



MTO 15.1 Examples: Roeder, Constructing Transformational Signification

(Note: audio, video, and other interactive examples are only available online)

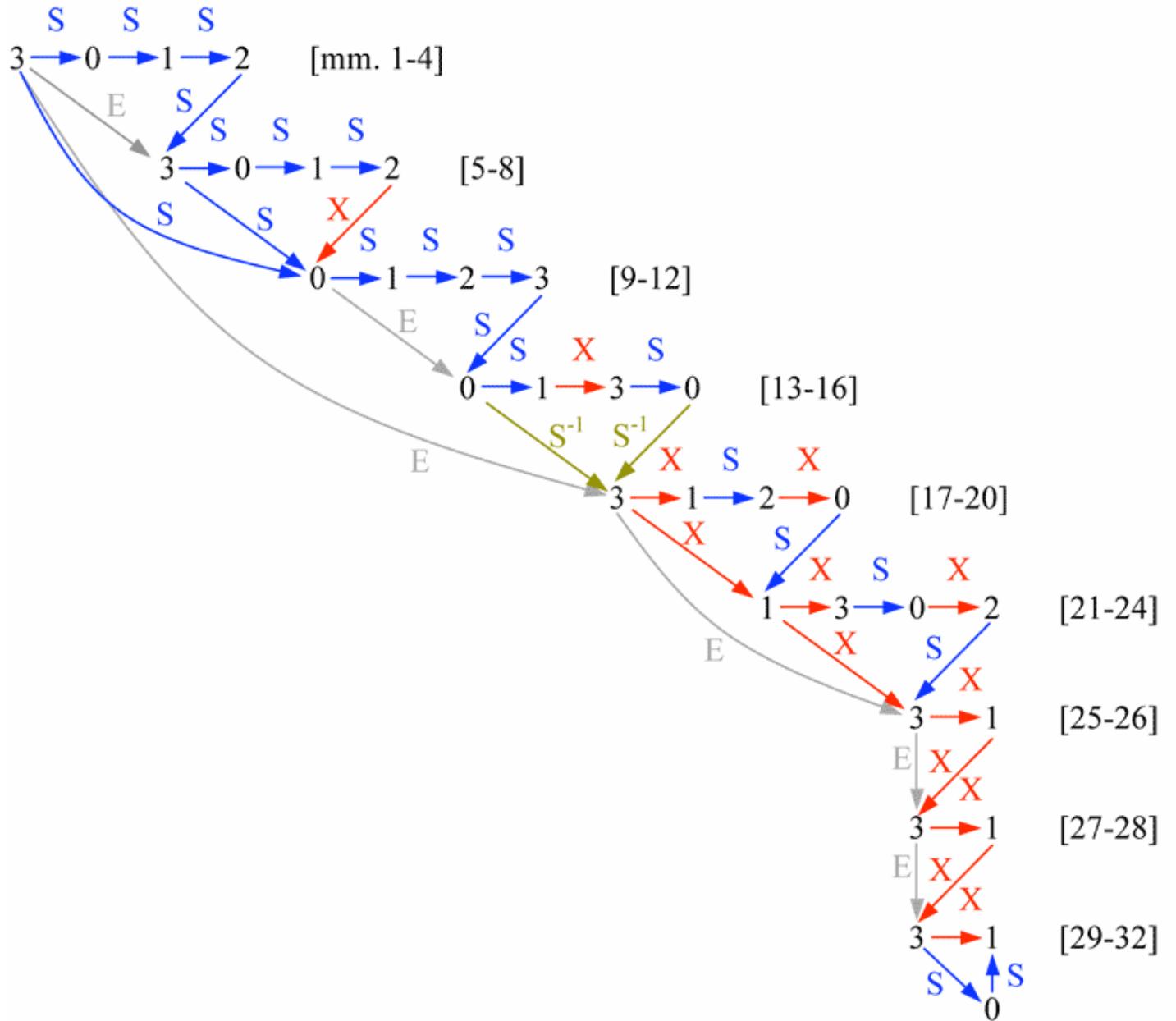
http://www.mtosmt.org/issues/mto.09.15.1/mto.09.15.1.roeder_signification.php

