

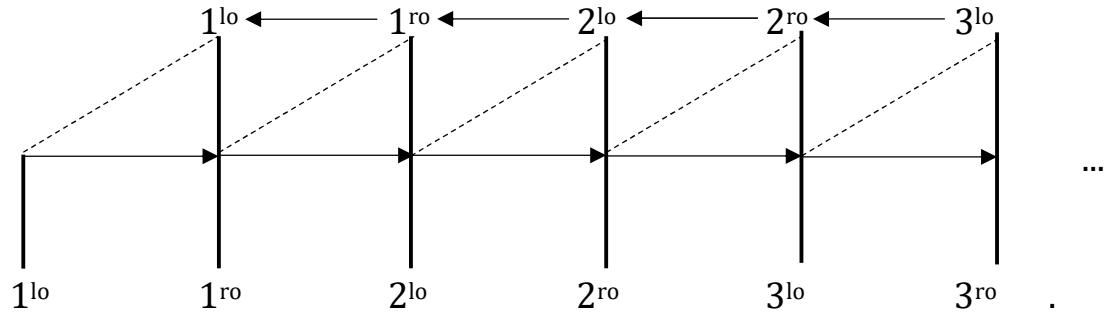
Prof. Dr. Alfred Toth

Trajektionsachsen bei thematischen Realitäten

1. Eine trajektische Relation ist eine Relation mit einer Differenz

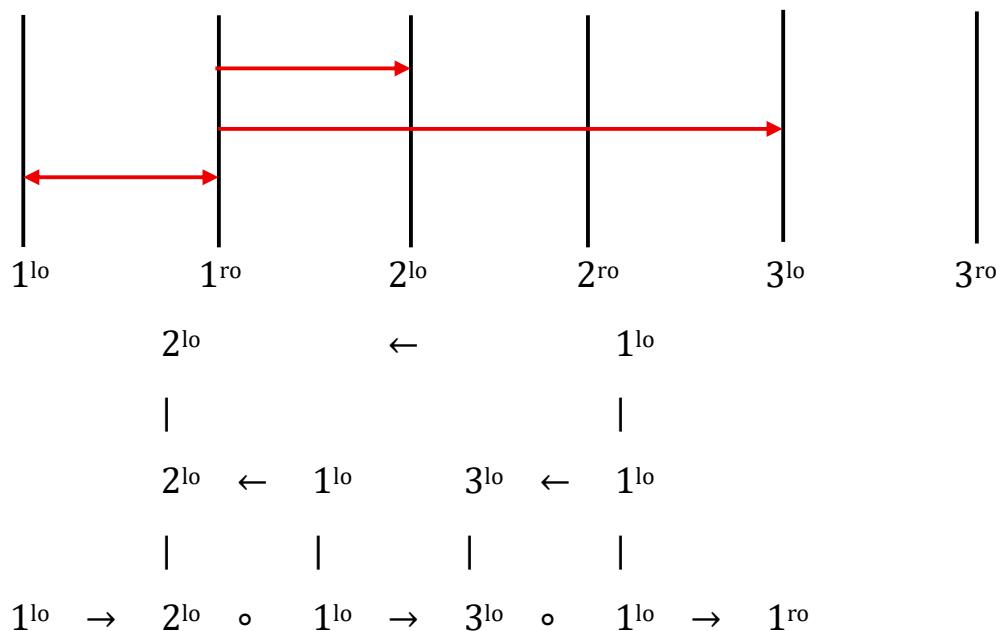
$$T = (x, y, z) = (x | y)$$

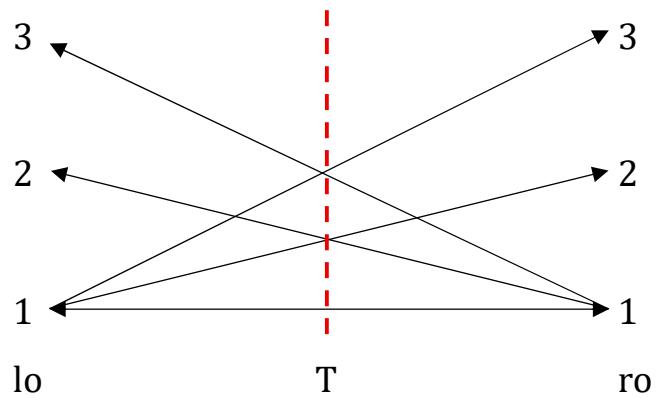
mit $| = R(x, z)$ und $R(x, z) \neq R(z, x)$, d.h. $R \neq \emptyset$, wobei $R(x, y) = R^\rightarrow = R^{\text{ro}}$, $R(y, x) = R^\leftarrow = R^{\text{lo}}$ und dem Zählschema



