

Prof. Dr. Alfred Toth

## Paarweise chiasmatische Abbildungen eigenrealer Thematisierungen

1. In Toth (2026a, b) hatten wir gezeigt, daß man die strukturellen Realitäten der 27 Dualsysteme des vollständigen ternären semiotischen Systems in Tripelrelationen der folgenden Form notieren kann

$$(X, Y) \rightarrow Z$$

$$X \rightarrow Y \leftarrow Z$$

$$X \leftarrow (Y, Z).$$

Nimmt man die Permutationen der Dualsysteme dazu, ergeben sich weitere paarweise Differenzen durch Vertauschung der Thematisanden

$$(Y, X) \rightarrow Z$$

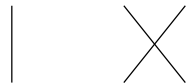
$$Z \rightarrow Y \leftarrow X$$

$$X \leftarrow (Z, Y).$$

2. Nachdem wir in Toth (2026c) die eigenrealen Links-, Zentral- und Rechtsthematisierungen konstruiert hatten, zeigen wir im folgenden, daß man sie als paarweise chiasmatische Abbildungen darstellen kann.

### 2.1. Linksthematisierungen

$$1.1 \leftarrow (2.2, 3.3)$$



$$1.1 \leftarrow (3.3, 2.2)$$

$$1.1 \leftarrow (2.3, 3.2)$$



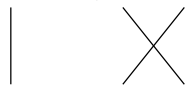
$$1.1 \leftarrow (3.2, 2.3)$$

$$1.2 \leftarrow (2.1, 3.3)$$



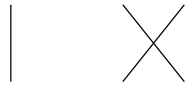
$$1.2 \leftarrow (3.3, 2.1)$$

1.2  $\leftarrow$  (2.3, 3.1)



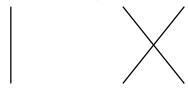
1.2  $\leftarrow$  (3.1, 2.3)

1.3  $\leftarrow$  (2.1, 3.2)



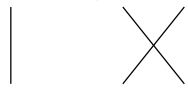
1.3  $\leftarrow$  (3.2, 2.1)

1.3  $\leftarrow$  (2.2, 3.1)



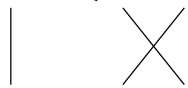
1.3  $\leftarrow$  (3.1, 2.2)

2.1  $\leftarrow$  (1.2, 3.3)



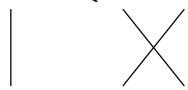
2.1  $\leftarrow$  (3.3, 1.2)

2.1  $\leftarrow$  (1.3, 3.2)



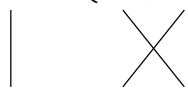
2.1  $\leftarrow$  (3.2, 1.3)

2.2  $\leftarrow$  (1.1, 3.3)



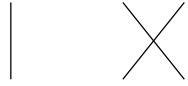
2.2  $\leftarrow$  (3.3, 1.1)

2.2  $\leftarrow$  (1.3, 3.1)



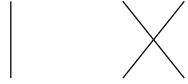
2.2  $\leftarrow$  (3.1, 1.3)

2.3 ← (1.1, 3.2)



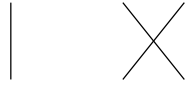
2.3 ← (3.2, 1.1)

2.3 ← (1.2, 3.1)



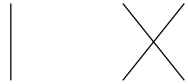
2.3 ← (3.1, 1.2)

3.1 ← (1.2, 2.3)



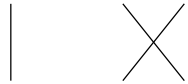
3.1 ← (2.3, 1.2)

3.1 ← (1.3, 2.2)



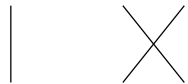
3.1 ← (2.2, 1.3)

3.2 ← (1.1, 2.3)



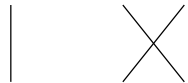
3.2 ← (2.3, 1.1)

3.2 ← (1.3, 2.1)



3.2 ← (2.1, 1.3)

3.3 ← (1.1, 2.2)



3.3 ← (2.2, 1.1)

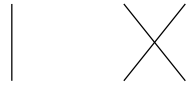
3.3 ← (1.2, 2.1)



3.3 ← (2.1, 1.2)

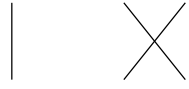
## 2.2. Zentralthematizierungen (Sandwiches)

$$1.1 \rightarrow 2.2 \leftarrow 3.3$$



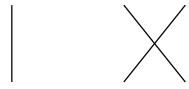
$$1.1 \rightarrow 3.3 \leftarrow 2.2$$

$$1.1 \rightarrow 2.3 \leftarrow 3.2$$



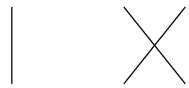
$$1.1 \rightarrow 3.2 \leftarrow 2.3$$

$$1.2 \rightarrow 2.1 \leftarrow 3.3$$



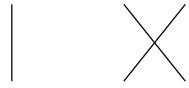
$$1.2 \rightarrow 3.3 \leftarrow 2.1$$

$$1.2 \rightarrow 2.3 \rightarrow 3.1$$



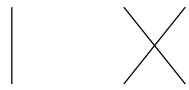
$$1.2 \rightarrow 3.1 \leftarrow 2.3$$

$$1.3 \rightarrow 2.1 \leftarrow 3.2$$



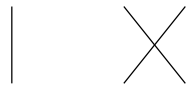
$$1.3 \rightarrow 3.2 \leftarrow 2.1$$

$$1.3 \rightarrow 2.2 \leftarrow 3.1$$



$$1.3 \rightarrow 3.1 \leftarrow 2.2$$

$$2.1 \rightarrow 1.2 \leftarrow 3.3$$



$$2.1 \rightarrow 3.3 \leftarrow 1.2$$

$$\begin{array}{c}
 2.1 \rightarrow 1.3 \leftarrow 3.2 \\
 | \quad \quad \times \\
 2.1 \rightarrow 3.2 \leftarrow 1.3
 \end{array}$$

