

Scales and Tetrachords by © Christof Griese, Berlin

When I have been young and practicing scales on my saxophone, I thought „how can I ever learn and understand all these scales?“.

So I developed an systematical method of learning all the scales by taking only half of a scale, tetrachord, and compare these tetrachords for understanding the characters and differences. And I was very surprised, that there are only five different tetrachords for all the usual scales. There is the lydian with the sharpened 4th, the major, the minor, the phrygian with the small second and the half-whole-tone tetrachord. So every scale is a combination of two same or different tetrachords:

1. **lydian**: lydian and major
2. **major**: major and major
3. **mixolydian**: major and minor
4. **dorian**: minor and minor
5. **aolian**: minor and phrygian
6. **phrygian**: phrygian and phrygian
7. **locrian**: phrygian and lydian

This system works also with the **melodic minor** as basis - it is the same principle (see my table). And even it helps with the **symmetrical scales**.

So you should use this method and learn to sing these tetrachords and then the combinations: **when you can sing them**, you will understand right quick the characters and you understand the scales and can recognize them also by ear. For the playing it is very important, to practice the scales through all keys very consciously. But: when you practice the major and the melodic minor scale in all keys on your instrument or/and in mind, it helps a lot, when you have practiced before singing the tetrachords and their combinations, because you know them, you can hear them and you can recognize mistakes. Singing does not matter in what key - so you just sing the tetrachords and combinations in one key - and it does not matter in which key (it has to be in the range of your voice...). But playing and knowing the major and melodic minor in all keys is basically necessary.

One important rule: **never make enharmonic changes** - you should not destroy the logic in construction of the scales: it is the alphabet.

Another important rule: with the halftone-wholetone or the altered scale ist very important to think about it like: **root, minor second, augmented second, major third, sharpend fourth and sharpend fifth - but minor seven**. I can not think and understand these scale with half and wholetone steps. That is not musically.

Finally: you can take one more tetrachord and you get the **harmonic minor scale** (and their derivate): it is the harmonic tetrachord: root, minor second, major third, fourth. And in the combination: minor tetrachord and harmonic tetrachord it is the harmonic minor scale.

Now try to find out the **HM5 - scale**...

So, good luck working with 5 or 6 Tetrachords: Lydian - Major - Minor - Phrygian - Half-Whole (1/2-1) and harmonic! It makes musical life much easier...

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MODES of Major Scale	(Tetrachords)	MODES of Melodic - Minors Scale	(Tetrachords)
C D E F# - G A B C - Lydian C D E F - G A B C - MAJOR C D E F - G A Bb C - Mixolydian	(Lydian - Major) (Major-Major) (Major - Minor)	> C D E F# - G# A B C - Lydian - Augmented > C D Eb F - G A B C - Melodic - Minor > C D E F# - G A Bb C - Lydian - Dominant > C D E F - G Ab Bb C - Mixolydian - b6	(Lydian - 1/2-1) (Minor - Major) (Lydian - Minor) (Major - Phrygian)
C D Eb F - G A Bb C - Dorian C D Eb F - G Ab Bb C - Aolian C Db Eb F - G Ab Bb C - Phrygian	(Minor- Minor) (Minor - Phrygian) (Phrygian-Phrygian)	> C Db Eb F - G A Bb C - Dorian - b2	(Phrygian - Minor)
C Db Eb F - Gb Ab Bb C - Locrian - Halfdiminished	(Phrygian - Lydian)	> C D Eb F - Gb Ab Bb C - Lokrian 2 - Halfdiminished 2	(Minor - Lydian)
Special Case: C Db D# E - F# G# Bb C - Altered (<i>Superlocrian</i> ?) (1/2-1 - Lydian) > altered DOMINANT! > 1, b9, #9, 3, #4, #5, 7, 8			
Symmetrical Scales:			
C Db D# E - F# - G A Bb C E F# G A Bb - C Db D# E C D E F# G# Bb (C D# E G# B C	- Dominant 8-Note > 1/2-1 - Minor (Half-Whole - Minor) - Diminished > Minor - 1-1/2 (Minor- Half-Whole) - Wholenote > Lydian-Lydian? - Augmented	Achtung: 1. Tetrachord Lydisch endet auf #4 und 2. Tetrachord Lokrisch fängt mit b5 an Achtung ähnlich: Lydisch-übermäßig, Lokrisch 2 und symmetrische Skalen	
Practice: 12 Major Scales / 12 Melodic-Minor Scales / Symmetrical scales (THINK and PLAY)			
SING: 5 Tetrachords und 14 Modes, Symmetrical Scales			
5 Tetrachords: Lydian - Major - Minor - Phrygian - Half-Whole (1/2-1)			