

# STRING THEORY

Music theory tries to understand how sounds are produced, combined, and arranged to create something that listeners will recognize as music. All musicians develop a sense of “theory” – whether they call it that or not – as, over time, they figure out what sounds right to their ears, and what sounds wrong.

For some musicians, this practical understanding is plenty. But most musicians find that when they learn how to think and talk more consciously about theory – even a little bit – their practical skills improve too. They understand better what they’re doing on their instrument, how to translate what they know into other contexts (e.g., other songs & styles), how to range farther, and how to explore more deeply.

## What We Talk about When We Talk about Theory

Notice how weaselly I was in my first sentence above. I didn’t say that theory explains how to create music, but rather “something that listeners will recognize as music.” I did that because theory isn’t actually a set of universal rules for achieving musical correctness. Rather, it turns out to be a really complicated traffic snarl at the intersection of physics, culture, genre conventions, and local style.

### PHYSICS

How music works at the physical, neurological level of stimulus and response. This is the aspect of music theory that presumably is more or less universal (though even this is debatable).

- Vibrations – 440 Hz = A, sine waves produced by plucked strings, etc.
- The overtone series and tone intervals – 7ths, minor 3rds, diminished 5ths, etc.
- Tension and resolution

### CULTURE

How sounds are commonly combined and socially used at a regional, national, ethnic, or other broad group level (e.g., “Western” or “Arabic” or “Black Atlantic” music).

- Linear tone relations (i.e., scales/modes) – major, dorian minor, freygish, quarter-tones, etc.
- Vertical tone relations (i.e., chords) – Amaj<sup>7</sup>, Dm<sup>7</sup>, Cdim, Bm<sup>7b5</sup>, etc.
- Social role of music – sacred, festive, folk, taught, archival, professional, industrial

### GENRE

How music is arranged and performed according to specific conventions: sometimes a sub-type of a cultural style (i.e., Afro-Caribbean calypso, salsa, ska, or early hip-hop), sometimes crossing cultures (i.e., jazz, EDM, or Pacific Rim “pop”)

- Chord patterns – 12-bar blues, bop’s “Rhythm” changes, jug band “circle of 5ths” tunes, etc.
- Relationship of melody to harmony, bass, counterpoint etc. (e.g., classical serialism’s atonality)
- Music’s “jobs” – dances, concerts, DIY hootenannies, videogame or office background music, etc.

### STYLE

How generic and cultural conventions are expressed or mixed/matched at the local or individual level (e.g., Piedmont, Delta, or Chicago blues; Django or Jimmy or Bill Monroe style)

- Instrumental technique and innovations
- Song repertoire
- Historical forces – economics, immigration, media developments, etc.