The Fermata, the Trill, and Life and Death

The trill in Schubert’s B-flat piano sonata, whose effect was described so well by András Schiff in an article by Alex Ross in the New Yorker (November 2, 2015), taps into a network of musical symbols. One of the marks of a great composer is a deep intuition as to what meaning can be conveyed by notes deployed in a certain way, a sense similar to one great poets must have to make us feel connections between words.

We tend to think of music as a constant flow, perhaps because our brains create music from a perception of rapid periodic changes in atmospheric pressure. And this happens not just at the level of milliseconds: a succession of shifts in the rate of changes in pressure—what we experience as “melody”—is really just a series of individual pitches sounded one after another. The creation of such a “gestalt,” so characteristic of consciousness, must provide the basis for the metaphorical connections we draw between music and physical activity, and narrative, and ultimately, life itself. Even actual silence between notes doesn’t necessarily disrupt our sense of motion from one to the next. And if a note in another register—an octave or so higher or lower—sounds between the two notes, we can very quickly have the illusion of one instrument or voice performing two melodies simultaneously, an illusion that Bach and Bobby McFerrin (and almost all other creative musicians in the last few hundred years) have relied on.

But of course music’s flow not only slows down and speeds up but stops and starts for a number of reasons, both expressive and structural. It can at times even stop where it is expected to continue, and a special sign, the fermata, is used to alert the musicians to hold a note or a rest, and be ready to begin again when given the signal. The name of the sign means a stop (as in a bus stop), but the origin of the graphic symbol is lost in medieval mists. Still, it is pretty obviously an eye, signifying something like “hold this note and watch for a cue.” Yet music historians stodgily refuse to see what is front of their faces because there is no documentation that attests to what the scribes who first used the sign intended. I believe Nicholson Baker’s book The Fermata (which I should read) plays on the symbol’s, um, optical significance.

The fermata has links to some of the deeper aspects of tonal music. If you think of that last chord of “A Day in the Life,” even the convention of a sustained final chord suggests secrets known to the adepts of the musical mysteries—and to everyone, though probably not consciously. What I mean is, even when musical time stops, music exists in the time of
consciousness (and of the physical universe, of course). An apparently static musical event is different from a physical object that subsists in time. While both are essentially complexes of vibrations, we can perceive that discrete physical events accelerated become a “pitch,” but we can’t perceive the vibrations that constitute physical matter. Another difference between music and a chair, connected to the first, is that we hear a number of octaves of pitch. This means that integral to the experience is a relationship among overtones (whole-number multiples of frequencies) and between, say, the C in one octave and C’s in the octaves above and below it. But we see just under one octave of light and only one “color” of matter.

When a fermata is used not simply to indicate holding the last chord but within a piece, it creates an opening in time. Probably the most common way this occurs is for the music to come to a halt on a chord that requires resolution, often a tonic 6/4 chord. The numbers 6 and 4 represent the intervals above the bass note in the chord (modulo the octave); the 4th, in particular, needs to resolve, by the motion of the upper voice down a step, to make the interval a 3rd. Because the note that makes the 4th with the bass is dissonant, it has to be “prepared” by being introduced in a context where it is consonant and doesn’t need to resolve. It becomes dissonant when it is carried over to a different context created by a new note in the bass. The term suspension has the literal meaning of a note held over into a new context, but it has the psychological effect of “suspending” time, as well: nothing can happen until this unfinished business is resolved. In the space created by stopping on a chord that needs to be resolved, a soloist—a singer, the pianist in a piano concerto, or what have you—is let loose to improvise. This is as ritualized in classical music as improvisation in jazz is, because it is put under a spotlight, so to speak, by the fermata on the 6/4 chord.

