Prof. Dr. Alfred Toth

Permutationen trajektischer Relationen

1. In Toth (2025) hatten wir das vollständige System der $3^3 = 27$ ternären (triadisch-trichotomischen) semiotischen Relationen in Form von trajektischen Abbildungen der Form

T = (1, 2, 3) | (1, 2, 3) mit | = R((1, 2, 3), (1, 2, 3))

dargestellt und und die semiotischen Relationen nach dem Vorschlag Walthers für Zeichenklassen (vgl. Walther 1979, S. 79) in Kompositionen dyadischer Teilrelationen zerlegt

(3.x, 2.y, 1.z) = (3.x → 2.y) ∘ (2.y → 1.z)

(z.1, y.2, x.3) = (z.1 → y.2) ∘ (y.2 → x.3).

2. Im folgenden schauen wir uns die Veränderungen in den Abbildungen an, wenn wir eine ternäre ZKl auf 3! = 6 Weisen permutieren. Als Beispiel stehe

ZKl^3 = (3.1, 2.1, 1.3)

Die Menge der Permutationen von ZKl^3 ist

$\mathcal{P}_1 ZKl^3$ = (3.1, 2.1, 1.3)

$\mathcal{P}_2 ZKl^3$ = (3.1, 1.3, 2.1)

$\mathcal{P}_3 ZKl^3$ = (2.1, 3.1, 1.3)

$\mathcal{P}_4 ZKl^3$ = (2.1, 1.3, 3.1)

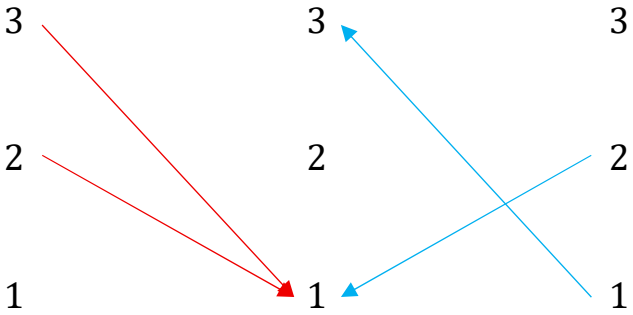
$\mathcal{P}_5 ZKl^3$ = (1.3, 3.1, 2.1)

$\mathcal{P}_6 ZKl^3$ = (1.3, 2.1, 3.1)

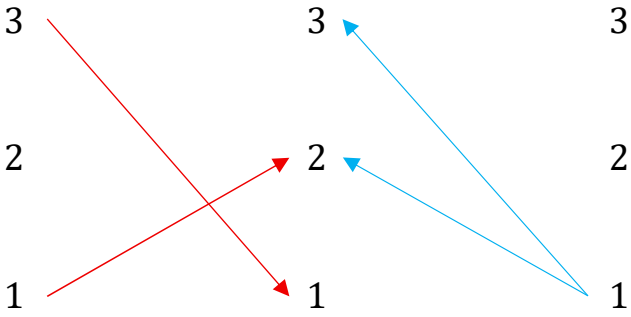
2. Permutationen von ZKl^3

1. Permutation

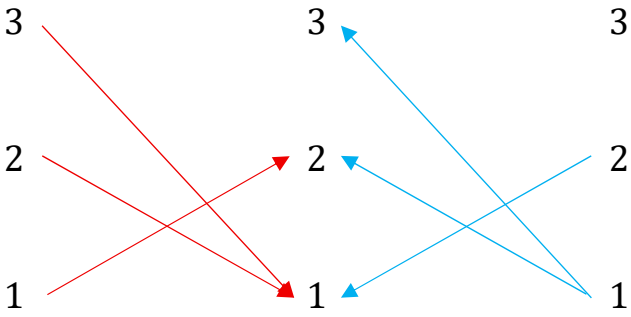
$\mathcal{P}_1 ZKl^3$ = (3.1, 2.1, 1.3)



