Letter to the editors of DSA and DSGB concerning music

Well-Tempered Music is probably next to the clock the most common practical application of the duodecimal principle in current use. We describe our proposals for the recording of well-tempered music with "Hamburg Music Notation" and inform you that there is a commercial software available from arpege music for all notations that are based on twelve digits that can represent Numbered Notation (Jianpu) and Standard Notation simultaneously.

First, we comment on the article on the homepage of DSGB Dozenal Society of Great Britain, Music á la Dozen, author: Tom Pendlebury, chapter applications, title: Music, Scales, and secondly on the article, author: Dr. John Impagliazzo available as pdf by the DSA Dozenal Society of America, chapter articles and books.

Tom Pendlebury describes in his article the advantages of the dozenal approach regarding the clarity - every note has only one name and a number that describes him.
Transposition to higher or lower tones is carried out by simple addition or subtraction.
The structure of scales takes place according to mathematically defined distances without the aid of auxiliary structures such as the circle of fifths. Identical principles apply to the construction of chords. His article contains a table with the names for the intervals of sounds. For interval, he uses the term span. He chose the duodecimal numbers that were recommended by Pitman for the 12 note chromatic scale. It starts with 0 = C of the standard notation.
Middle C is designated duodecimal 60, C 'gets the number duodecimal 70.
The article of John Impagliazzo illustrates that the frequency ratios depend on the intonation used. Only for „Just Intonation“ arise integers, but you obtain disharmony if you change the key. According to Pythagoras or well-tempered intonation, the frequency ratios are generally not integer. However, within the well-tempered music we work with sufficiently good approximations to small whole numbers. With the dozenal system, octaves and intervals look the same and can be simply calculated. It always applies that c-sharp = d-flat etc. Therefore, the system of well-tempered music is so easy.
Hamburg Music Notation (HMN) is particularly simple, since all 12 notes have their own symbol there will be no confusion with the next/previous semitone. However HMN is based on numbers starting with C=1. To start with C=1 and use A=A for the tenth note, makes it easier to compare our Notation with Standard notation and Numbered notation (Jianpu). We recommend: 1, 2, 3, 4, 5, 6, 7, 8, 9, A (for10), B (for 11), ʘ (for 12 decimal or 10 dozenal). There is a calculater available for this dozenal nomenclature.

1	2	3	4	5	6	7	8	9	A	B	ʘ
C	c-sharp	D	d-sharp	E	F	F-sharp	G	g-sharp	A	a-sharp	B
	d-flat		e-flat			g-flat		a-flat		b-flat	

