

Intonation for Baroque Violin Players

One of the greatest challenges for Baroque string players is understanding that intonation is not simply about playing "in tune." Intonation is a flexible expressive tool shaped by harmony, temperament, rhetoric, and affect. Unlike modern equal temperament, Baroque musicians lived in a world where not all semitones and not all keys were equal.

1. Temperament and Why It Matters

When we play with a harpsichord or organ, we are not playing with an equal-tempered instrument. Most eighteenth-century keyboard instruments were tuned in some form of unequal temperament.

Common temperaments include:

- ❖ Quarter-comma Meantone (often used in early 17th C repertoire)
- ❖ 6th Comma Meantone (often used by lute and guitar players)
- ❖ Valotti (often used in 18th C rep, when there are many key changes)
- ❖ "Charlotti" (Charlotte's version of Valotti, used for Tafelmusik in 18th C rep)
- ❖ Neidhardt City (often used in Tafel for big 18th choral works like Bach Passions)
- ❖ Werkmeister
- ❖ Kirnberger

In these systems:

- ❖ Some keys sound sweeter.
- ❖ Some intervals are more consonant.
- ❖ Certain notes are naturally higher or lower than others.

This means that a violinist cannot think of F# as always being the same pitch. Its placement depends on its harmonic function and the temperament of the continuo instrument.

A useful principle: Tune to the harmony, not to an abstract scale.

2. There are 2 methods of tuning a tempered keyboard:

1. Tune every note to the temperament of the keyboard.
2. Tune chords to the temperament and identify which notes have to be exactly with the temperament (non negotiable notes) and which notes have some room for expressive intonation (negotiable notes).

a) Non-Negotiable Notes

Some notes have a strong tendency toward a fixed placement because they define the harmony.

Roots

The root of the chord is generally stable.

In a D major chord:

D–F#–A

The D is a reference point. That D needs to be in tune to your open string and Harpsichord temperament.

Fifths

Perfect fifths are usually stable.

They are among the purest intervals and form the foundation of tuning systems.

Think of roots, fifths, as the "pillars" of your intonation.

*You also want to tune the fifths to your keyboard (fifths can be narrow and still sound good).

b) Negotiable Notes

The most flexible notes are those that define the colour of the harmony.

Major Thirds

Major thirds are typically lower than in equal temperament.

Example:

D–F#

The F# is lowered until the interval resonates and locks with the D.

A pure major third is about 14 cents lower than the equal-tempered version. You can find a pure F# in ¼ comma meantone on your tuner .

Minor Thirds

Minor thirds are generally higher.

Example:

A–C (The C is raised slightly.)

Sevenths

Sevenths are highly expressive and often adjusted according to context.

3. Harmonic Function Determines Pitch

The same written note can have different intonational placements.

Consider F#:

As the third of D major

D–F#–A

The F# is lowered.

As the fifth of B Major

B–D#–F#

The F# is more perfect so Higher

This can feel contradictory at first.

The note is not defined by its name but by its function.

This principle appears in writings by Johann Joachim Quantz and is reflected throughout eighteenth-century performance practice.

4. The Rule of Thirds

Many historically informed temperaments organize tuning around thirds.

Major Thirds = Low

These create purity and resonance.

Minor Thirds = High

These maintain proper proportion and clarity.

Why? Because If you tune all thirds according to equal temperament, chords often lose resonance.

A useful rehearsal exercise:

Play a sustained bass note and a fifth and experiment with moving the third until the sound suddenly becomes richer and stable.

That point is usually much closer to just intonation than equal temperament.

5. Whole Tones Are Not Equal

In many historical temperaments there are two sizes of whole tone.

For example:

- Large whole tone
- Small whole tone

Likewise, semitones are not all the same.

Examples:

- G $\sharp$ is generally lower than A $\flat$
- D $\sharp$ is generally lower than E $\flat$

Although violinists can technically play enharmonic notes identically, Baroque musicians often differentiated them according to harmonic context.

This is one reason why keys possessed distinctive characters.

6. Expressive Intonation

Intonation also serves rhetoric.

Dissonances

Can be intensified by making intervals more extreme (crunchy).

Suspensions or Upper note pedals

Notes may need to change slightly depending on their function in a chord.

Laments

Minor seconds can be narrowed to increase tension.

Joyful Music

Thirds may become higher and more energetic and directed. For example try using a $\frac{1}{6}$ comma F $\sharp$ instead of a $\frac{1}{4}$ comma F $\sharp$ for extra joyful D major!

Intonation helps communicate affect, not merely correctness!

7. Practical Hierarchy for Baroque Players

When deciding where to place a note, ask:

1. What temperament is the keyboard using?
2. What is the root of the chord?

3. What is my function? Am I a root, third, fifth, seventh, or non chord tone?
4. Am I creating consonance or dissonance? Is my note negotiable or non negotiable?
5. What affect am I trying to communicate?

A Simple Summary

Non-Negotiable (more stable)	Negotiable (more flexible)
Roots	Major thirds
Fifths	Minor thirds
Open strings (depending on harmony)	Non chord tones
Structural bass notes	Sevenths
Cadential arrival notes	Suspensions and dissonances

"The root and fifth tell us where we are. The third tells us how it feels." by CPC

8. Tuning our open strings to a tempered fixed pitch instrument:

There are many ways of tuning our open strings. JW likes to tune her open strings to chords that she will play the most regularly.

Example:

If your piece is in D major, the D and A are going to be tuned to the D Major chord.

The G can be tuned to a G major chord (IV of D+)

The E string can be tuned to an A Major Chord (V of D+)

Tune your open strings to non-negotiable notes that are the Roots and Fifths of the key you are in or and closest tonality to your open strings.

Example:

F Major - try tuning A and D to D minor chord because of the relationship with F natural and A. You can also check the A with an F major chord.

Tune G to G minor to find the relationship with B-flat, or to G major (V of V), tune E with A minor chord, or check in with C major.

A Weekly Intonation Routine (15 minutes)

1. Pure thirds with drone $\frac{1}{4}$ comma for sharps and $\frac{1}{6}$ comma for flats – 2 minutes
2. Arpeggios with a root and a fifth drone – 6 minutes
3. Double stops in the key you are working on – 2 minutes
4. Harmonic analysis of repertoire – 5 minutes

The most important principle is: **Do not ask, "Is this note in tune?" Ask, "What is this note doing in the harmony?"**

"The third, despite its imperfection, becomes the sole object of our desire after a dissonance."

— Rameau, *Treatise on Harmony*

"Harmony is the source of everything; melody proceeds only from it."

— Jean-Philippe Rameau, *Traité de l'harmonie* (1722)