Example 1. Bartók, Scherzo from *Suite*, Op. 14, measures 1–32

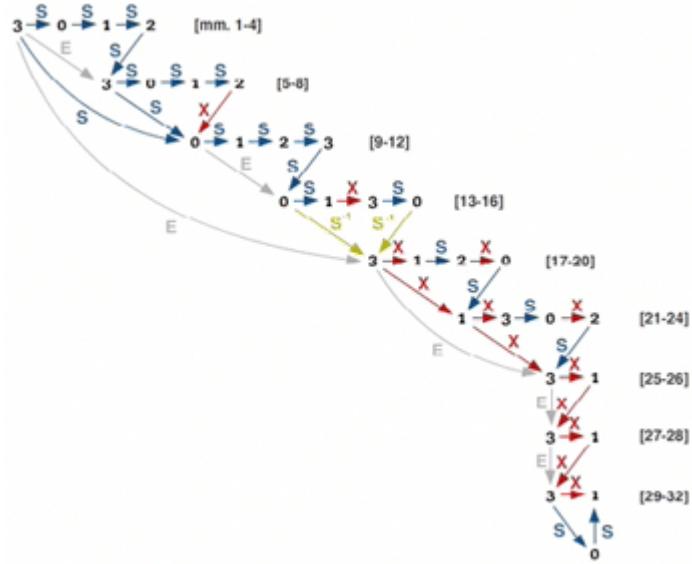
The musical score consists of six staves of music for two voices (Soprano and Alto). Measure 1 starts with a dynamic **f** marcatoissimo. The score is annotated with several colored boxes and text labels:

- A red box highlights a note in measure 1, with the question "why stop?" written above it.
- A blue box highlights a note in measure 1, with the question "why different?" written above it.
- A purple box highlights a note in measure 17, with the question "why begin here, this way?" written above it.
- A pink box highlights a note in measure 25, with the question "why repeat" written above it.
- A blue box highlights a note in measure 25, with the question "and get stuck here?" written above it.
- A dynamic marking **cresc.** is shown between measures 17 and 25.
- A dynamic marking **p** is shown at the beginning of measure 17.
- A dynamic marking **sf** is shown at the end of measure 25.

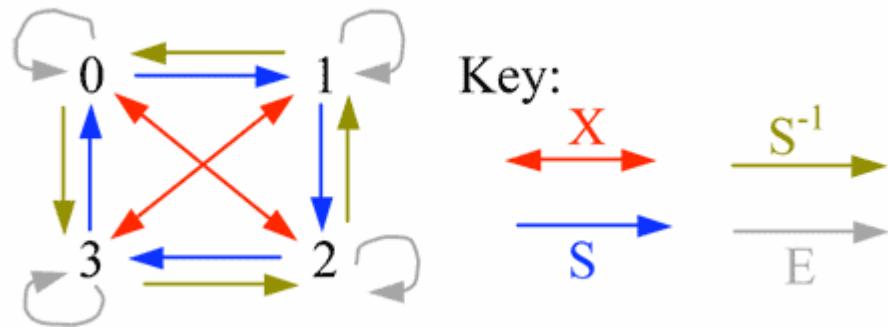
Example 2. Event-transformational analysis of Example 1



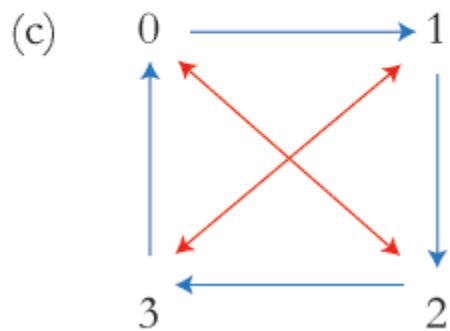
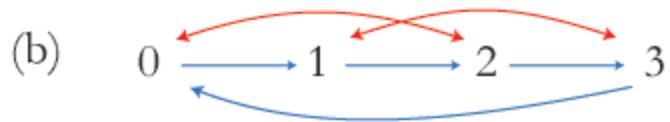
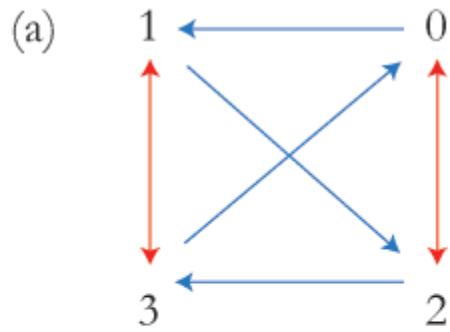
Animation 1. Animation of the event network of Example 2



