

Prof. Dr. Alfred Toth

Nicht-Bijektion der Abbildung monokontexturaler semiotischer auf trajektische semiotische Dualsysteme

1. Wir gehen erneut vom Gesamtsystem der 27 semiotischen Relationen, dargestellt als Trajekte, aus (vgl. Toth 2025a) und betrachten die Dualsysteme, die mehr sind als die Summe von Zeichenklassen und Realitätsthematiken, da trajektische semiotische Relationen durch

$$\text{ZKI} = (3 \rightarrow x, 2 \rightarrow y, y \leftarrow 2, z \leftarrow 1)$$

bzw.

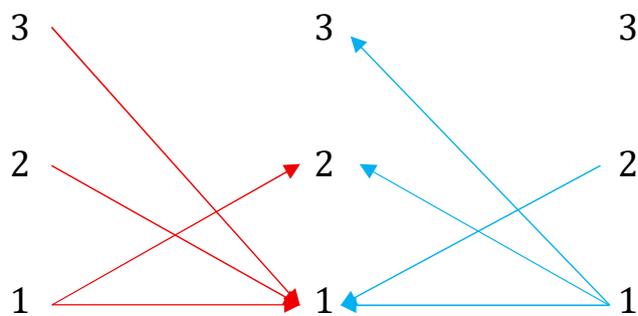
$$\text{RTh} = (z \rightarrow 1, y \rightarrow 2, y \leftarrow 2, x \leftarrow 3),$$

d.h. durch Morphismen und Heteromorphismen und also polykontextural definiert werden (vgl. Toth 2025c, d). Wie man leicht zeigt, ist die Abbildung monokontexturaler auf trajektisch-polykontexturale semiotische Dualsysteme nicht-bijektiv.