$\mathcal{P}_1\mathrm{RTh}^3 = (3.1, 1.2, 1.3)$

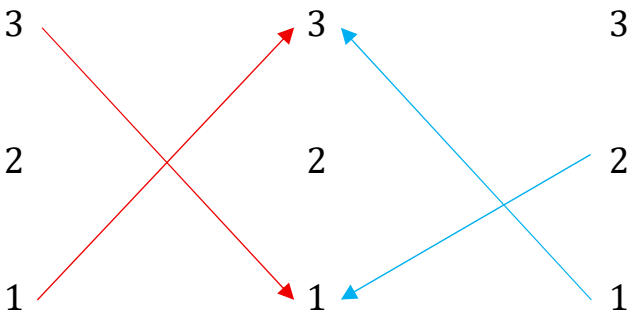


$\mathcal{P}_1\mathrm{DS}^3 = [(3.1, 2.1, 1.3) \times (3.1, 1.2, 1.3)]$

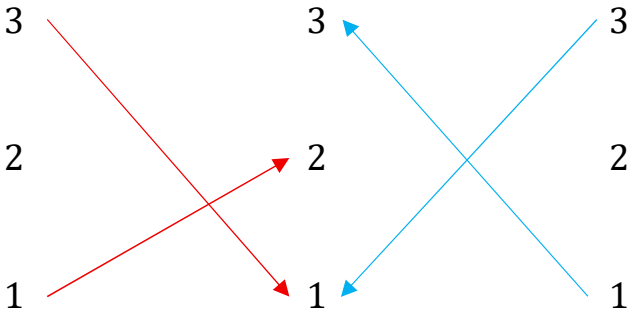


2. Permutation

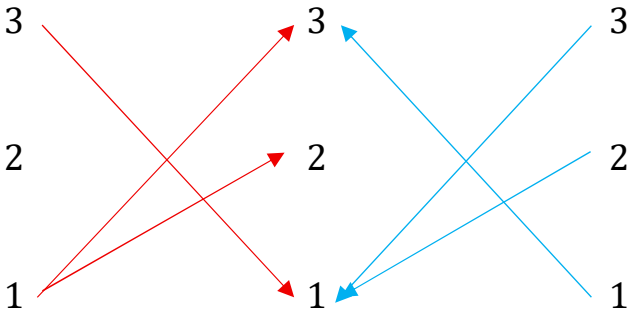
$\mathcal{P}_2\mathrm{ZKl}^3 = (3.1, 1.3, 2.1)$



$\mathcal{P}_2\mathrm{RTh}^3 = (1.2, 3.1, 1.3)$

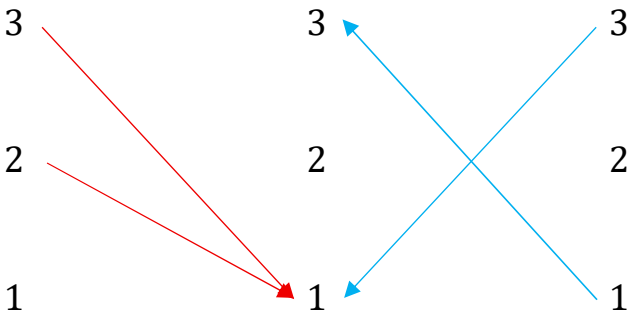


$\mathcal{P}_2\mathrm{DS}^3 = [(3.1, 1.3, 2.1) \times (1.2, 3.1, 1.3)]$

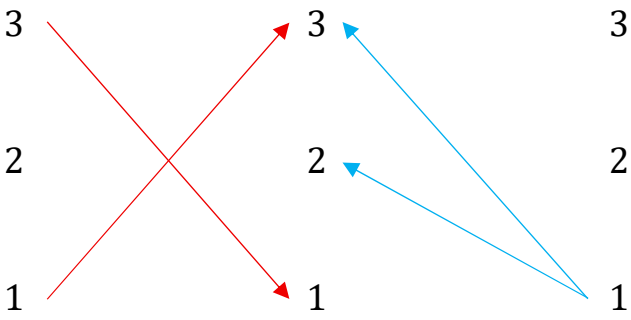


3. Permutation

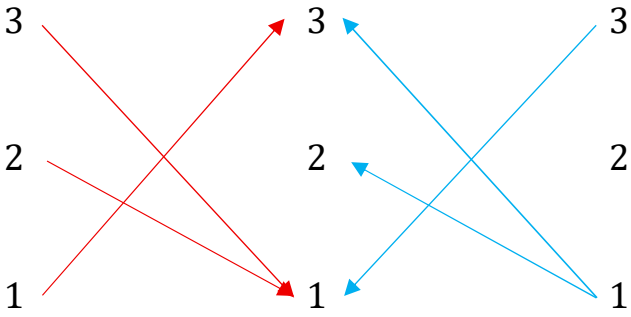
$\mathcal{P}_3\mathrm{ZKl}^3 = (2.1, 3.1, 1.3)$