When the improvisation is finished, the soloist signals to the rest of the players with a trill, the rapid alternation of the note that makes the 6th of the 6/4 chord with the note that it will resolve to (or frequently a double trill of both the 6th and the 4th to their respective notes of resolution). While it is a signal that time is about to resume after being suspended, this does not happen until the trill ends, and as a result, the trill itself has become more than a signal; in Britten’s operaBilly Budd, for example, a trill is used as a musical symbol of Billy’s spells of stammering; movie music is full of trills to convey/create suspense (please note), so much so that it has become a cliché.
Notice that the trill conveys an opening in time on two levels: The first is the level of immediate perception, where its rapid alternation of pitches subverts our ability to measure time. The trill works as a signal precisely because though the alternation is regular, it is on the one hand too quick to count and on the other too undifferentiated to subdivide (and thus, count). The second level is the “measure,” where we usually perceive the regularity with which one harmony succeeds another, underlined by repeated rhythmic patterns. Thus the 6/4 chord often returns at the end of the improvised section as if to take up the unfinished business of resolution, and the trill either begins with the 6/4 chord or marks its resolution to the dominant chord that in turn leads to the tonic and the resumption of musical time.

The soloist’s improvisation is called a *cadenza* because, while there are many cadences, acting like punctuation, throughout a piece of music, the cadence that defines the *structural* return to the tonic is where the improvisation usually happens. (By “structural,” I mean that while it is seldom the last cadence, it is the one that signals that the completion of the large-scale form-defining aspect of moving from and returning to the tonic. Anything after that cadence seems to be what musicians call a *coda*, literally, a tail.) Think of a piece of music as being like a journey on a train. Although there are many stops along the way where the train slows and even halts, on this trip everyone happens to have gotten on at the same station and plans to get off at the same station down the line—in fact, you might say that everyone is going to the same event in the distant town. So the trill that ends the cadenza also conveys something about the level of time represented by the whole “piece.” It is the point at which we feel we have arrived in the town we’re going to, not because the train has stopped at the platform but because the train is slowing down in the rail yard—switching tracks and so on—as it approaches its final berth. (As an aside, notice that we refer to a *piece* of music: a separate thing that is, however, implicitly part of something larger.)

Instead of our arrival at our destination on a train, however, a sexual metaphor probably better reflects the experience of many pieces of music—one could say that the 6/4 chord and trill metaphorically signal that one is about to arrive at the “point of no return.” A 6/4 chord (without a trill—though the melody does involve repeated motions from a note to the next higher note and back) is a salient feature in one of the most explicit depictions of sexual climax in music history, in the concluding movement of the Schumann *Fantasie* in C major (in the Breitkopf edition, last
system of p. 26 through the second system on p. 27). By contrast, the *Liebestod* from *Tristan* seems more like “edging,” and the slo-mo climax downright artsy/pornographic.

The *Fantasie* was written in 1836, in anticipation of Robert Schumann’s eventual union with his beloved, Clara Wieck—who was underage and therefore not free to marry without her father’s permission—thus the romantic title of what was basically a piano sonata, if an idiosyncratic one. The first movement was acknowledged by the composer to depict his feelings during his enforced separation from Clara and *avoids* definitive resolution on the tonic chord as much as is possible in a tonal work. It thereby focuses the listener’s attention on the sense of arrival that can otherwise seem to be a mere convention of tonal music. The second movement is a triumphal (wedding?) march. The third and final—okay, *climactic*—movement has been described as a *nocturne*. A night piece, indeed!

Despite its program, the *Fantasie* was dedicated to Franz Liszt for a number of reasons, including his role in spearheading the building of a monument to Beethoven, of which Schumann was an enthusiastic supporter. It might also have been that Liszt was the only pianist of the time who could play the second movement. But while Liszt played the piece privately for Schumann, he never played it in public. Perhaps he felt it was too intimate a statement to be quite decent. And while Clara Schumann did perform it publicly—though not until a decade after Robert’s death—she delayed its publication till the last volume of her edition of his piano works, in which the order of pieces is otherwise mostly chronological.

