

Neo-Riemannian_triads

tries

Composer / arranger

Every perfect triad consists of a major and a minor third. <https://en.wikipedia.org/wiki/Tonnetz> is a graph tool I will represent chords by time:quality. Except from changing 3rd note to get the opposite quality, we observe that a Major triad has 4-3 intervals so we can go to 3h (R) earlier or 4h later (L) minors. A minor has 3-4 intervals so we go to 4h earlier (L) or 3h later (R) Majors.

Relative movement (R)

Preserve major 3rd

move the rest note so as

to have a new perfect triad

Leading tone movement (L)

Preserve minor 3rd

move the rest note so as

to have a new perfect triad

Parallel movement (P)

Preserve perfect fifth

move the rest note so as

to have the opposite quality triad

Musical notation showing three types of triad movements in 4/4 time. The treble clef contains the triads, and the bass clef contains whole rests. The movements are: (R) Major to 3h earlier minor or from minor to 3h later Major; (L) Major to 4h later minor or from minor to 4h earlier Major; (P) Same hour opposite quality.

Beside the basic R, L, P movements, there are

Slide movement (S)

Preserve 3rd note

move the fifth so as

to have a opposite quality

perfect triad.

Equivalent to LPR or RPL movement.

Neighbor movement (N)

Move minor 3rd by half

step and preserve the

rest, so as to have an

opposite quality perfect

triad. Equivalent to LPRPL

Hexpole movement (H)

Equivalent to a PLP movement

Musical notation showing three types of triad movements in 4/4 time. The treble clef contains the triads, and the bass clef contains whole rests. The movements are: (S) Major to 1h later minor or from minor to 1h earlier Major; (N) Major to 5h later minor or from minor to 5h earlier Major; (H) Major to 4h earlier minor or from minor to 4h later Major. (The opposite of [L]).

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Musical notation showing a sequence of triads in 4/4 time. The treble clef contains the triads, and the bass clef contains whole rests. The sequence is: 9m, 9M, 1m, 1M, 9m, 1M.

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Cube dance.

R is the only movement that move by tone. If the movement were to be made by 2 halfsteps, we go through augmented that eventually can connect minor and major triads. The augment 048 is equivalent to 480, to 804, so there are 3 major and 3 minor triads that an augmented can connect. As summary, instead of exchange by (R) Major-minor triads, we allow augmented to interfere between them, as Major-Aug-minor or minor-Aug-Major. I symbolize augmented by time:time+4:time+8

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0M 9m 9m 0M 4M 1m 1m 4M 8M 5m 5m 8M

An augmented can connect the same hour Major and its parallel 3hours earlier minor triad between them.

So, we are not restricted to R movement. We can go to intermediate Augmented and, from an equivalent of that, except the (R) movement, go to one of two more triads, that have opposite to the initial triad quality.

Since, instead of (R), the intermediated Augmented is used, from each triad an (L) and a (P) can be used.

To the three Major and three minor triads of any PL cycle, 2 Augmented are added and a cube is graphically formed, as we see in <https://open.library.okstate.edu/musictheory/chapter/neo-riemannian-triadic-progressions/>

Instead of that is we can use

An example from C to bBmin, by Aug and by PRL movements.

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0M 9m 0M 9m 0M 5m 0M 5m 1M 9m 10m 0M 0m 3M 3m 6M 10m

(L) (P) (R) (P) (R) (L)

Because each Aug represent a class of 3 equivalent Augs, there are only 4 classes of Augmented triads.

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Class 0 Augmented Class 1 Augmented Class 2 Augmented Class 3 Augmented

0M 9m 0M 5m 1 5 9 2 6 10 6 10 2 3 7 11 7 11 3

To create a cube, we need the two Augs it has. From an Aug we move to same hour Major, apply a (P) and, from this minor, we go to 3hours later new Aug.

This cube has
 0.4.8Aug Class 0
 0M,4M,8M triads
 3.7.11Aug Class 3
 0m,4m,8m triads

To create another cube
 from same Aug, we move to 3hours earlier minor
 a (P) movement and from this Major to
 a same hour Aug.

32 0M 0m 3.7.11 0m 9m 9M 9.1.5

This cube has
 0.4.8Aug Class 0
 9m,1m,5m triads
 9.1.5Aug Class 1
 9M,1M,5M triads

We created a cube for Classes 0-3 and another one for Classes 0-1 that has Class 0 Aug in common.
 Same way we create cube for Classes 1-2 and Classes 2-3.
 All four cubes in a graph, as in <https://viva.pressbooks.pub/app/uploads/sites/12/2019/07/cube-dance.png>
 form the dance cube.