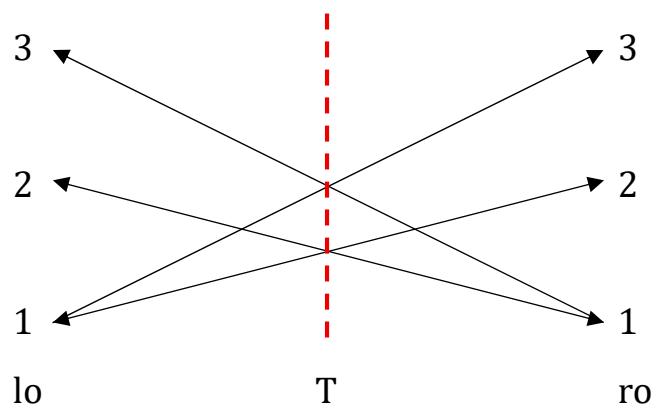
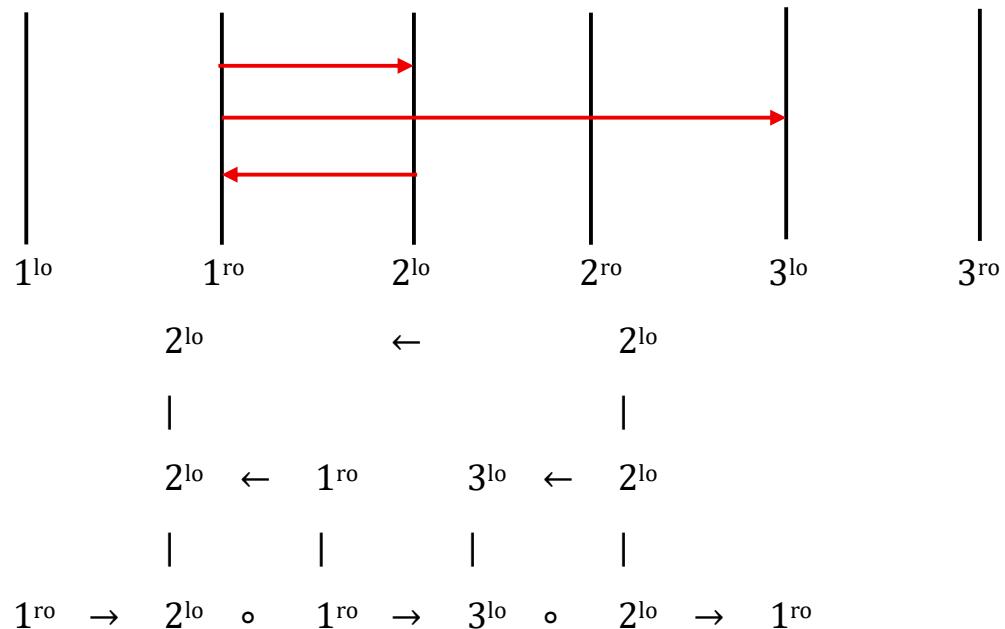
2. Im folgenden behandeln wir im Anschluß an Toth (2025a, b) die durch die dualen Realitätsthematiken der Zeichenklassen thematisierten strukturellen (entitätschen) Realitäten als trajektische Relationen und stellen sie dreifach dar: mittels trajektischer Zählschemata, (3, 2)-Diamonds und einem numerischen Bestimmungsschema zur Ermittlung der Trajektionsachsen.

