quality	Diminished (tritone)
Cultural origin	Western (derived from harmonic major scale); used in progressive metal and contemporary classical music
Relation to Locrian	Identical to Locrian except the sixth degree is raised from ♭6 to a natural 6 — a single semitone difference.
Character	The raised 6th degree creates an augmented second interval between ♭5 and 6 (three semitones in a row), giving the scale an exotic, slightly Middle Eastern quality within its Locrian framework. The ♭2 and ♭5 are both retained, so the scale retains Locrian's full sense of tonal menace. The augmented second (♭5 to 6) gives the ascending scalar line an unexpected lift before it falls back to ♭7 and the tonic. Opeth use this scale (which they and others sometimes call "Locrian ♮6") to add harmonic variety within dark Locrian passages without departing from the modal center.
Overlap with Locrian	Retains the ♭2, ♭5 (tritone), ♭3, and ♭7 — the four most defining Locrian degrees. The tonic triad remains diminished. The overall sound remains unmistakably Locrian in character. The raised 6 allows a IV major chord (built on the 4th degree) using tones from the scale, providing slightly more harmonic flexibility than pure Locrian.
Key divergence	The natural 6 creates an augmented second interval (A2) between ♭5 and 6, a feature that pure Locrian lacks. This interval is characteristic of harmonic minor and its modes, giving Locrian ♮6 a distinctly non-diatonic quality even within an already non-diatonic mode. The augmented second gives melodic lines a tension-and-release shape absent from pure Locrian's uniformly descending chromaticism.

Ultra Locrian (Mode 7 of Melodic Minor)	
Formula	1 ♭2 ♭3 ♭4 ♭5 ♭6 ♭♭7
Tonic triad	Diminished (1–♭3–♭5)
Fifth quality	Diminished (tritone)
Cultural origin	Western theoretical construct; rarely encountered in practice outside academic or extreme avant-garde contexts
Relation to Locrian	Locrian with the fourth degree also lowered (to ♭4) and the seventh degree double-flattened (♭♭7, i.e., a diminished seventh interval above the tonic). Two degrees below Locrian.
Character	The Ultra Locrian is the most chromatically compressed of all Locrian variants, containing six lowered degrees and only one unaltered note (the tonic itself). The ♭4 (enharmonically equivalent to a major third) creates an interval between the ♭3 and ♭4 of only a semitone, making even the lower

	tetrachord feel claustrophobic. The ♭♭7 (a diminished seventh above the tonic, enharmonically a major sixth) gives the scale an unusually low seventh degree. In practice, this scale is almost never used melodically; it appears primarily in theoretical surveys and very occasionally in extreme metal or atonal writing where maximum chromatic density is sought.
Overlap with Locrian	Retains the ♭2 and ♭5 (the two defining Locrian intervals), the ♭3, and the ♭6. The tonic triad remains diminished. The overall sound is darker and more chromatic than pure Locrian, representing an intensification rather than a departure from Locrian's fundamental qualities.
Key divergence	The ♭4 creates a tritone between the tonic and ♭4 itself (in addition to the standard Locrian tritone between 1 and ♭5), making the scale contain two simultaneous tritone relationships from the tonic. The ♭♭7 (diminished seventh) is enharmonically equivalent to a major sixth (6), meaning the scale's seventh sounds like a very flat seventh rather than a true minor seventh. These qualities make Ultra Locrian theoretically interesting but practically unwieldy.

2. Adjacent Diatonic Modes

The following modes belong to the Western diatonic system and are Locrian's closest neighbours within that family. Each shares the ♭2 with Locrian but diverges on the critical ♭5 — having a perfect fifth instead of a diminished fifth above the tonic. This single change transforms the tonic triad from diminished to minor and fundamentally alters the mode's harmonic usability.

Phrygian (Mode 3 of Major Scale)	
Formula	1 ♭2 ♭3 4 5 ♭6 ♭7
Tonic triad	Minor (1–♭3– 5)
Fifth quality	Perfect fifth
Cultural origin	Western diatonic (ancient Greek and medieval European); widely used in flamenco, metal, death metal, and Eastern European folk music
Relation to Locrian	Phrygian is Locrian with the fifth degree raised from ♭5 to a natural 5. The two modes are otherwise identical. Phrygian is built on the third degree of the major scale; Locrian on the seventh.
Character	Phrygian shares Locrian's most distinctive melodic feature — the ♭2, which gives both modes their characteristic dark, compressed feel at the tonic. The ♭2 in Phrygian is what produces the Spanish or Moorish quality that characterizes flamenco; the same interval in Locrian contributes to the mode's sense of menace. However, Phrygian has a perfect fifth above its

