

Notation Forum

Edited by
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A continuing series of new musical notation systems and ideas.
(To send proposals, see details at end of newsletter.)

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Keyboard Trigram Notation

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Historical and current music notation proposals mostly belong to one of two groups: 7-5 and 6-6. 6-6 notations, based on the two whole-tone scales (viz., *C D E F# G# A#* and *C# D# F G A B*), have the advantage that interval size is clearly represented (by the number of whole- and half-steps) and modulation is easy (at least through whole numbers of tones). 7-5 notations, on the other hand, are based on the distinction between the "original" diatonic scale (*C D E F G A B*) and "afterthoughts" (here called *V W X Y Z* after [Yasser, 1932] and [Stuckey & Parncutt, 1987]). Conventional notation (7-0) is more compact but also more complicated than both of these. An example of a compact notation based on the whole-tone scale is *Twinline* (6-0).

Which is best: 7-5 or 6-6? This is no easy question, and may keep the MNMA busy for many years to come. Here, I tackle the issue by comparing two notations which are almost identical; the main difference being that one is 7-5 and the other is 6-6.

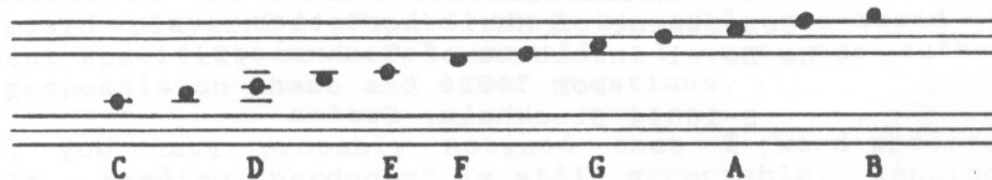
As a basis for these notations I have chosen a "trigram" (i.e., a three-line staff) corresponding to the group of three black keys on the piano (named *X Y Z*). A survey of the history of proposed music notation reforms (e.g., [Read, 1987]) suggests that these three notes are historically the most commonly chosen notes for staff lines. For example, they are included in both Thomas Reed's *Ling Lun* (*X Y Z D*) and Albert Brennink's *Chromatic Notation* (*X Y Z C*). In other words, the choice of *X Y Z* for the staff lines is not arbitrary.

In "7-5 trigram", leger lines notate the groups of two black keys on the piano (V W). So black keys are always notated on lines, white keys in spaces. The chromatic scale becomes:



This may be regarded as a kind of keyboard tablature (cf. Klavar). Its specific purpose might initially be to make piano music readable for those who have given up trying to read conventional piano music and would not otherwise go back to it.

In "6-6 trigram", staff and leger lines together describe a whole-tone scale on C. So the chromatic scale looks like this:



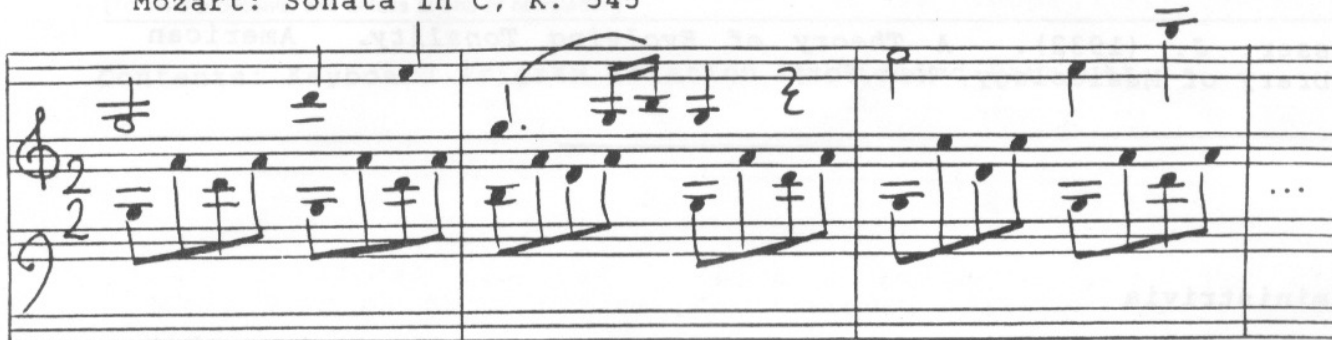
Notice that leger lines in 7-5 trigram always appear in pairs (V W), while those in 6-6 trigram only come in ones (C or E) or threes (C D E). This allows the two systems to be distinguished even if the spacing of leger lines is not exact (as in handwritten scores). In printed scores, spacing between noteheads would in all cases be exactly proportional to interval size in semitones, so the only difference between the two notations would be the placing of the leger lines relative to the noteheads.