2.1. $(3.1, 2.1, 1.1) \Rightarrow 1.1 \leftarrow (1.2, 1.3)$

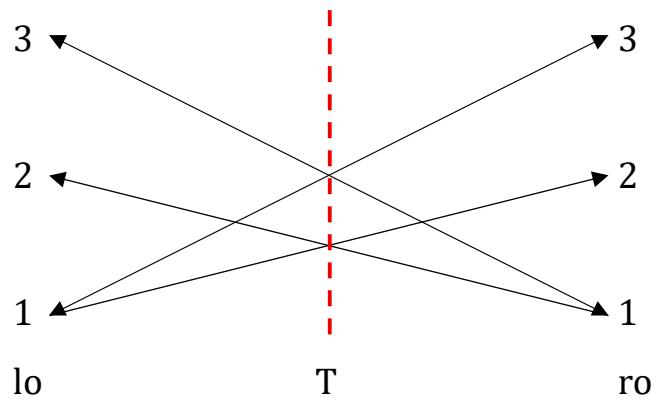
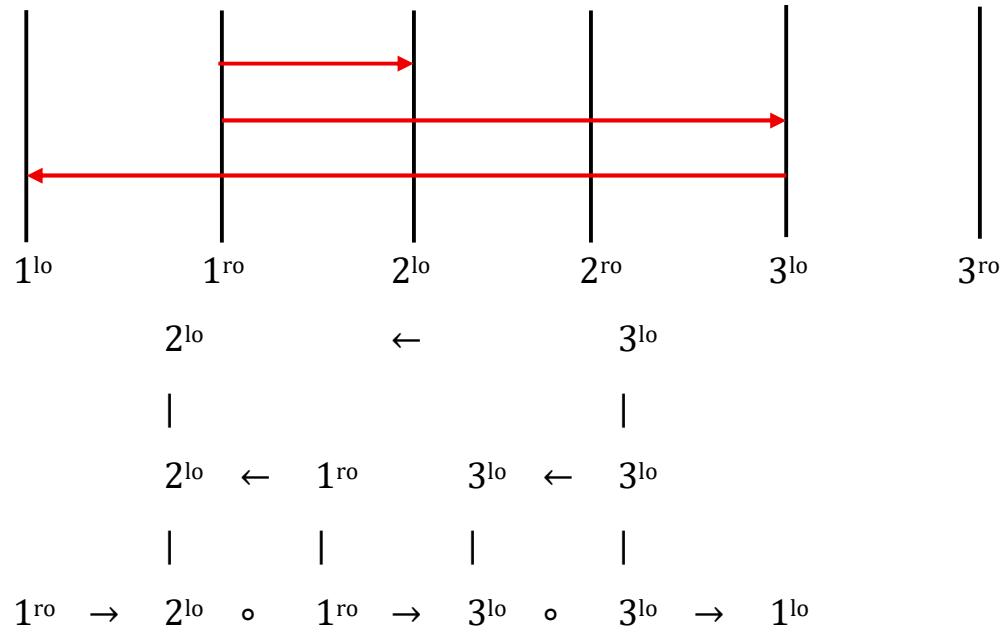




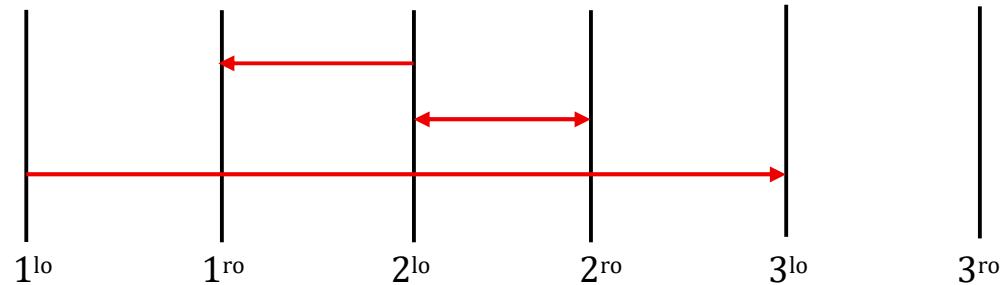
$$2.2. (3.1, 2.1, 1.2) \Rightarrow 2.1 \leftarrow (1.2, 1.3)$$



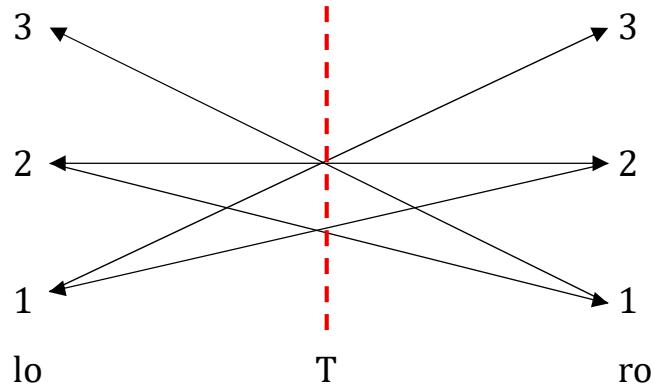
2.3. $(3.1, 2.1, 1.3) \Rightarrow 3.1 \leftarrow (1.2, 1.3)$



