


How does Bach fit into this?

With the regular $1/6$ comma system around him as a background, what notes did he use in his music?

How did he tune for his music?
How can **we** tune for his music,
if we can know?

**Title page of
Das wohltemperirte Clavier,
1722**

Bach was 37 at the
time, and applying
to follow Johann
Kuhnau in a
teaching position
at Leipzig



Das Wohltemperirte Clavier.

Præludia, 2^{te}

Fugen über alle Töne mit Semitoria,
Do soll tertiam majorem als Ut Re Mi anlan;

gut, als auf tertiam minorem ut Re
Mi Fa betrachtet. Zum
Nützen im Gebrauch ihrer Lehrbegierigen
Musicalischen Jugend, als auch stören in stincken etc.,
die schon habit gemacht besondern
Zweckes und aufgeführt
mit vorfolget von

Johann Sebastian Bach.

sch. Kunst. Kunst.

Lehrer in Leipzig,

Musik und Orgel.

rectore Ann.

Lehrer in

Leipzig.

anno

1722.



What kind of practical tuning challenges does the *Well-Tempered Clavier* (the book) present?

- Bach provided exemplary preludes and fugues in **all** 24 major and minor scales.
- The book as a whole calls for **27 differently-named notes!**
- Most of the preludes and fugues use 13, 14, or more notes...not only a convenient 12.
- Therefore, tasteful compromises **MUST** be made: for example, in C major, choosing a pitch for the G# and Ab keyboard lever that can serve passably as either one, in all its harmonic and melodic contexts.

A roster of all the named notes in the *Well-Tempered Clavier* :

Book 1, C major: 13 notes: Ab, Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#

Book 1, C minor: 12 notes: Db, Ab, Eb, Bb, F, C, G, D, A, E, B, F#

Book 1, C# major: 15 notes: A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx, Cx, Gx, Dx, Ax

Book 1, C# minor: 14 notes: G, D, A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx, Cx

Book 1, D major: 14 notes: Bb, F, C, G, D, A, E, B, F#, C#, G#, D#, A#, E#

Book 1, D minor: 13 notes: Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#, D#

Book 1, Eb major: 14 notes: Cb, Gb, Db, Ab, Eb, Bb, F, C, G, D, A, E, B, F#

Book 1, Eb minor/D# minor: 25 notes: Bbb, Fb, Cb, Gb, Db, Ab, Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx, Cx, Gx

Book 1, E major: 13 notes: C, G, D, A, E, B, F#, C#, G#, D#, A#, E#, B#

Book 1, E minor: 15 notes: Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#, D#, A#, E#

Book 1, F major: 12 notes: Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#

Book 1, F minor: 14 notes: Cb, Gb, Db, Ab, Eb, Bb, F, C, G, D, A, E, B, F#

A roster of all the named notes in the *Well-Tempered Clavier* :

Book 1, F# major: 14 notes: D, A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx, Cx, Gx

Book 1, F# minor: 14 notes: G, D, A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx

Book 1, G major: 14 notes: Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#, D#, A#

Book 1, G minor: 12 notes: Ab, Eb, Bb, F, C, G, D, A, E, B, F#, C#

Book 1, Ab major: 12 notes: Gb, Db, Ab, Eb, Bb, F, C, G, D, A, E, B

Book 1, G# minor: 14 notes: D, A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx, Cx, Gx

Book 1, A major: 12 notes: G, D, A, E, B, F#, C#, G#, D#, A#, E#, B#

Book 1, A minor: 14 notes: Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#, D#, A#

Book 1, Bb major: 14 notes: Gb, Db, Ab, Eb, Bb, F, C, G, D, A, E, B, F#, C#

Book 1, Bb minor: 13 notes: Fb, Cb, Gb, Db, Ab, Eb, Bb, F, C, G, D, A, E

Book 1, B major: 12 notes: D, A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx

Book 1, B minor: 17 notes: Eb, Bb, F, C, G, D, A, E, B, F#, C#, G#, D#, A#, E#, B#, Fx
(including 13 different notes already in the statement of the fugue subject!)