$\mathcal{P}_3\mathrm{RTh}^3 = (3.1, 1.3, 1.2)$

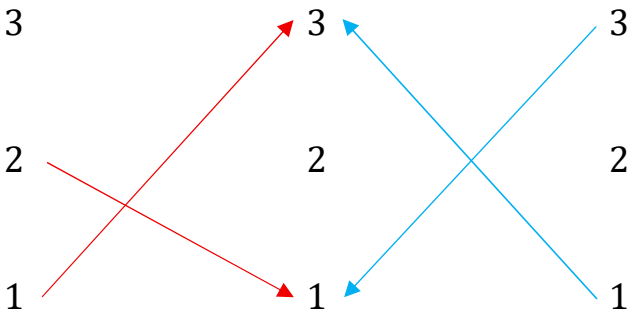


$\mathcal{P}_3\mathrm{DS}^3 = [(2.1, 3.1, 1.3) \times (3.1, 1.3, 1.2)]$

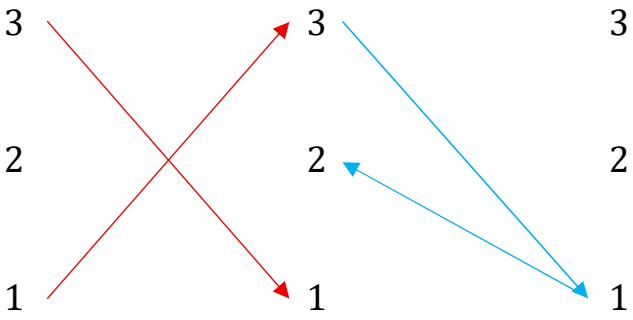


4. Permutation

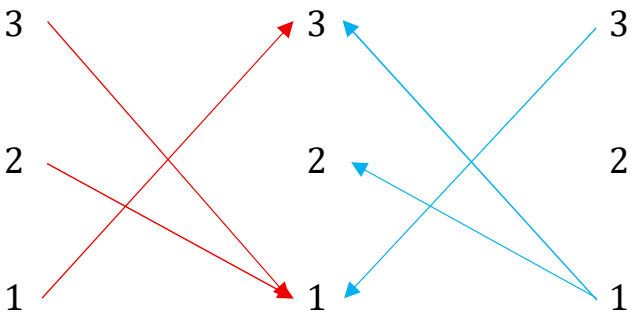
$\mathcal{P}_4\mathrm{ZKl}^3 = (2.1, 1.3, 3.1)$