It may come as a surprise, though it really should not, that Irving Berlin makes use of some similar patterns in his songs. There was an article in the *Wall Street Journal* several years ago headlined “The Best-Selling Record of All (“White Christmas”).” I love articles like this, though this one skirts the usual implication that “best-selling” and “best” are the same thing (Berlin apparently believed that at times)—maybe that’s such a self-evident truth to the *Journal*’s readers that the point doesn’t have to be belabored. But it’s especially the cluelessness of the interviewed experts that I enjoy, including their proclivity for getting some significant detail wrong in making a point. Contrary to what the article states, the word “glisten” is not on a minor chord, for example; what makes the melody so effective is that “glisten” and “listen” are both set with dissonant tones on the “-en”—approached by small leaps from below, they have to fall back, reenacting the unfulfilled yearning that is the mood of the song. The internal rhyme “-ist” returns at the end with the last “Christ(mases)”—and with the same tone as “glisten,” again a
dissonance—and this time it’s left completely hanging. (That phoneme in the word “Christmas” occurs four times and is set every time to a tone that’s dissonant in some sense.)

But more to the point about Berlin’s use of the kind of melodic patterns I’ve been discussing: The initial melody circles chromatically around the third note of the scale, creating a trill-like stasis. This represents the “dreaming” of the lyrics, which is of course really daydreaming. (Lest you think that this interpretation of the melody reads too much into it, I point out that Berlin used a very similar chromatic circling motion in the later song “It Only Happens When I Dance with You,” from the movie Easter Parade. The “it” that happens is “that trip to heaven till the dance is through,” in other words, a trancelike state similar to the daydreaming in “White Christmas.”) After the initial circling fantasy of “I’m dreaming of a,” “white” is melodically a similar dissonance to the later “glisten/listen”—that is, it ought to resolve downward—but it forces its way up to “Christmas.” (The harmonization masks the dissonance of the tone setting “white,” but note that it has already fallen back to the tone below it once, on “dreaming,” and it does so again at the end of the first phrase, on the word “sleigh-bells.”) It feels as if the initial circling gives the upward motion the impetus it needs. The sudden release of upward motion (no longer chromatic but diatonic) in “just like the ones” is practically orgasmic in the context. Most will find it far-fetched perhaps to say that it represents someone masturbating while thinking of a distant lover—the composer no doubt would have been scandalized!—but on a gut level there is an undeniable sense of a release that is yet unfulfilled. Notice that the highpoint of the melody is not in the tonic chord (the highpoint of many melodies, probably a majority of them, is in the tonic chord)—this subtly prepares that drop from another nontonic tone at the end. Even if “White Christmas” was written some time before World War II started, it perfectly captured the situation so many people found themselves in within a year. Berlin’s genius was, first, realizing the commercial potential of a sad Christmas song, and then, being able to embody (quite literally) the emotion in tones.

The 6/4 chord, like the trill, evolved in the later years of tonality, the late 19th century, in the hands of composers like Giuseppe Verdi, into a symbol. You’ll recall, it was originally usually a tonic chord—that is, the chord on which all musical motion comes to rest in the end—but it was a tonic chord that needed to be resolved, a paradox.

Otello, in the last act of Verdi’s opera, “dies upon a kiss,” singing “un altro bacio [another kiss]”—or actually “un altro ba—,” because though the last syllable is indicated in the singer’s
part, there is no note given for him to sing. The note B, the dominant, is sustained through most of the bacio theme, beginning in the bass with a 6/4 chord. The melody might be thought to resemble a series of slowed down trills, each of which “lands” in succession on a higher note. At the end of the first act, after an ecstatic key change, the theme had in fact led into a coda with a long high trill in the strings and piccolo, representing the symbolic appearance of Venus in the sky!

The first chord that harmonizes Otello’s last line is another 6/4 chord, but one made more unstable than usual by its harmonic context. It is not a tonic chord, and though the music is in E major, two of the pitches of the chord come from the E minor scale. And it feels as if the “bottom is dropping out” because the bass note of the chord is approached by a dissonant downward leap. On top of that, the chord doesn’t resolve in the expected way. Or it might be more accurate to say that because of its singularity—there may be no other example of precisely this progression in the literature—the listener has no way of knowing what to expect. So its resolution is actually both generally what’s expected (a flat VI chord moving to a V chord) and breathtakingly unexpected (the clash between G natural in the bass and G-sharp in the voice—which is also an unprepared suspension, the preparation not simply omitted but undone by the G natural). We are made to experience with Otello that inevitability for which it is never quite possible to be prepared: in other words, this 6/4 chord calls up the psychological effect of the fermata in a new context where it becomes a musical metaphor for the moment of death.