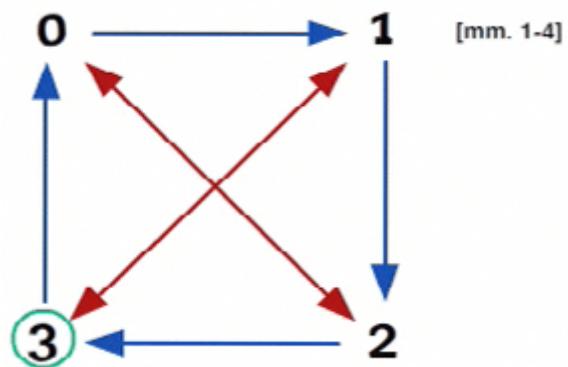
Example 3. A complete space containing the transformations of Example 2



Example 4. Various alternative visual layouts of the space of Example 3



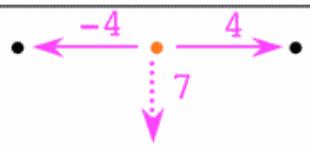
Animation 2. A simple animation in the space of Example 4c



Animation 3. A representational version of Animation 2



Example 5. Characteristic moves of the first pc of each measure from a member of an augmented triad 4-wiggle

MOVE 1: -7 from the referential pc of another augmented triad	 A diagram showing a vertical movement of -7 from a referential pc to another augmented triad. The movement is indicated by a green arrow pointing upwards, labeled -7 . The horizontal distance between the two augmented triads is labeled -4 and 4 .
MOVE 2: -7 from the pc that is -4 from a referential pc	 A diagram showing a vertical movement of -7 from a pc that is -4 from a referential pc. The movement is indicated by a red arrow pointing upwards, labeled -7 . The horizontal distance between the two augmented triads is labeled -4 and 4 .
MOVE 3: 7 from a referential pc	 A diagram showing a vertical movement of 7 from a referential pc. The movement is indicated by a purple arrow pointing downwards, labeled 7 . The horizontal distance between the two augmented triads is labeled -4 and 4 .
MOVE 4: -7 from the pc that is 4 from a referential pc	 A diagram showing a vertical movement of -7 from a pc that is 4 from a referential pc. The movement is indicated by a blue arrow pointing upwards, labeled -7 . The horizontal distance between the two augmented triads is labeled -4 and 4 .

Example 6. Instances of MOVEs in the Scherzo excerpt

MOVE1

MOVE1 -7

f marcissimo

-4 -7 -4 -7 -4 -7

same as above

MOVE2 -4 -7

MOVE3 -4 -7

MOVE4 -4 -7

cresc. simile

MOVE3 -4 -7

MOVE1 -7

-4 -7 -4 -7 -4 -7

MOVE4? -4 -7

missing Bb

MOVE3?

sf

Example 7. Event-transformational analysis of Bartók, Scherzo, measures 33–42

This passage's characteristic gestures in the left-hand part are larger four-node networks of 4s and 7s, in which the 4 and -4 of the previous "wiggle" are now mediated by a 7 or -7. The notes in the right-hand accompaniment clearly derive by 7 from the prominent left-hand notes. The long green arrow indicates that the entire eight-bar group, measures 33–40, is transposed by the characteristic interval 7 (down in pitch a perfect fourth) to measures 41–48.

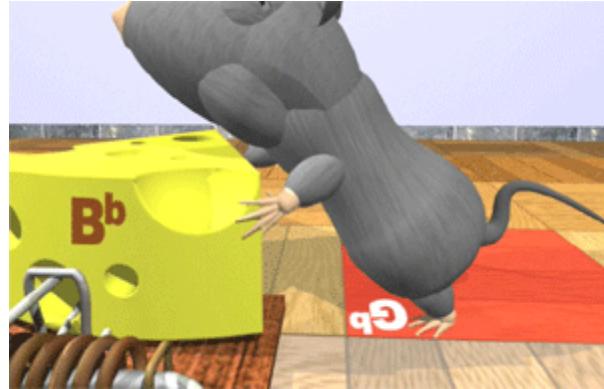
Example 8. A quasi-spatial network layout



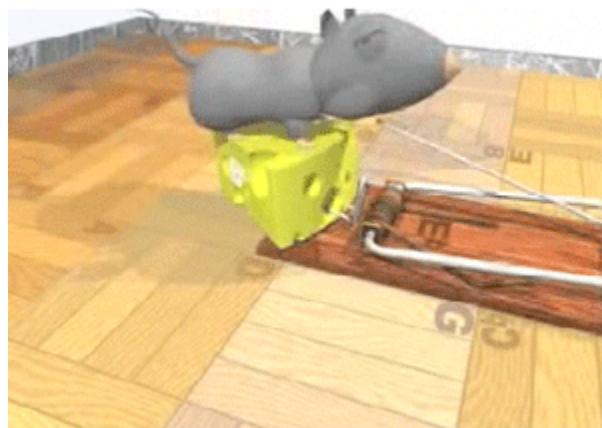
Animation 4. Enactment of measures 1–4 on the network of Example 8