$\mathcal{P}_4\mathrm{RTh}^3 = (1.3, 3.1, 1.2)$

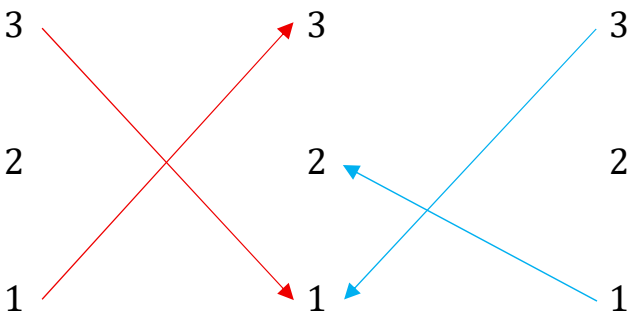


$\mathcal{P}_4\mathrm{DS}^3 = [(2.1, 1.3, 3.1) \times (1.3, 3.1, 1.2)]$

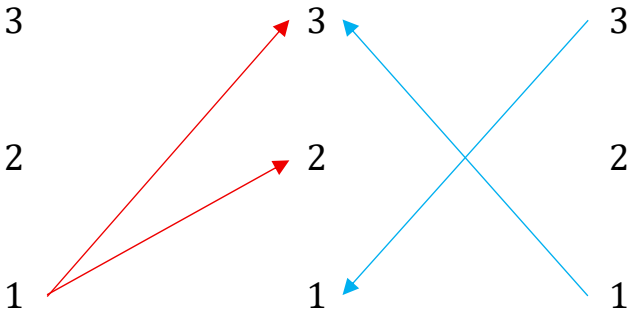


5. Permutation

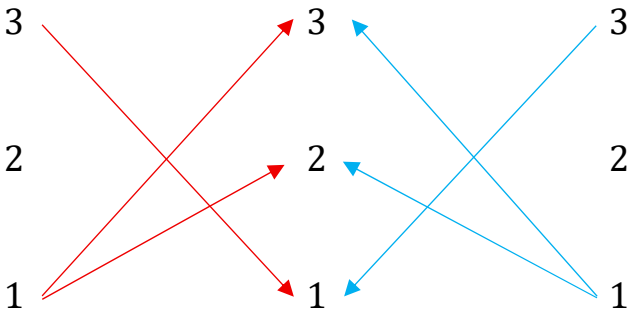
$\mathcal{P}_5\mathrm{ZKl}^3 = (1.3, 3.1, 2.1)$



$\mathcal{P}_5\text{RTh}^3 = (1.2, 1.3, 3.1)$

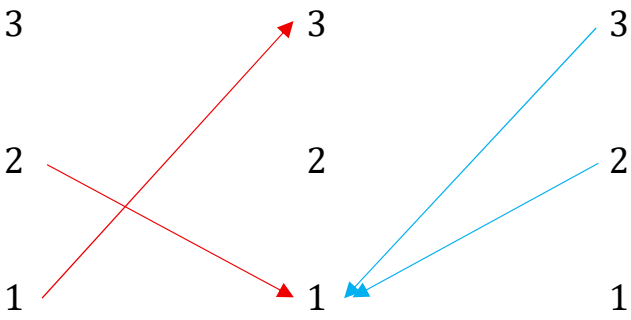


$\mathcal{P}_5\text{DS}^3 = [(1.3, 3.1, 2.1) \times (1.2, 1.3, 3.1)]$

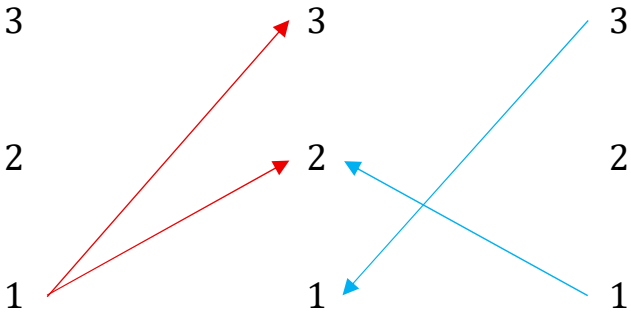


6. Permutation

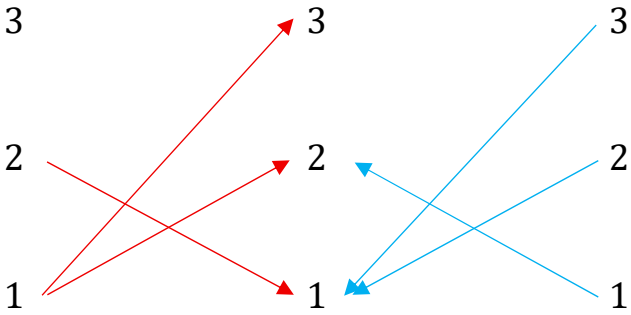
$\mathcal{P}_6\text{ZKl}^3 = (1.3, 2.1, 3.1)$



$\mathcal{P}_6\text{RTh}^3 = (1.3, 1.2, 3.1)$



$\mathcal{P}_6 DS^3 = [(1.3, 2.1, 3.1) \times (1.3, 1.2, 3.1)]$



Literatur

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

Walther, Elisabeth, Allgemeine Zeichenlehre. 2. Aufl. Stuttgart 1979

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