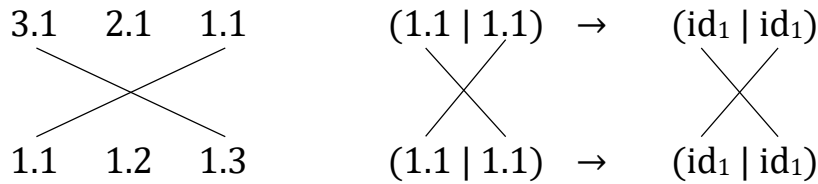


Systeme chiaistischer semiotischer und trajektischer Relationen

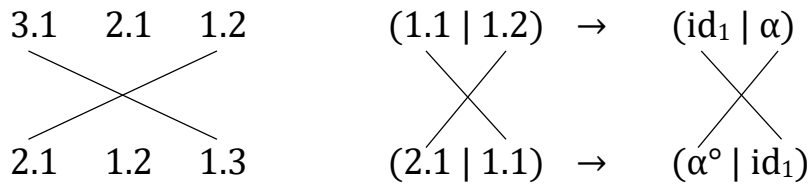
1. Die folgende Arbeit gibt alle 27 Zeichenklassen des vollständigen ternären Systems semiotischer Relationen zusammen mit den bijektiv abgebildeten trajektischen Dyadenklassen (vgl. Toth 2025) und deren Abbildung auf kategoriale trajektische Dyaden. Auf diese Weise kann man zeigen, daß alle drei Darstellungsweisen jedes Teilsystems dreifach chiaistisch sind.

2. Semiotische, trajektisch-numerische und trajektisch-kategoriale Relationen

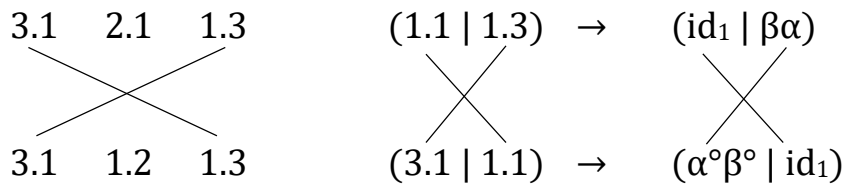
ZKL1



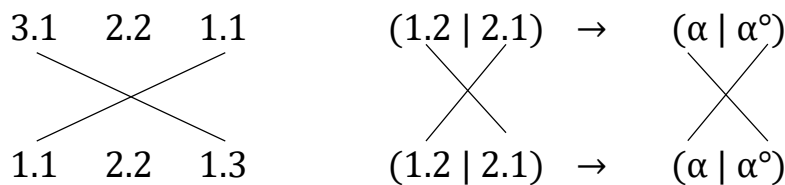
ZKL2



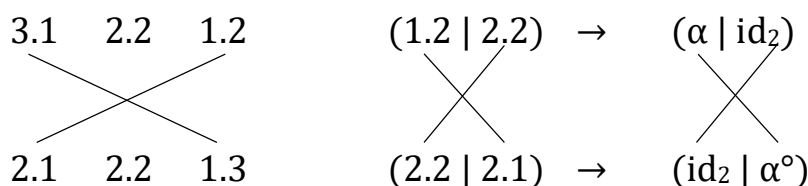
ZKL3



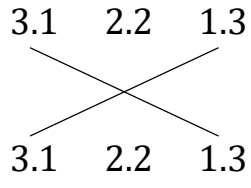
ZKL4



ZKL5

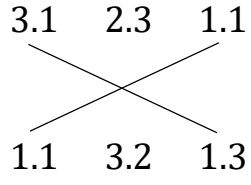


ZKL6



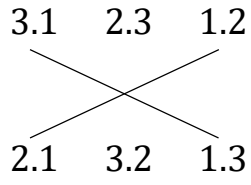
$$\begin{array}{ccc} (1.2 \mid 2.3) & \rightarrow & (\alpha \mid \beta) \\ (3.2 \mid 2.1) & \rightarrow & (\beta^\circ \mid \alpha^\circ) \end{array}$$

ZKL7



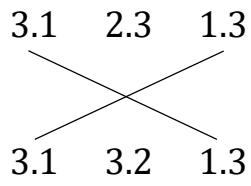
$$\begin{array}{ccc} (1.3 \mid 3.1) & \rightarrow & (\beta\alpha \mid \alpha^\circ\beta^\circ) \\ (1.3 \mid 3.1) & \rightarrow & (\beta\alpha \mid \alpha^\circ\beta^\circ) \end{array}$$