	tonic, meaning its tonic triad is a stable minor chord. This fundamental difference means Phrygian can establish a tonal center in a way Locrian cannot: it has a home to return to. Phrygian is dark but resolves; Locrian is dark and refuses to.
Overlap with Locrian	Shares five of seven scale degrees with Locrian: the ♭2 (the most distinctive shared interval), ♭3, 4, ♭6, and ♭7. Melodic lines in the lower tetrachord (1–♭2–♭3–4) are identical in both modes. Both modes share a strong association with menace and exoticism in Western music, and both are frequently used in metal and film scoring for dark affect.
Key divergence	The natural 5 versus ♭5 is the sole but decisive difference. With a perfect fifth, Phrygian can support a minor tonic chord and establish harmonic closure. Locrian cannot. In improvisation, Phrygian allows the performer to land on the fifth of the tonic chord as a point of rest; in Locrian, the equivalent pitch (♭5) is the most dissonant degree, the tritone itself. Choosing between Phrygian and Locrian is essentially a choice between dark-but-stable and dark-and-unstable.

Phrygian Dominant (Mode 5 of Harmonic Minor; also: Freygish in klezmer, Hijaz in Arabic music)	
Formula	1 ♭2 3 4 5 ♭6 ♭7
Tonic triad	Major (1– 3– 5)
Fifth quality	Perfect fifth
Cultural origin	Derives from the harmonic minor scale; central to Spanish flamenco, Arabic maqam Hijaz, Jewish klezmer (Freygish), and widely used in metal and film scoring
Relation to Locrian	Shares the ♭2 and ♭6 with Locrian, but has a major third (3) and perfect fifth (5) — the latter being the critical distinction from Locrian's tritone. The major third produces a major tonic chord rather than Locrian's diminished triad.
Character	The Phrygian dominant is arguably the most widely recognized "exotic" scale in Western music due to its presence in flamenco, Arabic music, and film scoring for Middle Eastern settings. The combination of ♭2 and major 3 (natural 3) creates an augmented second (A2) interval between ♭2 and 3 — a sound strongly associated with Middle Eastern and Mediterranean musical traditions. Unlike Locrian, the Phrygian dominant has a stable major tonic chord and a perfect fifth, giving it substantial harmonic usability. It is dark and exotic but not fundamentally unstable.
Overlap with Locrian	Shares the ♭2 with Locrian — the most ear-catching shared feature — and also the ♭6 and ♭7. Descending passages from ♭2 to 1 are identical and produce the same characteristic dark step in both scales. Both scales are associated with menace and exoticism in film scoring, and both are used in metal for dark, Eastern-inflected riffing.
Key divergence	The major third (3 vs ♭3) and perfect fifth (5 vs ♭5) are both raised relative to Locrian, producing a major tonic chord instead of a diminished triad. The augmented second between ♭2 and 3 is characteristic of harmonic

	minor-derived scales and gives the Phrygian dominant its instantly recognizable exotic quality — a quality absent from pure Locrian, which has no augmented seconds.

3. Non-Diatonic Western Scales

The following scales lie outside the seven diatonic modes but are firmly part of the Western harmonic tradition, each used historically in European classical, folk, or contemporary music. Their relationship to Locrian is indirect but meaningful.

Double Harmonic Scale (also: Byzantine scale, Arabic scale, Major Gypsy scale)	
Formula	1 ♭2 3 4 5 ♭6 7
Tonic triad	Major (1– 3– 5)
Fifth quality	Perfect fifth
Cultural origin	Used in Byzantine music, Arabic maqam (particularly Maqam Hijaz Kar), Turkish makam (Hicaz), Greek folk music, Hungarian/Romani music, and occasionally in Western classical music (Liszt, Rimsky-Korsakov)
Relation to Locrian	Shares only the ♭2 and ♭6 with Locrian. Has raised 3, raised 5, and raised 7 compared to Locrian. The two scales share a similar sense of exotic compression at the ♭2–tonic step, but diverge sharply elsewhere.
Character	The double harmonic scale contains two augmented second intervals — between ♭2 and 3, and between ♭6 and 7 — which gives it a uniquely symmetrical and dramatic quality. Each tetrachord (lower: 1–♭2– 3– 4; upper: 5–♭6– 7– 8) contains the same augmented-second shape, creating a scale that sounds simultaneously ancient, exotic, and ceremonial. It is one of the most internationally distributed scales in world music, appearing independently in Byzantine liturgical music, Arabic classical music, Turkish makam, and Romani folk traditions.
Overlap with Locrian	The ♭2 creates the same characteristic dark opening step as in Locrian, and this is the most emotionally significant point of overlap — both scales open with a semitone step that sounds compressed and slightly threatening. The ♭6 is also shared. In film scoring, both scales are used for dark exotic atmospheres; the double harmonic leans toward ancient/ceremonial menace, Locrian toward modern psychological terror.
Key divergence	The major tonic triad (due to the natural 3 and 5) makes the double harmonic far more harmonically stable than Locrian. The two augmented seconds create a modal character utterly unlike Locrian's uniformly descending minor/diminished structure — the double harmonic scale rises and falls with dramatic leaps, while Locrian moves in more uniform small steps.