1. Trichotomische Triade

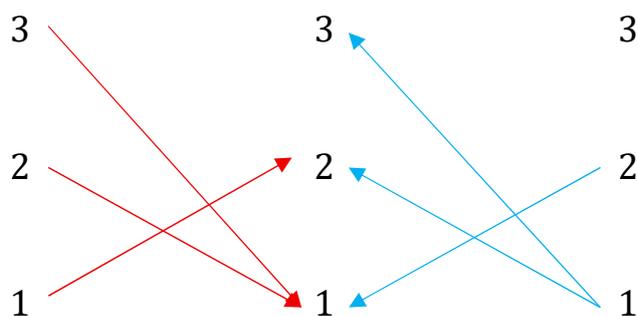
1. Semiotische Relation

$$\text{DS} = [(3.1, 2.1, 1.1) \times (1.1, 1.2, 1.3)]$$



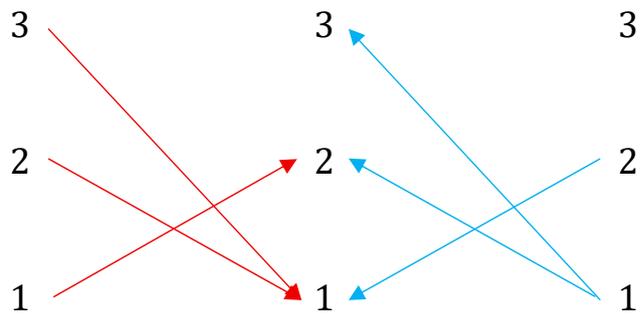
2. Semiotische Relation

$$\text{DS} = [(3.1, 2.1, 1.2) \times (2.1, 1.2, 1.3)]$$



3. Semiotische Relation

$$DS = [(3.1, 2.1, 1.3) \times (3.1, 1.2, 1.3)]$$

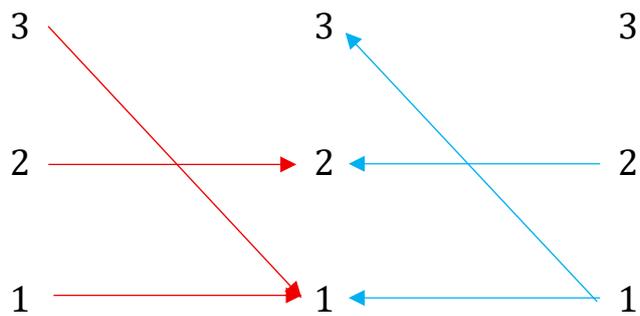


$$\mathfrak{I}(DS2) = \mathfrak{I}(DS3).$$

2. Trichotomische Triade

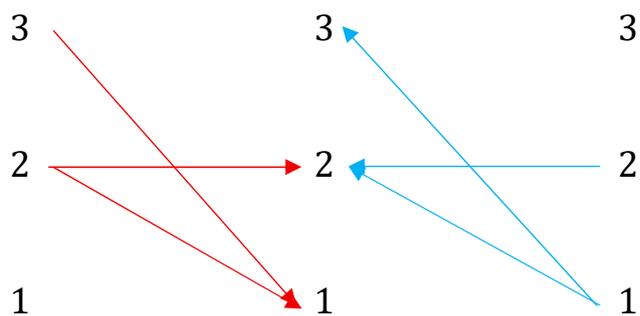
4. Semiotische Relation

$$DS = [(3.1, 2.2, 1.1) \times (1.1, 2.2, 1.3)]$$



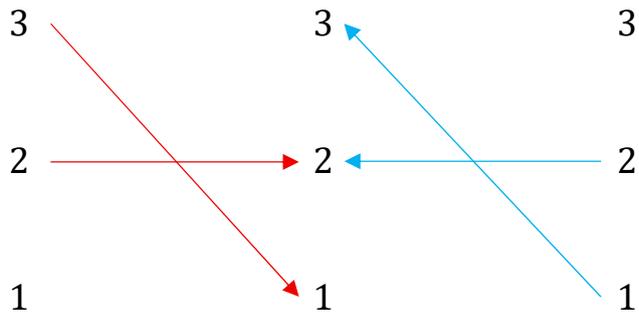
5. Semiotische Relation

$$DS = [(3.1, 2.2, 1.2) \times (2.1, 2.2, 1.3)]$$



6. Semiotische Relation

$$DS = [(3.1, 2.2, 1.3) \times (3.1, 2.2, 1.3)]$$

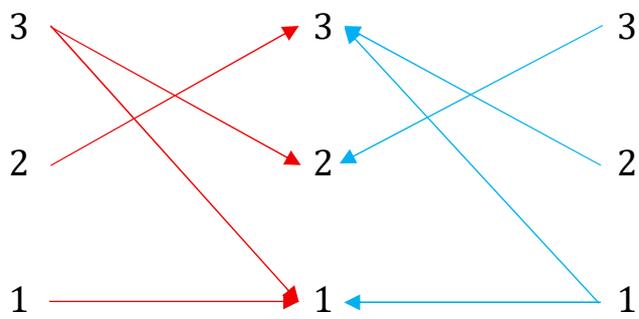


$$\mathfrak{I}(\text{DS4}) \setminus (1 \rightarrow 1 \mid 1 \leftarrow 1) = \mathfrak{I}(\text{DS6}).$$