$$\begin{array}{c}
 2.2 \rightarrow 1.1 \leftarrow 3.3 \\
 | \quad \quad \times \\
 2.2 \rightarrow 3.3 \leftarrow 1.1
 \end{array}$$

$$\begin{array}{c}
 2.2 \rightarrow 1.3 \leftarrow 3.1 \\
 | \quad \quad \times \\
 2.2 \rightarrow 3.1 \leftarrow 1.3
 \end{array}$$

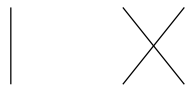
$$\begin{array}{c}
 2.3 \rightarrow 1.1 \leftarrow 3.2 \\
 | \quad \quad \times \\
 2.3 \rightarrow 3.2 \leftarrow 1.1
 \end{array}$$

$$\begin{array}{c}
 2.3 \rightarrow 1.2 \leftarrow 3.1 \\
 | \quad \quad \times \\
 2.3 \rightarrow 3.1 \leftarrow 1.2
 \end{array}$$

$$\begin{array}{c}
 3.1 \rightarrow 1.2 \leftarrow 2.3 \\
 | \quad \quad \times \\
 3.1 \rightarrow 2.3 \leftarrow 1.2
 \end{array}$$

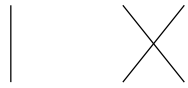
$$\begin{array}{c}
 3.1 \rightarrow 1.3 \leftarrow 2.2 \\
 | \quad \quad \times \\
 3.1 \rightarrow 2.2 \leftarrow 1.3
 \end{array}$$

$$3.2 \rightarrow 1.1 \leftarrow 2.3$$



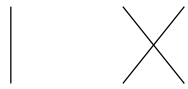
$$3.2 \rightarrow 2.3 \leftarrow 1.1$$

$$3.2 \rightarrow 1.3 \leftarrow 2.1$$



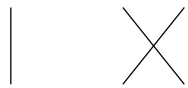
$$3.2 \rightarrow 2.1 \leftarrow 1.3$$

$$3.3 \rightarrow 1.1 \leftarrow 2.2$$



$$3.3 \rightarrow 2.2 \leftarrow 1.1$$

$$3.3 \rightarrow 1.2 \leftarrow 2.1$$



$$3.3 \rightarrow 2.1 \leftarrow 1.2$$

### 2.3. Rechtsthematisierungen

$$(3.2, 2.3) \rightarrow 1.1$$



$$(2.3, 3.2) \rightarrow 1.1$$

$$(2.2, 3.3) \rightarrow 1.1$$



$$(3.3, 2.2) \rightarrow 1.1$$

$$(2.1, 3.3) \rightarrow 1.2$$



$$(3.3, 2.1) \rightarrow 1.2$$

$$(3.1, 2.3) \rightarrow 1.2$$



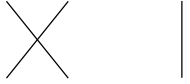
$$(2.3, 3.1) \rightarrow 1.2$$

(3.1, 2.2) → 1.3



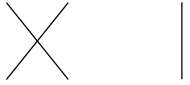
(2.2, 3.1) → 1.3

(2.1, 3.2) → 1.3



(3.2, 2.1) → 1.3

(3.2, 1.3) → 2.1



(1.3, 3.2) → 2.1

(1.2, 3.3) → 2.1



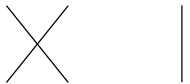
(3.3, 1.2) → 2.1

(3.1, 1.3) → 2.2



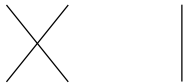
(1.3, 3.1) → 2.2

(1.1, 3.3) → 2.2



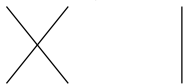
(3.3, 1.1) → 2.2

(3.1, 1.2) → 2.3



(1.2, 3.1) → 2.3

(1.1, 3.2) → 2.3



(3.2, 1.1) → 2.3

(2.2, 1.3) → 3.1



(1.3, 2.2) → 3.1

(1.2, 2.3) → 3.1



(2.3, 1.2) → 3.1

(2.1, 1.3) → 3.2



(1.3, 2.1) → 3.2

(1.1, 2.3) → 3.2



(2.3, 1.1) → 3.2

(2.1, 1.2) → 3.3



(1.2, 2.1) → 3.3

(1.1, 2.2) → 3.3



(2.2, 1.1) → 3.3

## Literatur

Toth, Alfred, Vollständige Thematisierungstripel. In: Electronic Journal for Mathematical Semiotics, 2026a

Toth, Alfred, Thematische Transpositionen. In: Electronic Journal for Mathematical Semiotics, 2026b

Toth, Alfred, Eigenreale Links-, Zentral- und Rechtsthematisierungen. In: Electronic Journal for Mathematical Semiotics, 2026c

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