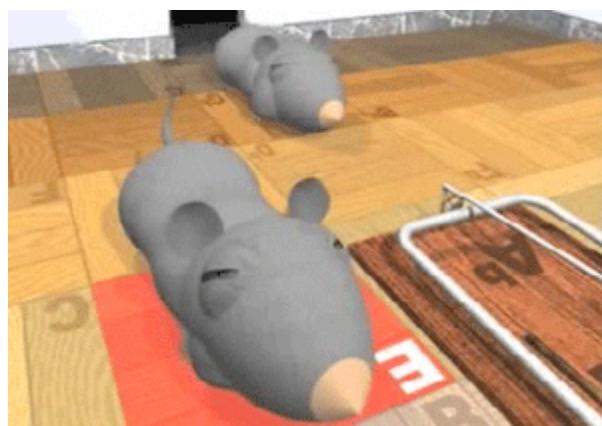
Animation 5. Enactment of measures 5–8



Animation 6. Enactment of measures 9–16



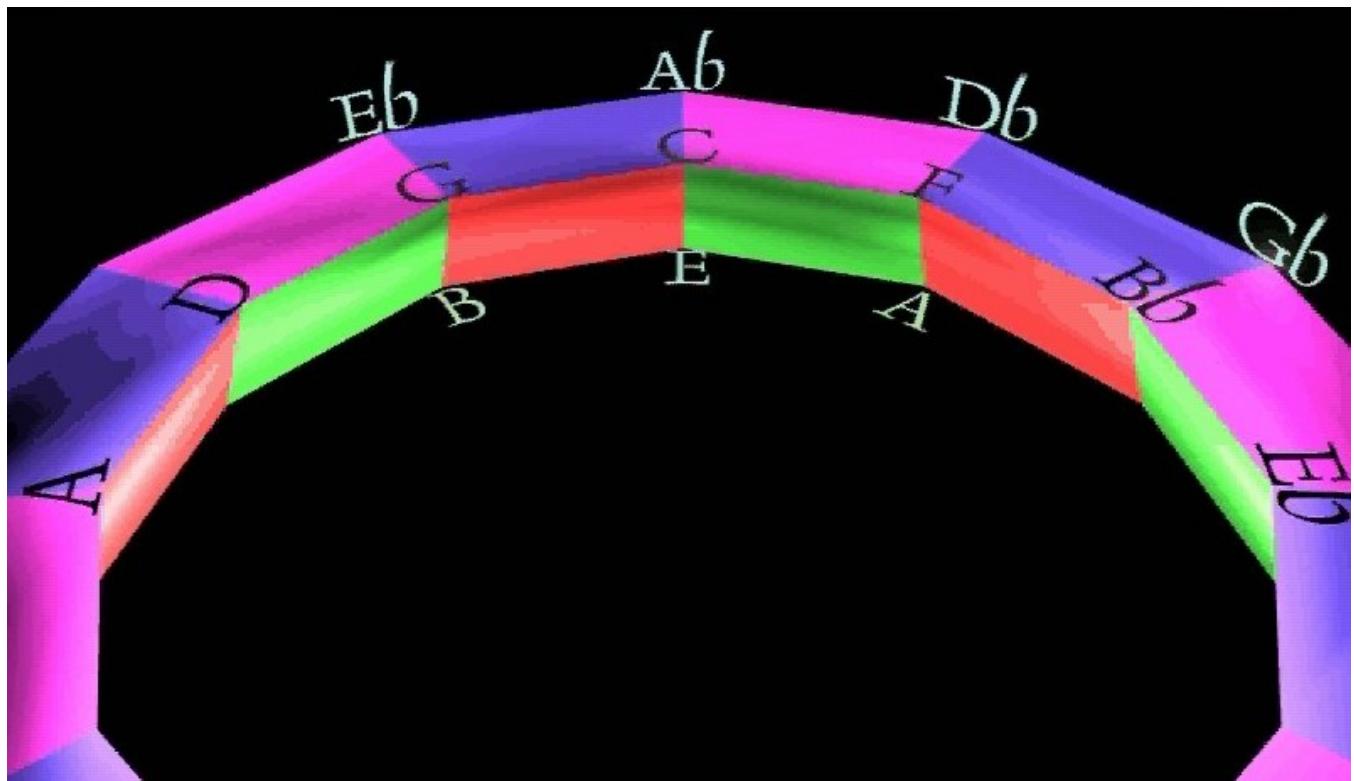
Animation 7. Enactment of measures 17–32