3. Trichotomische Triade

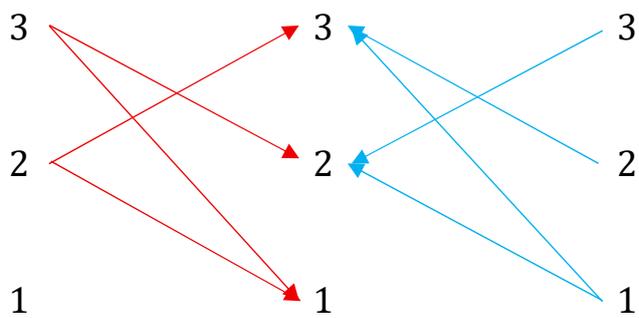
7. Semiotische Relation

$$\text{DS} = [(3.1, 2.3, 1.1) \times (1.1, 3.2, 1.3)]$$



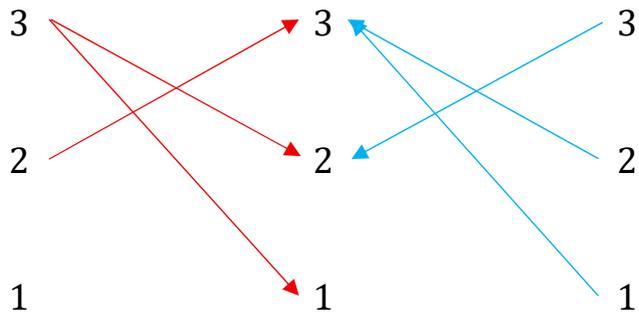
8. Semiotische Relation

$$\text{DS} = [(3.1, 2.3, 1.2) \times (2.1, 3.2, 1.3)]$$



9. Semiotische Relation

$$\text{DS} = [(3.1, 2.3, 1.3) \times (3.1, 3.2, 1.3)]$$

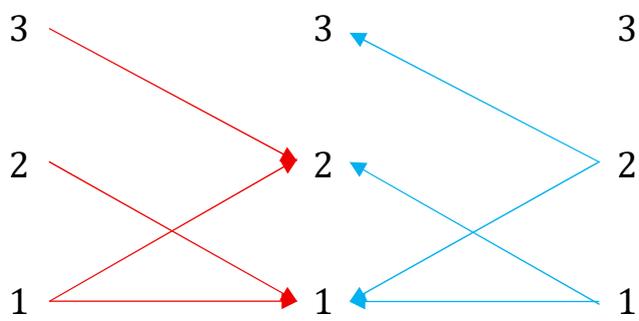


$\mathfrak{I}(\text{DS7}) \setminus (1 \rightarrow 1 \mid 1 \leftarrow 1) = \mathfrak{I}(\text{DS9})$.

4. Trichotomische Triade

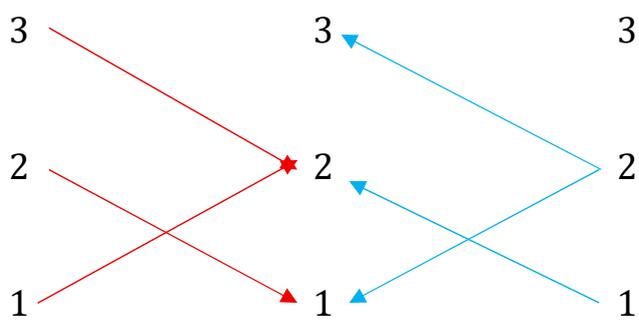
10. Semiotische Relation

$\text{DS} = [(3.2, 2.1, 1.1) \times (1.1, 1.2, 2.3)]$



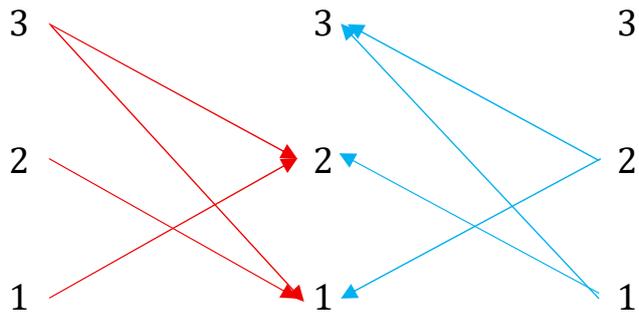
11. Semiotische Relation

$\text{DS} = [(3.2, 2.1, 1.2) \times (2.1, 1.2, 2.3)]$



12. Semiotische Relation

$\text{DS} = [(3.2, 2.1, 1.3) \times (3.1, 1.2, 2.3)]$

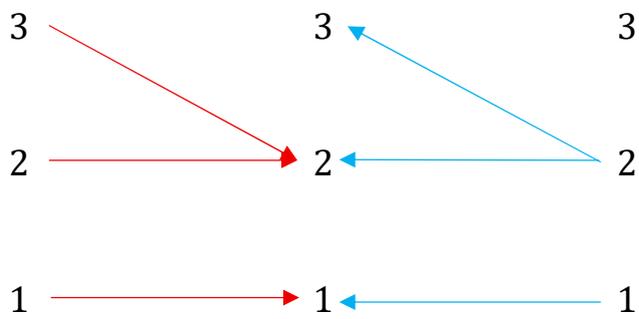


$$\mathfrak{I}(\text{DS10}) \setminus (1 \rightarrow 1 \mid 1 \leftarrow 1) = \mathfrak{I}(\text{DS11}).$$

