

Polyphonic Dissonance

Jeremy Mates

October 6, 2019

This article outlines dissonances used in 16th century polyphony[Merritt(1939)].

Measures are divided into strong (0,2) and weak (1,3) beats. These beats are in turn subdivided into on- and off-beat phases. Some dissonances may only appear on strong or weak beats or only on the off-beat phase of a beat. Various dissonances must be prepared and resolved in specific ways, often but not always by stepping downwards.



In 16th century polyphony the half note was the basis for strong and weak beats (4/2 time); that instead has been changed here to the quarter note (4/4 time). It may be helpful to label the weak, strong, and off-beats in the examples below.

Consonant intervals include the unison, thirds, perfect fifth, sixths, and the octave. Restrictions are generally lifted for intervals greater than an octave. In two-voice music a perfect or augmented fourth is always a dissonance; with three or more voices they are consonant only if the interval does not appear between the lowest voice and any other. From a harmonic perspective, this permits only root and first inversion chords. The diminished triad is only used in first inversion.

The Dissonances

Passing Notes as eighth notes occur on an off-beat and step upwards or downwards.

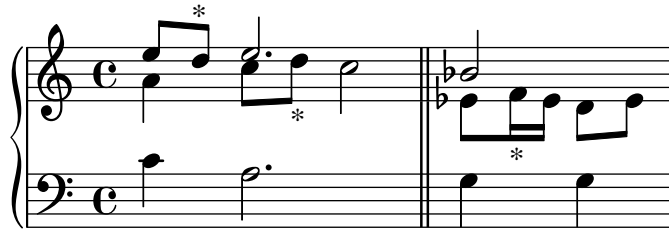
Here, the dissonant D (marked with *) form a 7th or 4th with the E or A below in the first measure.



Sometimes passing notes may be a quarter note; if so, they will only appear on a weak beat of the measure (1,3). Passing quarter note dissonances most often descend though only rarely may ascend in 16th century polyphony.

Passing dissonances may also be sixteenth notes in which case the voice will descend or ascend by a fourth instead of a third.

Auxiliary Notes step away from then back to a starting note. They always occur on an off-beat. Sixteenth notes may be used to elaborate the voice.



Changing Note Groups are a four-note unit that steps down to a dissonance, drops by a third, then steps up to what may be a consonant or dissonant note. The first and third notes are always consonant. The dissonant second note must always be an eighth note and must always appear on an off-beat. The first and third notes can be longer than eighth notes but are usually never more than a half note in duration. The fourth note will usually then step up to the next note that follows.



The first example shows a changing note group in the upper voice, and the second one in the lower voice with a more varied rhythm.

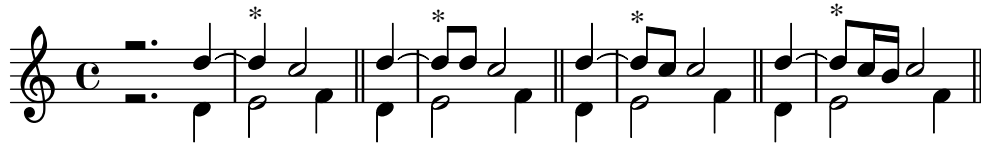
Cambiatas or changed notes occur when a consonant and dissonant note exchange positions with one another, placing the dissonance on what must only be the downbeat of a weaker beat (1,3) of the measure. The dissonant note must not be leaped to or away from, and will most often descend¹ to the following consonant.



Contrast this with a passing note dissonance where the consonance must occur on the downbeat of a beat.

¹The discussion on [Merritt(1939)] p.74 is unclear to me due to one phrase mandating downward motion through the dissonance and another allowing for step motion with the qualification "and in the Golden Age almost always descends" indicating that there is rare upward motion of some form.

Suspensions occur on the strong beats (0,2) of the measure and must be prepared on the (3,1) beat prior and resolved on the (1,3) beat that follows; the following shows a 3-0-1 pattern. The resolution may be elaborated with a number of different forms as shown.



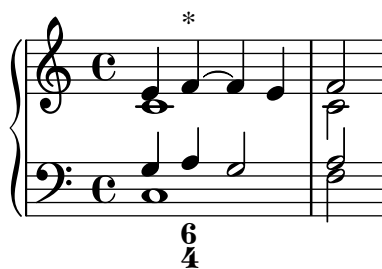
It may be important not to spoil the resolution by using that note (C, in the above examples) in some other voice prior to resolution, though this requirement is less urgent if the dissonant interval is a 9th or greater. The effectiveness of a suspension will depend on the number of voices involved and whether the suspension is above or below the other voices, as well as on the instrumentation used.

Followers of harmony may note that suspensions look a lot like a seventh or a ninth chord (C-E-(G-B)-D) especially should the suspended note be repeated instead of being tied over from the previous beat. But such chords are here a by-product of the rules of counterpoint.

Anticipations or *portamento* are eighth note anticipations of the subsequent consonant interval, and may or may not be dissonant. In 16th century polyphony usually only the downwards anticipation is used. The anticipation must occur on an off-beat.



Consonant Fourths are an exception to the rule that the interval of a fourth with the lowest voice is a dissonance; instead, the interval is used typically in cadences and particularly for the ultimate cadence.



The F is dissonant with the bass C though here prepares for the G-F dissonance on the subsequent strong beat. There is no special preparation of the C-F interval as would usually be required, so the fourth is handled as if it were a consonant. A six-four chord is usually created by this form, one of the few if only places such will appear in polyphonic music from this period.

Combinations

Dissonances can be combined vertically or played out horizontally as permitted by the rules of counterpoint and the forms specified above[Mates(2019)].

References

[Mates(2019)] Jeremy Mates. Chorale 21.

<https://github.com/thrig/compositions/blob/master/chorale21.pdf>, 2019.

[Merritt(1939)] Arthur Tillman Merritt. *Sixteenth-Century Polyphony: A Basis for the Study of Counterpoint*. Harvard University Press, 1939.