ZKL8



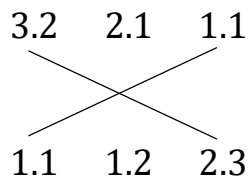
$$\begin{array}{ccc} (1.3 \mid 3.2) & \rightarrow & (\beta\alpha \mid \beta^\circ) \\ (2.3 \mid 3.1) & \rightarrow & (\beta \mid \alpha^\circ\beta^\circ) \end{array}$$

ZKL9



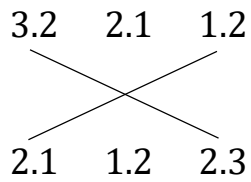
$$\begin{array}{ccc} (1.3 \mid 3.3) & \rightarrow & (\beta\alpha \mid \text{id}_3) \\ (3.3 \mid 3.1) & \rightarrow & (\text{id}_3 \mid \alpha^\circ\beta^\circ) \end{array}$$

ZKL10



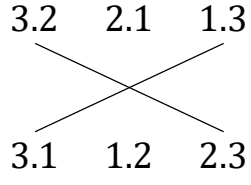
$$\begin{array}{ccc} (2.1 \mid 1.1) & \rightarrow & (\alpha^\circ \mid \text{id}_1) \\ (1.1 \mid 1.2) & \rightarrow & (\text{id}_1 \mid \alpha) \end{array}$$

ZKL11



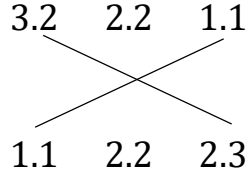
$$\begin{array}{ccc} (2.1 \mid 1.2) & \rightarrow & (\alpha^\circ \mid \alpha) \\ (2.1 \mid 1.2) & \rightarrow & (\alpha^\circ \mid \alpha) \end{array}$$

ZKL12



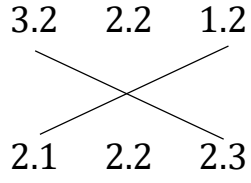
$$\begin{array}{ccc} (2.1 \mid 1.3) & \rightarrow & (\alpha^\circ \mid \beta\alpha) \\ (3.1 \mid 1.2) & \rightarrow & (\alpha^\circ\beta^\circ \mid \alpha) \end{array}$$

ZKL13



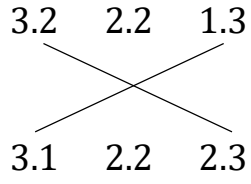
$$\begin{array}{ccc} (2.2 \mid 2.1) & \rightarrow & (\text{id}_2 \mid \alpha^\circ) \\ (1.2 \mid 2.2) & \rightarrow & (\alpha \mid \text{id}_2) \end{array}$$

ZKL14



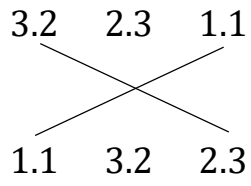
$$\begin{array}{ccc} (2.2 \mid 2.2) & \rightarrow & (\text{id}_2 \mid \text{id}_2) \\ (2.2 \mid 2.2) & \rightarrow & (\text{id}_2 \mid \text{id}_2) \end{array}$$

ZKL15



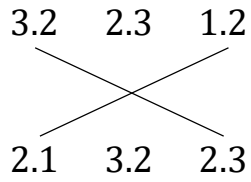
$$\begin{array}{ccc} (2.2 \mid 2.3) & \rightarrow & (\text{id}_2 \mid \beta) \\ (3.2 \mid 2.2) & \rightarrow & (\beta^\circ \mid \text{id}_2) \end{array}$$

ZKL16



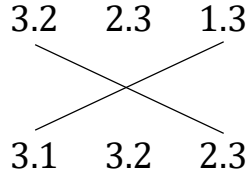
$$\begin{array}{ccc} (2.3 \mid 3.1) & \rightarrow & (\beta \mid \alpha^\circ\beta^\circ) \\ (1.3 \mid 3.2) & \rightarrow & (\beta\alpha \mid \beta^\circ) \end{array}$$

ZKL17



$$\begin{array}{ccc} (2.3 \mid 3.2) & \rightarrow & (\beta \mid \beta^\circ) \\ (2.3 \mid 3.2) & \rightarrow & (\beta \mid \beta^\circ) \end{array}$$