5. Trichotomische Triade

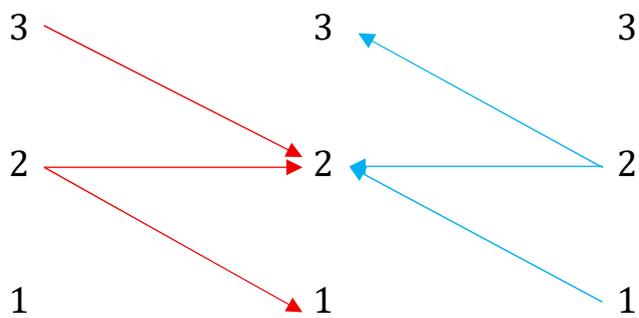
13. Semiotische Relation

$$\text{DS} = [(3.2, 2.2, 1.1) \times (1.1, 2.2, 2.3)]$$



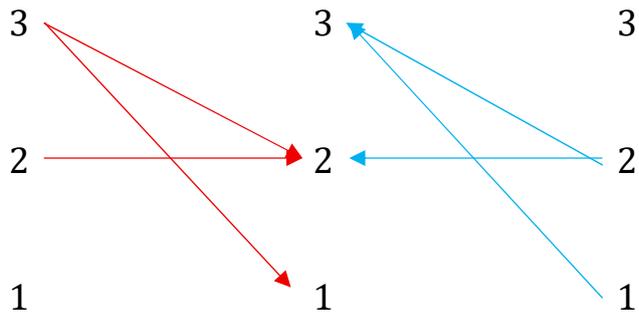
14. Semiotische Relation

$$\text{DS} = [(3.2, 2.2, 1.2) \times (2.1, 2.2, 2.3)]$$



15. Semiotische Relation

$$\text{DS} = [(3.2, 2.2, 1.3) \times (3.1, 2.2, 2.3)]$$

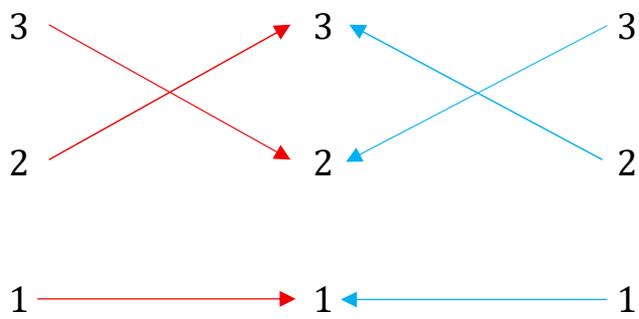


$\mathfrak{I}(\text{DS13}) \neq \mathfrak{I}(\text{DS14}) \neq \mathfrak{I}(\text{DS15})$.