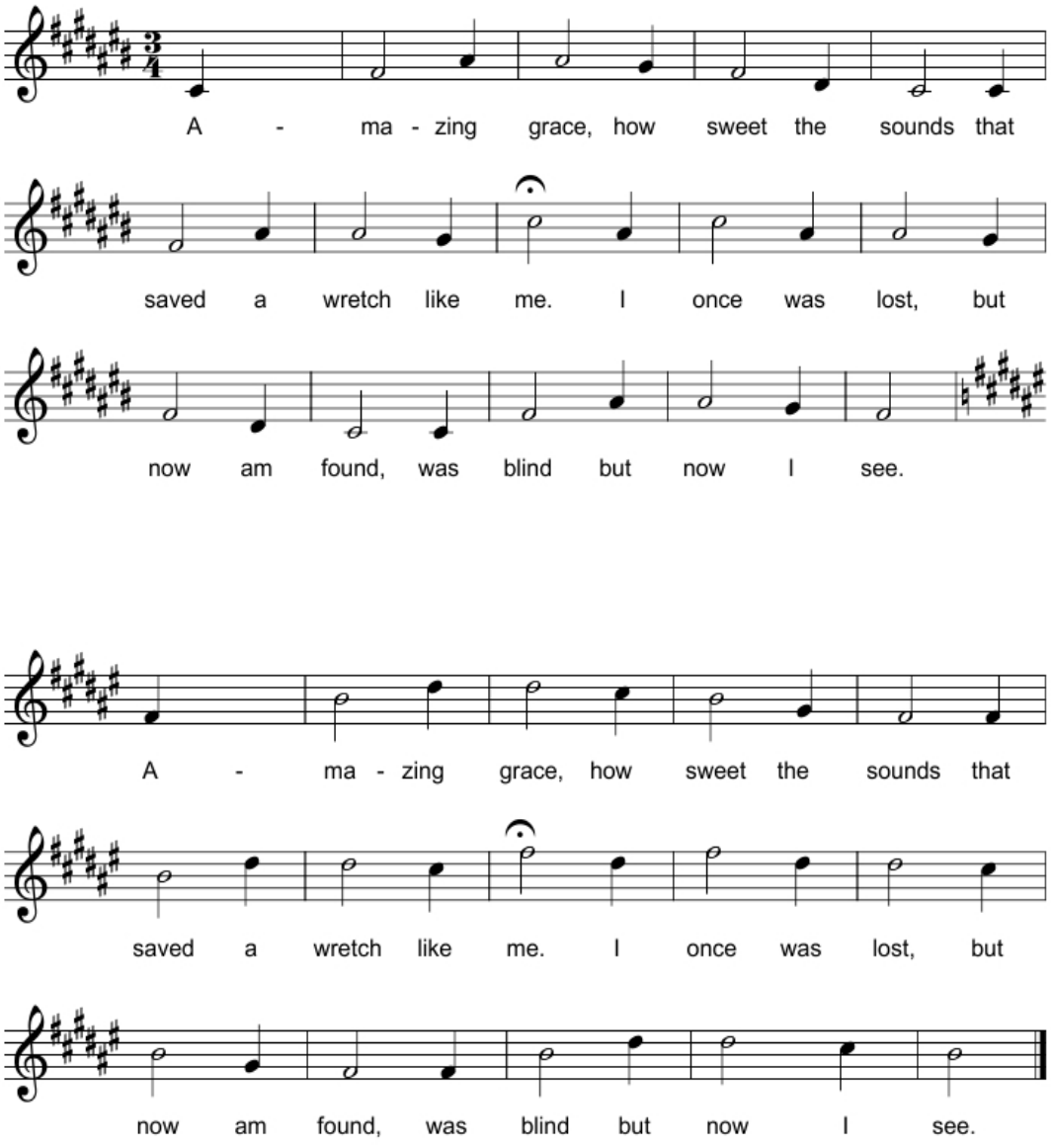
We use these numbers for the 12 notes of the chromatic octave. We chose the following dozenal numbers as names for the octaves beginning with Sub contra C = 1, Contra C = 11, great C = 21, small c = 31 small c' one-line octave = 41, c" 2-line octave = 51 *, c'" 3-line octave = 61, c"" 4-line octave 71, c"" 5 -line octave 81. This reflects the structure of the standard grand piano.

We modelled our dozenal music notation calling it Hamburg Music Notation, to avoid a person's name, to the widely used Chinese Numbered Notation (Jianpu) and used some elements of Standard Music Notation as they are used in Numbered Notation. There is one major difference however: We use the crotchet character for a quarter rest and not 0 as does Numbered Notation. Zero with a dot inside is reserved for the twelfth note in our system.
In the meantime, we established a partnership with Pizzicato by Arpege Music www.arpegemusic.com and developed together the add-on Alternative Notation published 2013 http://www.arpegemusic.com/alternative-music-notation.htm that can handle Hamburg Music Notation and all cipher notations based on twelve symbols as well as Numbered Musical Notation (Jianpu). In addition, there is a vertical pitch version for alternative notations that allows identifying each tone on a vertical scale. The software allows swinging back and forth between Standard and Alternative Notations and can be downloaded for a trial.
http://www.arpegemusic.com/demo1.htm#go
The very useful manual for Alternative Notation is found on http://www.arpegemusic.com/manual36/EN284.htm.
On www.hamburgmusicnotation.com you can read on my homepage about theory and practice of my Alternative Music Notation System.
A short e-book with more information is available from AMAZON
Numbers are Music - Hamburg Music Notation - Jianpu - and other Alternative Cipher Notations by Robert Elisabeth Key
Germany: http://www.amazon.de/Numbers-are-Music
UK: http://www.amazon.co.uk/Numbers-are-Music
USA: http://www.amazon.com/usa/Numbers-are-Music

Below we include an illustration to show the simplicity of our duodecimal music notation:

Amazing Grace

English melody - text: John Newton (1725 - 1807)



Amazing Grace

English melody - text: John Newton (1725 - 1807)