2.4. $(3.1, 2.2, 1.2) \Rightarrow (2.1, 2.2) \rightarrow 1.3$



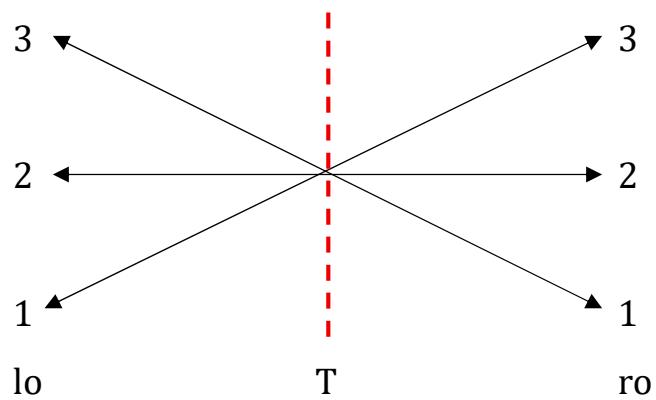
$$\begin{array}{ccccccc}
 & & \leftarrow & & \leftarrow & & \\
 1^{\text{lo}} & & & & 1^{\text{lo}} & & \\
 | & & & & | & & \\
 1^{\text{lo}} & \leftarrow & 2^{\text{lo}} & & 2^{\text{ro}} & \leftarrow & 1^{\text{lo}} \\
 | & & | & & | & & | \\
 2^{\text{lo}} & \rightarrow & 1^{\text{lo}} & \circ & 2^{\text{lo}} & \rightarrow & 2^{\text{ro}} & \circ & 1^{\text{lo}} & \rightarrow & 3^{\text{lo}}
 \end{array}$$



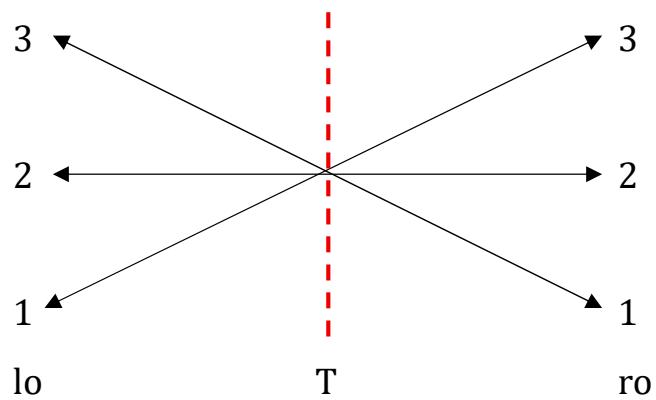
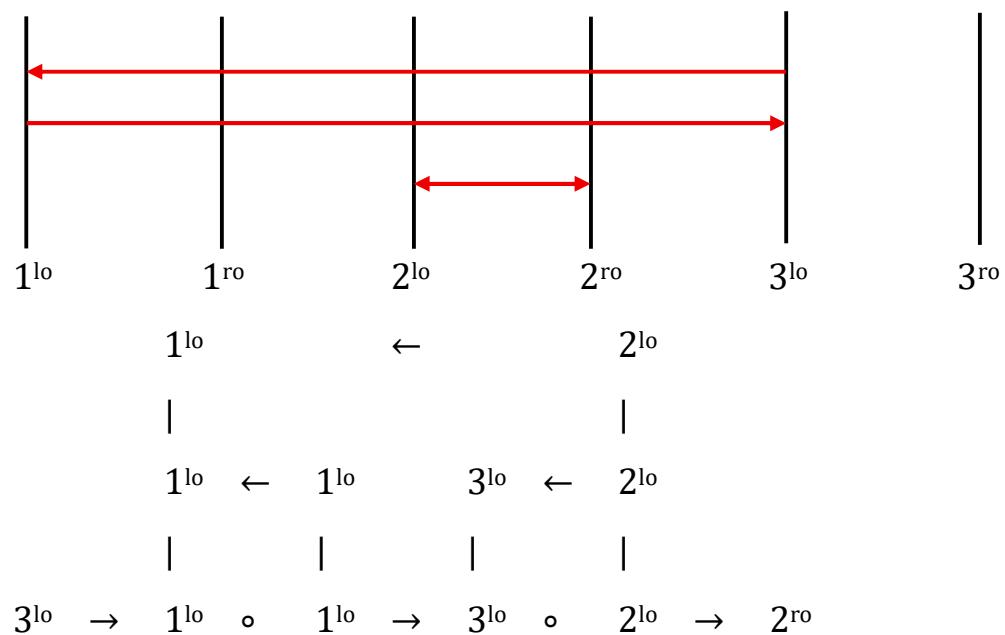
$$2.5.a. (3.1, 2.2, 1.3) \Rightarrow (3.1, 2.2) \rightarrow 1.3$$

Diagram illustrating a mapping between five levels (1^{lo}, 1^{ro}, 2^{lo}, 2^{ro}, 3^{lo}) and their corresponding labels (lo, ro). Red double-headed arrows connect the first two pairs of lines.