Neapolitan Minor Scale	
Formula	1 ♭2 ♭3 4 5 ♭6 7
Tonic triad	Minor (1–♭3– 5)
Fifth quality	Perfect fifth
Cultural origin	Western classical; associated with the Neapolitan school of eighteenth-century opera and used by Baroque and Classical composers for dramatic effect; the ♭2 degree is the origin of the "Neapolitan chord" (a ♭II major chord) in common-practice harmony
Relation to Locrian	Shares the ♭2, ♭3, and ♭6 with Locrian. Has a natural 5 (not ♭5) and a natural 7 (leading tone, not ♭7). The natural 7 is the most unusual feature — it makes the scale contain both a minor tonic triad and a leading tone, combining characteristics of minor and harmonic minor.
Character	The Neapolitan minor scale has a strong leading-tone pull toward its tonic (from the natural 7) combined with the dark ♭2 opening step — creating a scale of considerable dramatic intensity that nonetheless cadences strongly. It was used in eighteenth-century opera precisely because it combined expressive darkness (♭2, ♭3, ♭6) with harmonic functionality (perfect fifth, leading tone). The Neapolitan chord (♭II major), which derives its name from this tradition, is the same chord that Locrian film composers use as their ♭II substitute tonic — a point of convergence between the two traditions.
Overlap with Locrian	The shared ♭2 produces the same dark initial step, and the shared ♭6 creates a similar brooding quality in the upper register. The ♭II chord (built on the ♭2) is harmonically identical in both contexts and carries similar emotional weight: an unexpected, slightly displaced consonance that creates unease rather than comfort.
Key divergence	The natural 5 and natural 7 (leading tone) make the Neapolitan minor substantially more functional than Locrian — it cadences strongly, supports a stable minor tonic triad, and creates clear dominant-tonic relationships. The Neapolitan minor is dark but directed; Locrian is dark and directionless.

4. Non-Western Analogues

The following scales come from traditions entirely independent of the Western diatonic system. Their resemblance to the Locrian mode is therefore particularly significant: it suggests that the interval patterns underlying Locrian — particularly the tritone above the tonic and the semitone opening step — respond to universal features of human pitch perception rather than being culturally specific inventions.

Iwato Scale (Japanese pentatonic)	
Formula	1 ♭2 (—) 4 ♭5 (—) ♭7
Tonic triad	No triad (pentatonic; missing ♭3)
Fifth quality	Diminished (tritone) — the ♭5 is present
Cultural origin	Traditional Japanese music; associated with ancient, solemn, and ritualistic contexts; related to the shakuhachi (bamboo flute) and koto repertoire
Relation to Locrian	The Iwato scale is a five-note subset of the Locrian mode, retaining the 1, ♭2, 4, ♭5, and ♭7 while omitting the ♭3 and ♭6. It is as if Locrian were filtered through a pentatonic lens that kept its most defining and most acoustically powerful degrees.
Character	The Iwato scale's selection of five degrees from Locrian is not arbitrary: the retained degrees include both of Locrian's most defining intervals (♭2 and ♭5) and the ♭7, while the omitted degrees (♭3 and ♭6) are the most chromatic elements that would make Locrian sound distinctly Western. The result is a scale that carries Locrian's fundamental tritone instability but frames it within a sparse, open texture that sounds ancient and non-Western. The Iwato scale is used in Japanese music for contexts of solemnity, mystery, and the supernatural — exactly the contexts in which Western composers would reach for Locrian.
Overlap with Locrian	The ♭2 and ♭5 — Locrian's two most essential degrees — are both present and form the backbone of the Iwato scale's character. Any Iwato melody can be heard as a Locrian melody with two degrees withheld. The tritone from tonic to ♭5 is identical and produces the same fundamental sense of harmonic instability in both contexts. The emotional associations — mystery, unease, the uncanny — align closely across traditions despite complete cultural independence.
Key divergence	The missing ♭3 means the Iwato scale cannot form a diminished tonic triad — or any triad at all — from its available pitches. The scale is heard melodically rather than harmonically. The absence of the ♭6 removes one of the more expressively flexible degrees of Locrian. And as a pentatonic scale, Iwato is culturally embedded in a system of melodic practice, ornamentation, and rhythmic convention that is entirely distinct from Western modal thinking.