6. Trichotomische Triade

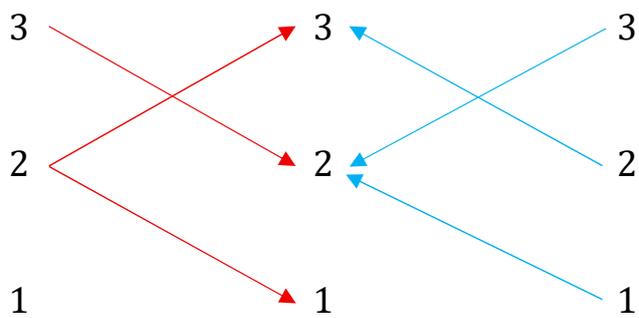
16. Semiotische Relation

$\text{DS} = [(3.2, 2.3, 1.1) \times (1.1, 3.2, 2.3)]$



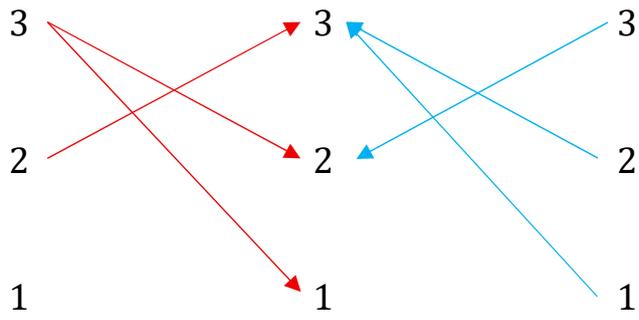
17. Semiotische Relation

$\text{DS} = [(3.2, 2.3, 1.2) \times (2.1, 3.2, 2.3)]$



18. Semiotische Relation

$\text{DS} = [(3.2, 2.3, 1.3) \times (3.1, 3.2, 2.3)]$

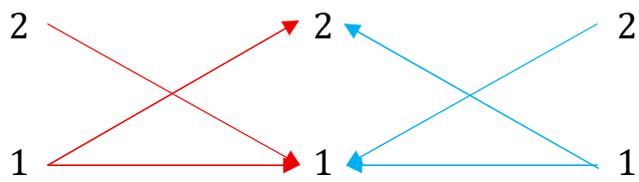


$\mathfrak{I}(\text{DS16}) \neq \mathfrak{I}(\text{DS17}) \neq \mathfrak{I}(\text{DS18})$.

7. Trichotomische Triade

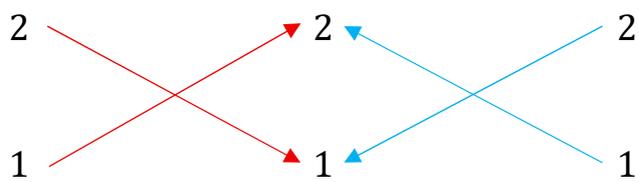
19. Semiotische Relation

$\text{DS} = [(3.3, 2.1, 1.1) \times (1.1, 1.2, 3.3)]$



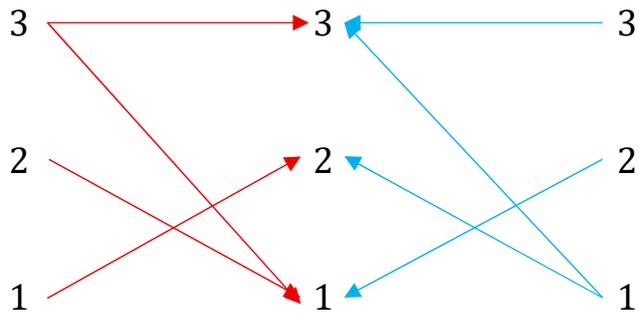
20. Semiotische Relation

$\text{DS} = [(3.3, 2.1, 1.2) \times (2.1, 1.2, 3.3)]$



21. Semiotische Relation

$\text{DS} = [(3.3, 2.1, 1.3) \times (3.1, 1.2, 3.3)]$

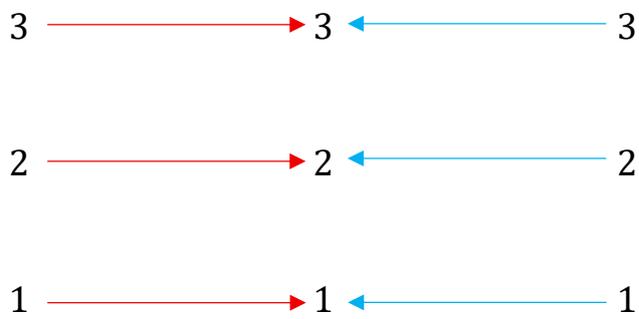


$$\mathfrak{I}(\text{DS19}) \setminus (3 \rightarrow 3 \mid 3 \leftarrow 3) = \mathfrak{I}(\text{DS20}).$$