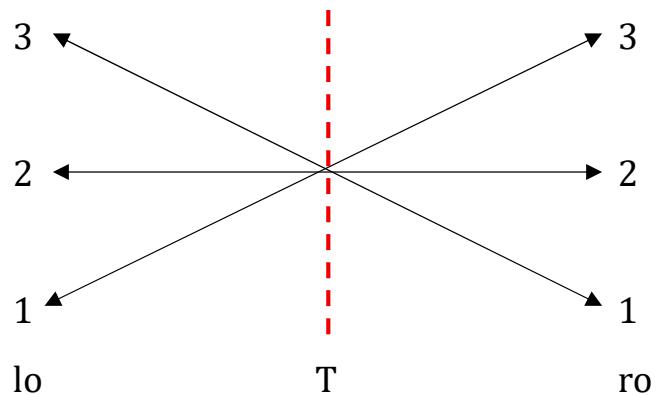
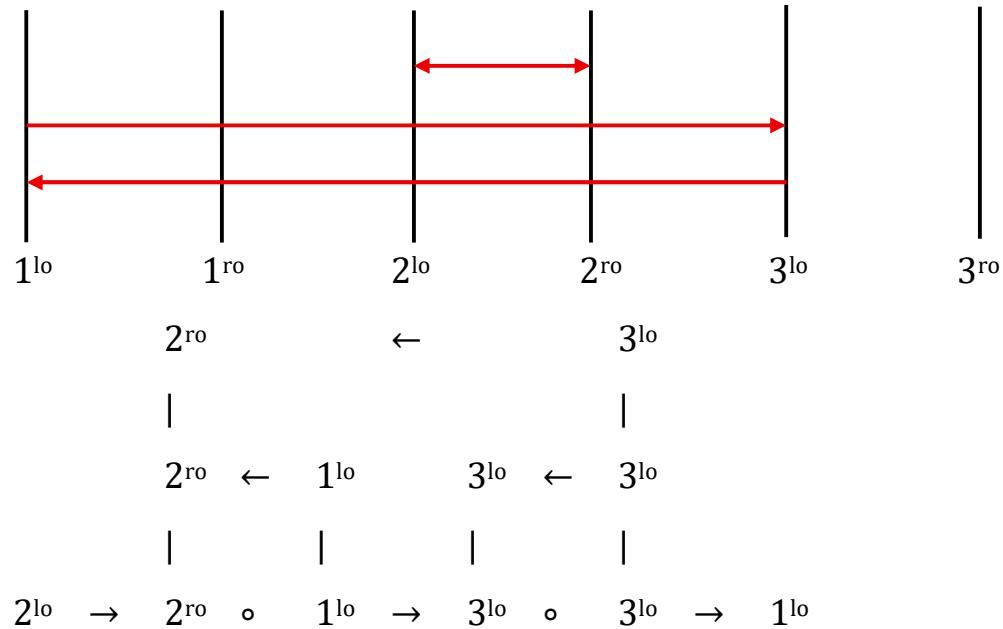
$$\begin{array}{ccccccc}
 & & \leftarrow & & \leftarrow & & \\
 & & & & & & \\
 1^{\text{lo}} & & 1^{\text{ro}} & & 2^{\text{lo}} & & 2^{\text{ro}} & & 3^{\text{lo}} & & \\
 | & & | & & | & & | & & | \\
 1^{\text{ro}} & \leftarrow & 2^{\text{lo}} & & 2^{\text{ro}} & \leftarrow & 1^{\text{lo}} & & \\
 | & & | & & | & & | \\
 3^{\text{lo}} & \rightarrow & 1^{\text{ro}} & \circ & 2^{\text{lo}} & \rightarrow & 2^{\text{ro}} & \circ & 1^{\text{lo}} & \rightarrow & 3^{\text{lo}}
 \end{array}$$



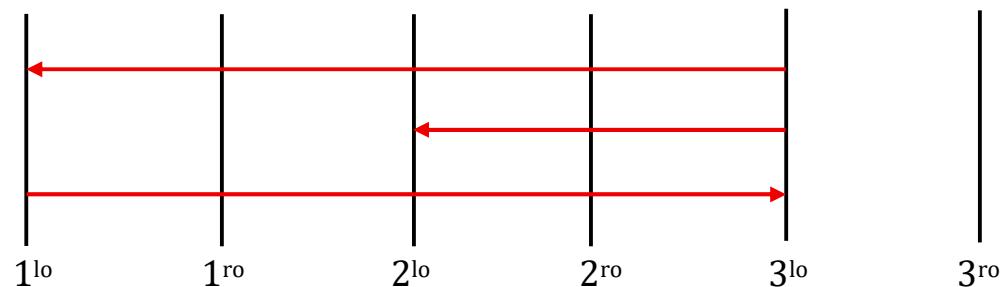
2.5.b. $(3.1, 2.2, 1.3) \Rightarrow (3.1, 1.3) \rightarrow 2.2$