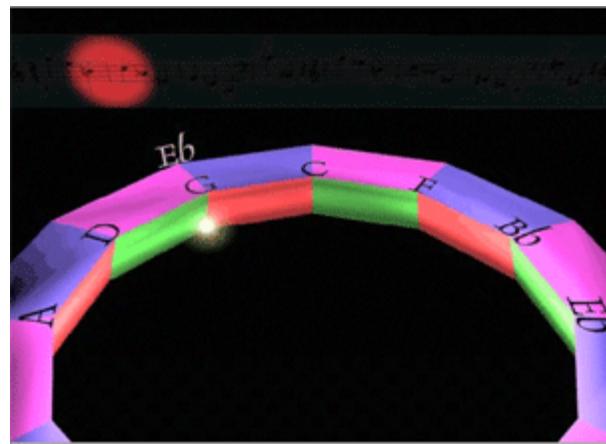
Animation 8. Enactment of measures 1–32



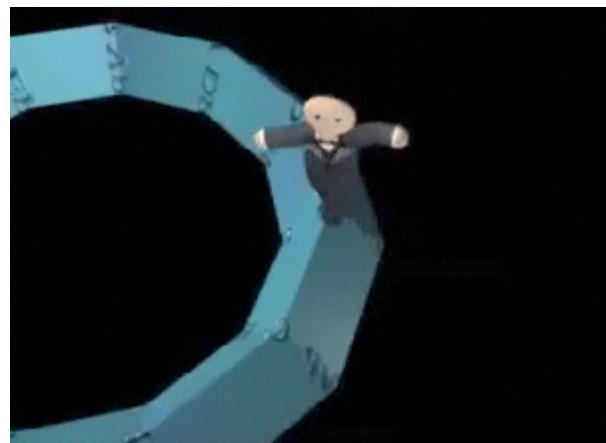
Example 9. A T7–T4 *Tonnetz* torus



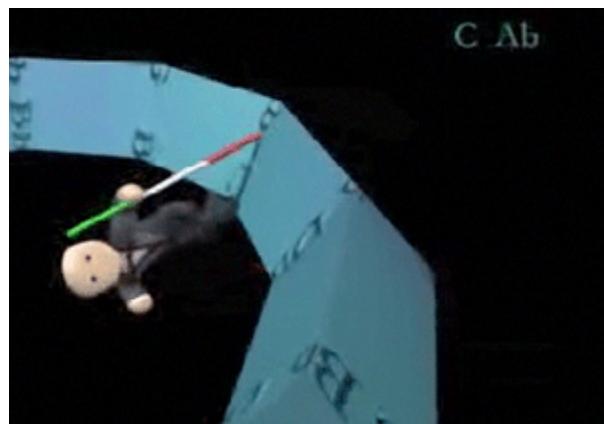
Animation 9. Enactment of measures 1–16 on the network of Example 9 by a moving light



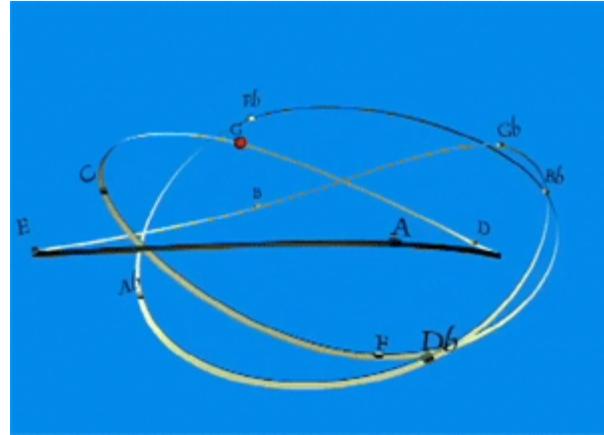
Animation 10. Enactment of measures 1–32 by a human agent on a T7–T4 *Tonnetz*



Animation 11. Enactment of measures 1–32 by a human agent on a T1–T4 *Tonnetz*



Animation 12. A tour of a minimal toroidal space with T7–T4 *Tonnetz* structure



Animation 13. Interactive tour of the space of Animation 12