8. Trichotomische Triade

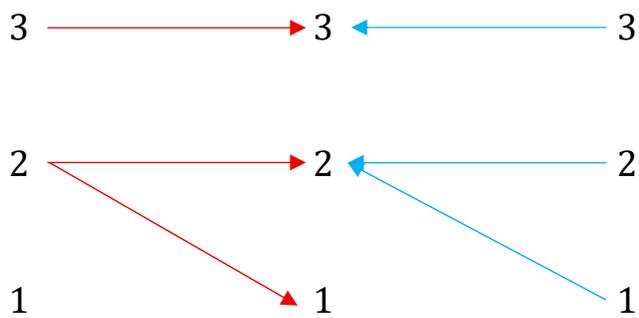
22. Semiotische Relation

$$\text{DS} = [(3.3, 2.2, 1.1) \times (1.1, 2.2, 3.3)]$$



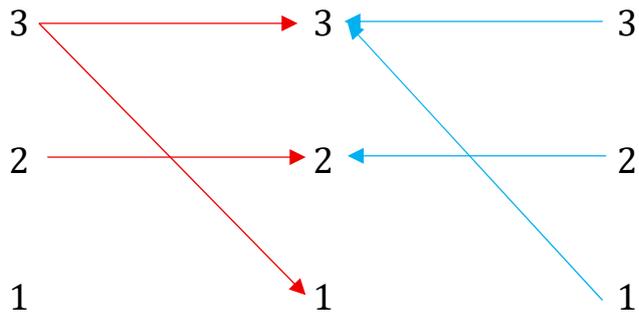
23. Semiotische Relation

$$\text{DS} = [(3.3, 2.2, 1.2) \times (2.1, 2.2, 3.3)]$$



24. Semiotische Relation

$$\text{DS} = [(3.3, 2.2, 1.3) \times (3.1, 2.2, 3.3)]$$

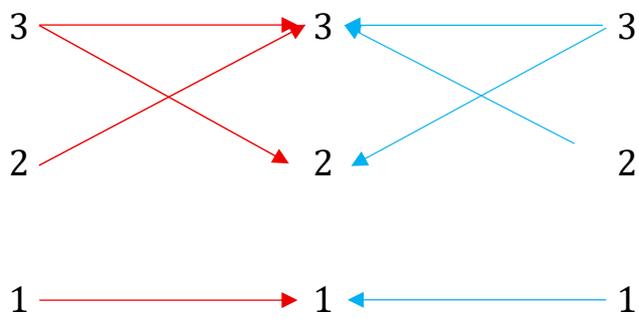


$\mathfrak{I}(\text{DS22}) \neq \mathfrak{I}(\text{DS23}) \neq \mathfrak{I}(\text{DS24})$.

9. Trichotomische Triade

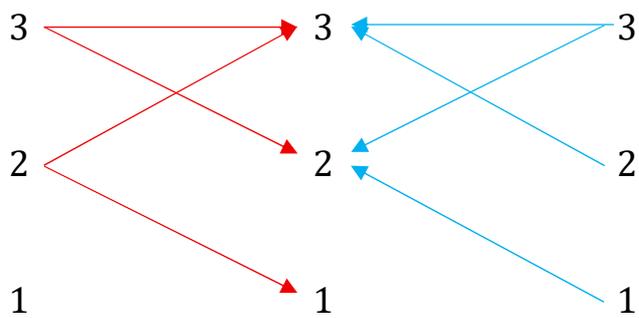
25. Semiotische Relation

$\text{DS} = [(3.3, 2.3, 1.1) \times (1.1, 3.2, 3.3)]$



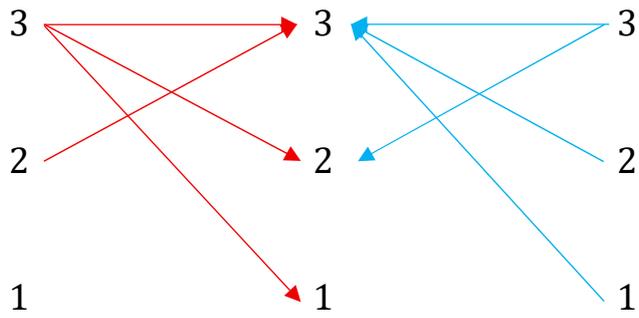
26. Semiotische Relation

$\text{DS} = [(3.3, 2.3, 1.2) \times (2.1, 3.2, 3.3)]$



27. Semiotische Relation

$\text{DS} = [(3.3, 2.3, 1.3) \times (3.1, 3.2, 3.3)]$



$\mathfrak{I}(\text{DS25}) \neq \mathfrak{I}(\text{DS26}) \neq \mathfrak{I}(\text{DS27})$.

Literatur

Toth, Alfred, Vollständiges trajektisches System triadisch-trichotomischer Relationen. In: Electronic Journal for Mathematical Semiotics, 2025a

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