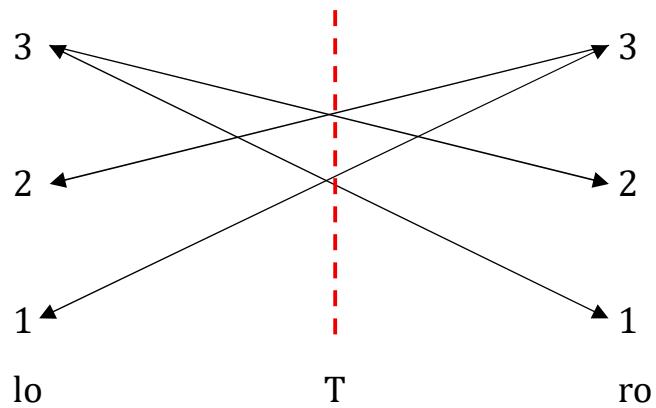
2.5.c. $(3.1, 2.2, 1.3) \Rightarrow (2.2, 1.3) \rightarrow 3.1$



2.6. $(3.1, 2.3, 1.3) \Rightarrow (3.1, 3.2) \rightarrow 1.3$

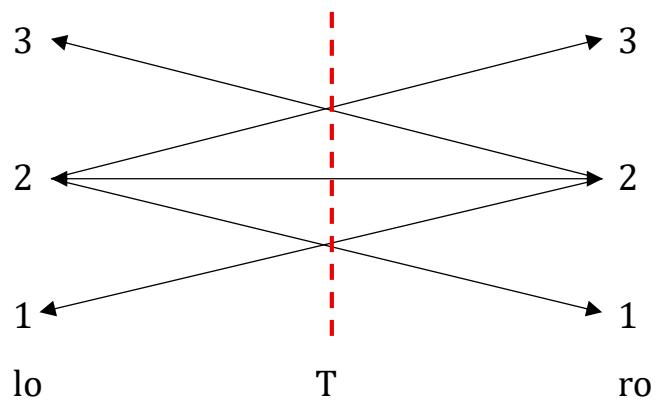


$$\begin{array}{ccccccc}
 & & \leftarrow & & \leftarrow & & \\
 1^{\text{lo}} & & & & 1^{\text{lo}} & & \\
 | & & & & | & & \\
 1^{\text{lo}} & \leftarrow & 3^{\text{lo}} & & 2^{\text{lo}} & \leftarrow & 1^{\text{lo}} \\
 | & & | & & | & & | \\
 3^{\text{lo}} & \rightarrow & 1^{\text{lo}} & \circ & 3^{\text{lo}} & \rightarrow & 2^{\text{lo}} & \circ & 1^{\text{lo}} & \rightarrow & 3^{\text{lo}}
 \end{array}$$

