

SmS Scales

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Theory: SmS Scales (Mirror Symmetric Scales)

This idea comes for me from a conversation with composer Wim de Ruiter. He was working with mirror symmetric scales upto a minor third interval (In analogy with our mirror symmetric hands) I have extended this idea upto the piano range and called these scales **SmS**. I defined the **SmS scales** as follows: **S** (a series of positive intervals) - **m** (one positive interval or nothing) - **S** the mirror symmetric counterpart of the first S. (S-S is also a possible outcome).

SmS Scales can have different modes (sum of all intervals).

Mode 12 is an octave scale in a chromatic 12 tone per octave setup.

SmS Scales have no note repetition. So 2 upto 12 notes Scales. With my VnV_Scale program you can also find all SmS scales. There are only 10 seven tone octave (mode 12) SmS scales:

- 1,1,1-6-1,1,1 (7) mode 12 = (also a VnV scale)
- 1,1,2-4-2,1,1 (7) mode 12
- 1,1,3-2-3,1,1 (7) mode 12
- 1,2,1-4-1,2,1 (7) mode 12 = (also a VnV scale)
- 1,2,2-2-2,2,1 (7) mode 12
- 1,3,1-2-1,3,1 (7) mode 12 = (also a VnV scale)
- 2,1,1-4-1,1,2 (7) mode 12
- 2,1,2-2-2,1,2 (7) mode 12 = Dorian Scale (also a VnV scale)
- 2,2,1-2-1,2,2 (7) mode 12
- 3,1,1-2-1,1,3 (7) mode 12

The 10 Seven Tone Octave SmS Scales

C (1,1,1-6-1,1,1) (also VnV scale)

C (1,1,2-4-2,1,1)



5 C (1,1,3-2-3,1,1)

C (1,2,1-4-1,2,1) (also VnV scale)



9 C (1,2,2-2-2,2,1)

C (1,3,1-2-1,3,1) (also VnV scale and C%Db)



13 C (2,1,1-4-1,1,2)

C (2,1,2-2-2,1,2) Dorian (also VnV scale)



17 C (2,2,1-2-1,2,2)

C (3,1,1-2-1,1,3)