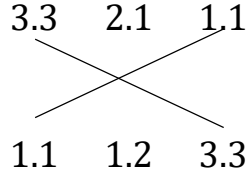
ZKL18



$$(2.3 \mid 3.3) \rightarrow (\beta \mid \text{id}_3)$$

$$(3.3 \mid 3.2) \rightarrow (\text{id}_3 \mid \beta^\circ)$$

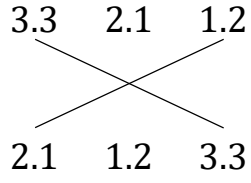
ZKL19



$$(3.1 \mid 1.1) \rightarrow (\alpha^\circ \beta^\circ \mid \text{id}_1)$$

$$(1.1 \mid 1.3) \rightarrow (\text{id}_1 \mid \beta\alpha)$$

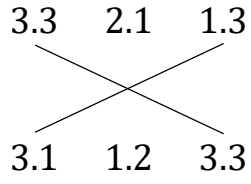
ZKL20



$$(3.1 \mid 1.2) \rightarrow (\alpha^\circ \beta^\circ \mid \alpha)$$

$$(2.1 \mid 1.3) \rightarrow (\alpha^\circ \mid \beta\alpha)$$

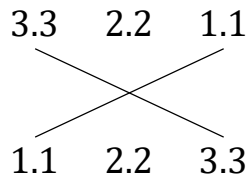
ZKL21



$$(3.1 \mid 1.3) \rightarrow (\alpha^\circ \beta^\circ \mid \beta\alpha)$$

$$(3.1 \mid 1.3) \rightarrow (\alpha^\circ \beta^\circ \mid \beta\alpha)$$

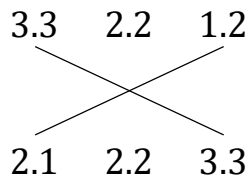
ZKL22



$$(3.2 \mid 2.1) \rightarrow (\beta^\circ \mid \alpha^\circ)$$

$$(1.2 \mid 2.3) \rightarrow (\alpha \mid \beta)$$

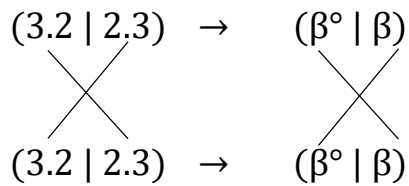
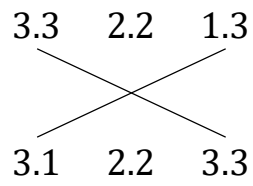
ZKL23



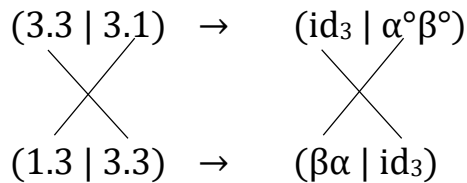
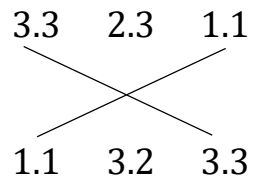
$$(3.2 \mid 2.2) \rightarrow (\beta^\circ \mid \text{id}_2)$$

$$(2.2 \mid 2.3) \rightarrow (\text{id}_2 \mid \beta)$$

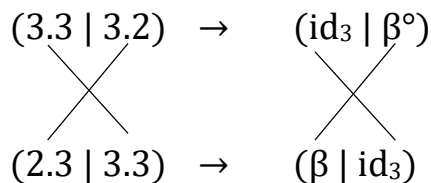
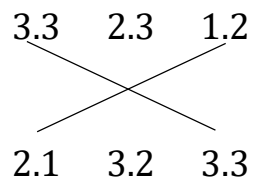
ZKL24



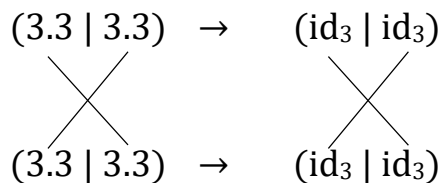
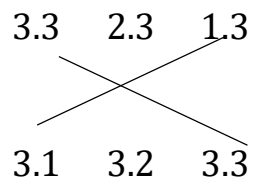
ZKL25



ZKL26



ZKL27



Literatur

Toth, Alfred, Das trajektische dyadische semiotische Dualsystem. In: Electronic Journal for Mathematical Semiotics, 2025

4.11.2025