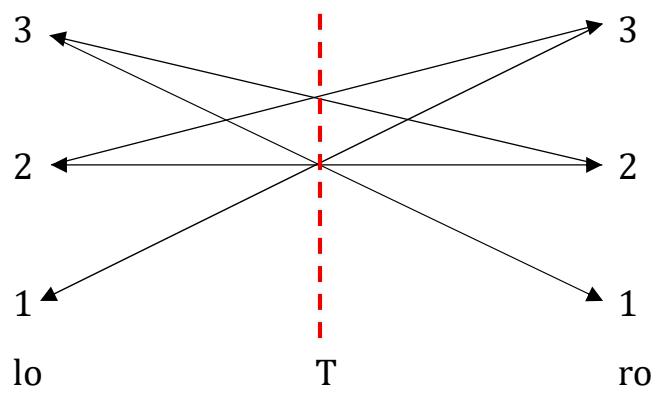
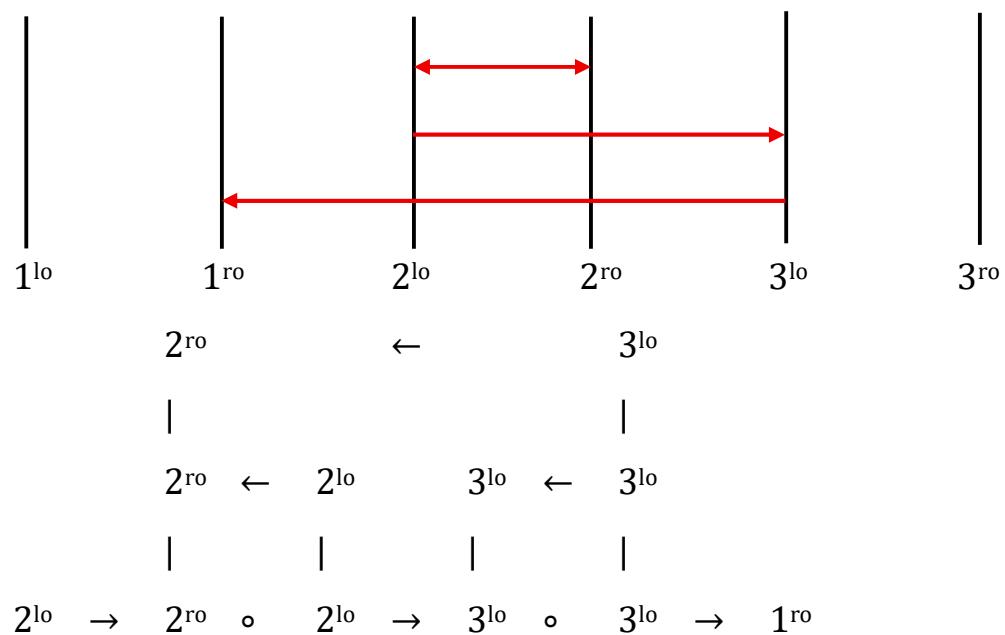


$$2.7. (3.2, 2.2, 1.2) \Rightarrow 2.1 \leftarrow (2.2, 2.3)$$

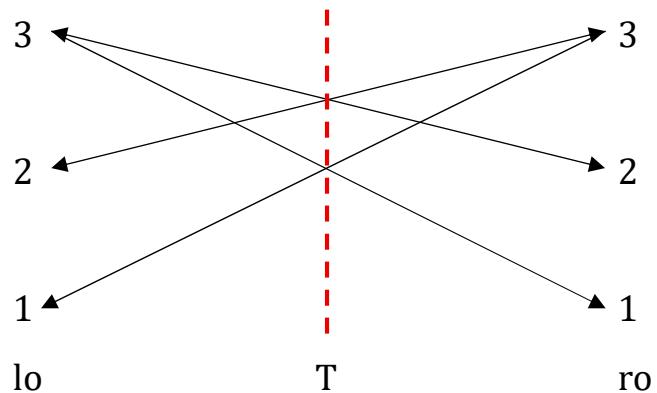
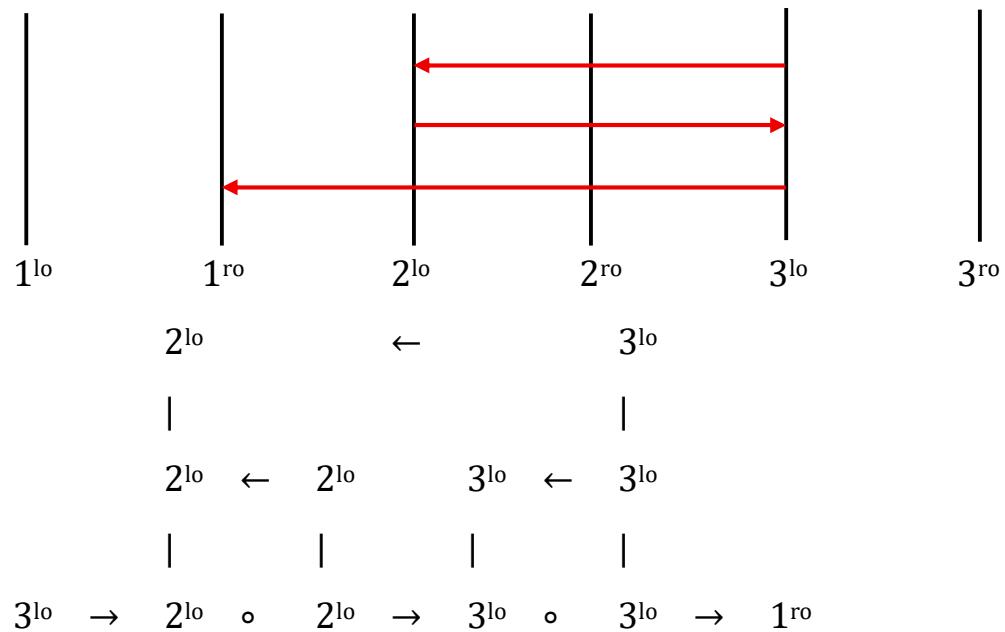
$$\begin{array}{ccccccc}
 & & \leftarrow & & \leftarrow & & \\
 & & & & & & \\
 1^{\text{lo}} & & 1^{\text{ro}} & & 2^{\text{lo}} & & 2^{\text{ro}} & & 3^{\text{lo}} & & 3^{\text{ro}} \\
 | & & | & & | & & | & & | & & | \\
 2^{\text{ro}} & \leftarrow & 2^{\text{lo}} & & 3^{\text{lo}} & \leftarrow & 2^{\text{lo}} & & & & \\
 | & & | & & | & & | & & & & \\
 2^{\text{lo}} & \rightarrow & 2^{\text{ro}} & \circ & 2^{\text{lo}} & \rightarrow & 3^{\text{lo}} & \circ & 2^{\text{lo}} & \rightarrow & 1^{\text{ro}}
 \end{array}$$