In-Sen Scale (Japanese pentatonic)	
Formula	1 ♭2 (—) 5 (—) ♭7 (—)
Tonic triad	No triad (pentatonic)
Fifth quality	Perfect fifth (5 is present) — the ♭5 is absent
Cultural origin	Traditional Japanese music; related to the Iwato scale and used in similar solemn and atmospheric contexts

Relation to Locrian	Shares only the ♭2 and ♭7 with Locrian. Has a perfect fifth (not ♭5) and is missing three Locrian degrees (♭3, ♭5, ♭6). The In-sen is closer to Phrygian than to Locrian in its interval content, despite being a traditional Japanese scale.
Character	The In-sen scale carries a similar dark, compressed quality to the Iwato scale through its shared ♭2, but its perfect fifth gives it a more stable grounding. It is used in Japanese music for solemn and atmospheric material, often in ceremonial contexts. The sparse pentatonic texture gives it an open, resonant quality that both Locrian and Iwato lack.
Overlap with Locrian	The ♭2 is shared and produces the characteristic dark step at the tonic. Both In-sen and Locrian are used for solemn and unnerving musical contexts. The ♭7 is also shared.
Key divergence	The presence of a perfect 5th (not a ♭5) and the absence of the tritone distinguish In-sen fundamentally from the Locrian sound world. In-sen is melancholy and spare; Locrian is unstable and menacing. The In-sen's perfect fifth allows it to suggest a modal center in a way Locrian cannot.

Maqam Lami (Arabic music)	
Formula	1 ♭2 ♭3 4 ♭5 ♭6 ♭7
Tonic triad	Context-dependent (see discussion)
Fifth quality	Diminished (tritone) — in pitch content; functionally different (see discussion)
Cultural origin	Arabic maqam system; likely of Iraqi origin; belongs to the Kurd family of maqamat
Relation to Locrian	Maqam Lami is pitch-for-pitch identical to the Western Locrian scale — it contains exactly the same seven intervals in the same order. Despite this complete pitch identity, it functions differently because the Arabic maqam system operates on principles distinct from Western modal harmony.
Character	The identical pitch content of Maqam Lami and Western Locrian means that any Locrian melody can theoretically be heard as a Lami melody and vice versa. However, Maqam Lami is performed within a tradition that prescribes specific melodic shapes, characteristic phrases (jins), ornamentation styles, performance registers, and emotional associations quite distinct from anything in Western Locrian usage. In the maqam system, tonal stability is established through melodic convention and the ghammaz (secondary tonal center) rather than through the vertical consonance of triads — meaning the diminished fifth above the tonic, which makes Western Locrian harmonically impossible, creates no such problem in Lami.
Overlap with Locrian	Complete pitch identity: every note of Western Locrian appears in Maqam Lami and vice versa. A Western listener hearing Maqam Lami will experience many of the same interval qualities — the ♭2, the tritone, the compressed melodic movement — that characterize Western Locrian. The modal character of unease and instability (as perceived by Western

	listeners) is a real point of overlap, though Arabic listeners may experience different emotional associations.
Key divergence	Functional identity is entirely different. Arabic maqam music establishes tonal stability through melodic convention, characteristic phrases, and the ghammaz rather than through vertical triadic harmony. The ghammaz of Lami falls on the fourth degree (not the fifth as in Western modal music), allowing the mode to function without needing a perfect fifth above the tonic. The ornamentation, rhythmic framework (iqa'), and melodic grammar of Maqam Lami are entirely distinct from Western Locrian practice. The emotional associations, while overlapping in some areas, are culturally distinct.

5. Putting It Together: A Family Portrait

Viewed as a whole, the scales in this appendix form a loose family united by two shared characteristics: the semitone step from tonic to ♭2, and/or the tritone relationship between tonic and ♭5. The ♭2 produces the characteristic dark, compressed opening gesture; the ♭5 produces the fundamental tonal instability. Scales that share both features with Locrian — the Locrian variants, the Iwato scale, and Maqam Lami — live in Locrian's immediate harmonic neighborhood. Scales that share only the ♭2 — Phrygian, Phrygian dominant, double harmonic, Neapolitan minor, In-sen — share Locrian's emotional coloring but not its structural instability.

This family portrait suggests something important about the Locrian mode's place in world music: it is not an arbitrary Western construction but a point in intervallic space that multiple independent musical traditions have approached, each from a different cultural direction. The interval pattern of Locrian — particularly its opening semitone step and its tritone fifth — appears to respond to universal features of human pitch perception. The semitone step creates an immediate sense of constriction; the tritone creates a sense of irresolvable tension. Together, they produce the particular quality of unease that has made this mode, across its long and complicated history, the musical language of darkness, mystery, and the unresolvable.

> *The Locrian mode is not an outlier in world music — it is a convergence point. Its two defining intervals appear independently in Japanese pentatonic music, Arabic maqam, Byzantine liturgy, Romani folk scales, and modern jazz. That convergence suggests that Locrian's emotional power is not culturally learned but acoustically fundamental.*

APPENDIX C — BIBLIOGRAPHY AND FURTHER READING

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