Trigram notation is less compact than conventional notation, as it allows for twelve vertical positions in the octave instead of the conventional seven. But, unlike most other notations with twelve vertical positions in the octave, trigram still has plenty of space between staves, which is useful for additional instructions and improves general clarity. Admittedly, this space is gained at the expense of the leger lines, which can be tedious when writing music in trigram. They do not cause reading problems, however. In this respect trigram is better suited for performers than for composers.

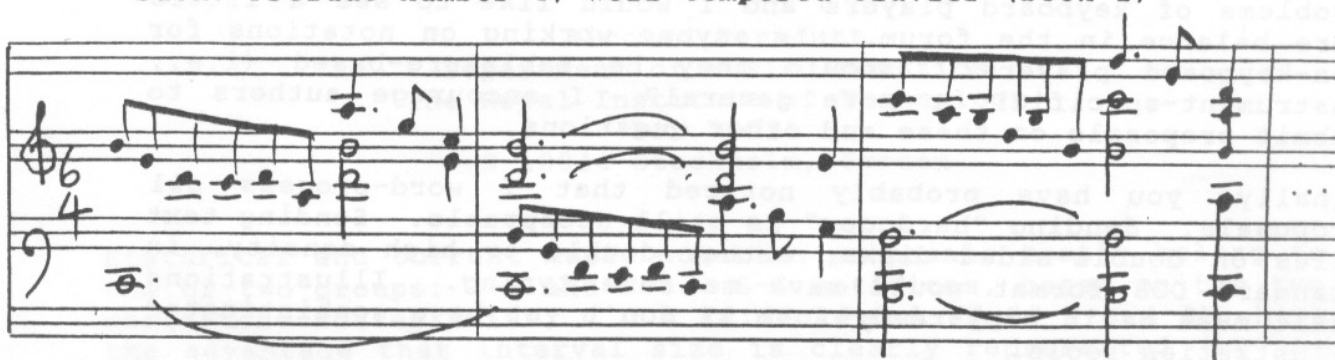
At first glance, 7-5 trigram would appear to be confined to the conventional piano keyboard. But if this were really the case, then 6-6 trigram would be confined to the 6-6 keyboard! It seems that no notation is really neutral with regard to instrument. But 7-5 notations are more compatible with conventional instruments, and with conventional notation, than 6-6.

Some short samples of 7-5 trigram follow:

Mozart: Sonata in C, K. 545



Bach: Prelude number 4, Well-tempered Clavier (book 1)



I have prepared a booklet of popular easy piano classics in 7-5 trigram notation. Please write to me at the address given at the beginning of this article if you would like a copy. The contents of the booklet are listed below:

J.S. Bach: Minuets in G & g, BWV Anh. 114 & 115; Prelude 1 in C, *Wohltemperiertes Klavier* I.

Mozart: Sonata in C, K. 545, first movement.

Beethoven: *Für Elise*; Sonata in c#, Op. 27 No. 2 (*Mondschein*), first movement.

Chopin: Preludes in e, c & A, Op. 28 Nos. 4, 20 & 7.

Schumann: *Album für die Jugend* Op. 68 Nos. 3 & 10; *Kinderszenen* Op. 15 Nos. 1 & 7.

Debussy: Preludes I, No. 8 (*La fille aux cheveux de lin*).

References

Read, G. (1987). *A History of Proposed Music Notation Reforms*. Greenwood Press, New York.

Stuckey, R. and Parncutt, R. (1987). Let's call the black notes V through Z. *Music Notation News*, 1 (5).

Yasser, J. (1932). *A Theory of Evolving Tonality*. American Library of Musicology, New York.

Administrivia

I would like to take this opportunity to solicit submissions that relate to instruments other than the keyboard. So far, nearly all of the proposals I've received are concerned with the problems of keyboard players and I would like to see a little more balance in the forum. Is anyone working on notations for non-keyboard players? Should they be tablature-based (i.e., instrument-specific) or more general? I encourage authors to submit proposals on these and other questions.

Finally, you have probably noticed that I word-process all proposals. Sending "hardcopy" is still acceptable. Sending text files on double-sided disks, either double or high density, in standard DOS format would save me some typing. Illustrations still must be in copy-ready form; I don't yet have sophisticated illustration tools.

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To send proposals, write:

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