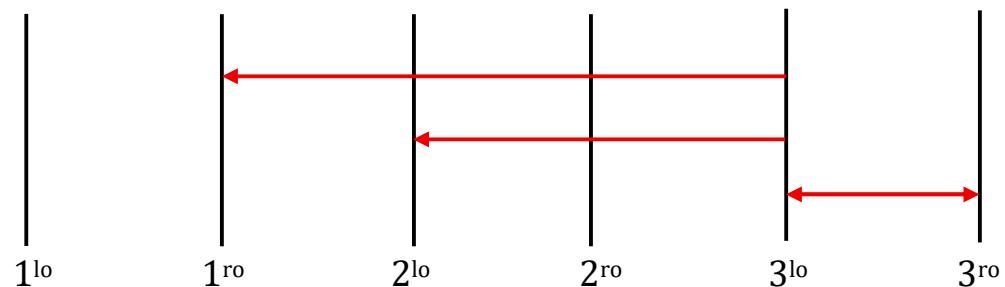
$$2.8. (3.2, 2.2, 1.3) \Rightarrow 3.1 \leftarrow (2.2, 2.3)$$

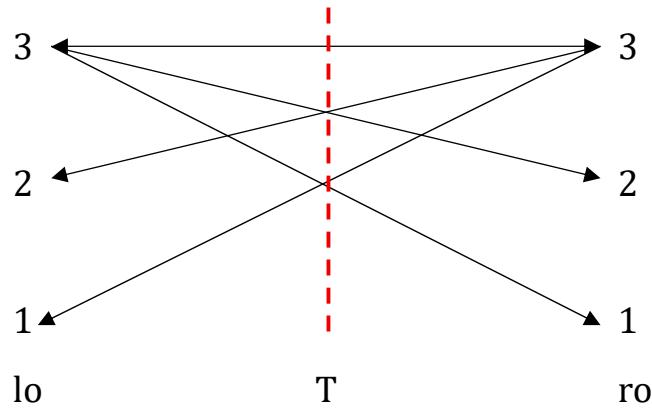
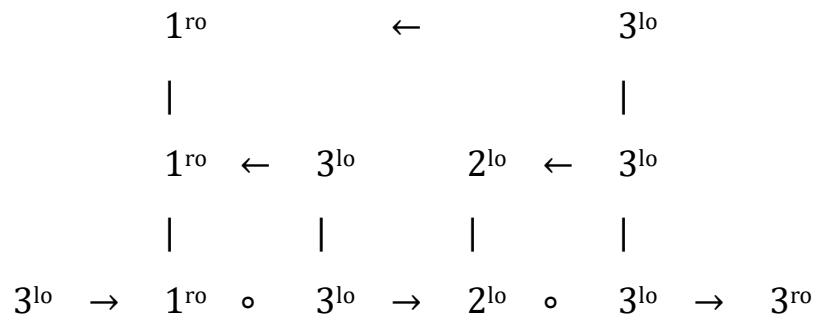


2.9. $(3.2, 2.3, 1.3) \Rightarrow 3.1 \leftarrow (3.2, 2.3)$



2.10. $(3.3, 2.3, 1.3) \Rightarrow (3.1, 3.2) \leftarrow 3.3$





Literatur

Toth, Alfred, Semiotische Thematisierungen als trajektische Relationen. In: Electronic Journal for Mathematical Semiotics, 2025a

Toth, Alfred, Trajektische Disremptionen. In: Electronic Journal for Mathematical Semiotics, 2025b

17.8.2025