

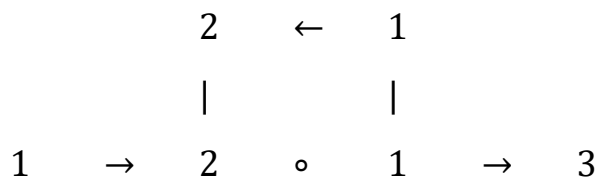
Prof. Dr. Alfred Toth

Schritt und Gegenschritt

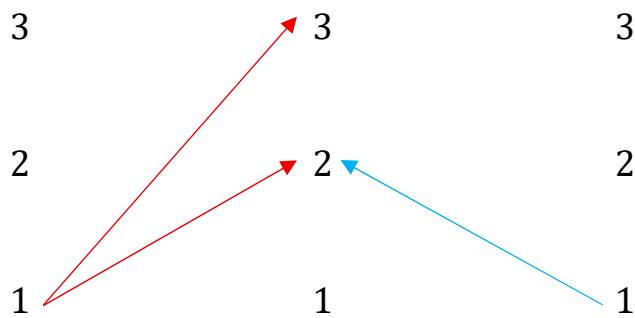
1. Kaehr (2007, S. 26):

In an open world it wouldn't make much sense to run numbers forwards and backwards at once. But in a closed world, which is open to a multitude of other worlds, numbers are situated and distributed over many places and running together in all directions possible. Each step in a open/closed world goes together with its counter-step. There is no move without its counter-move.

Schritt und Sprung in Diamonds

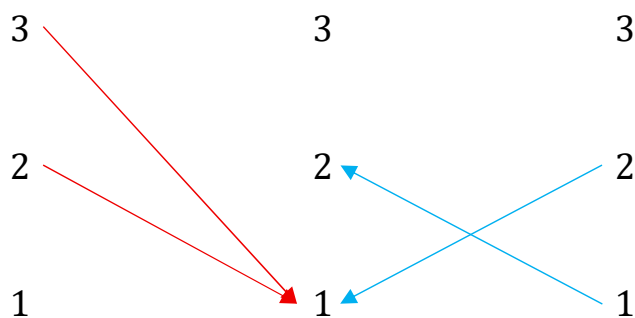


Schritt und Gegenschritt in Trajektionen



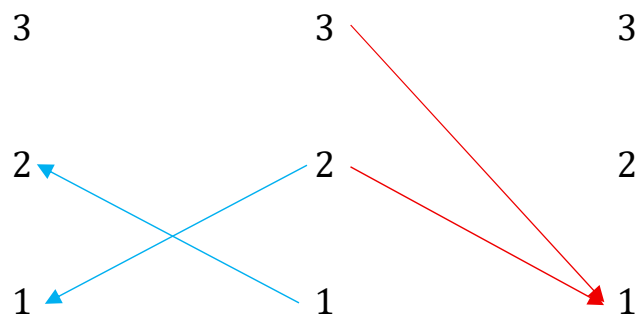
2. Trajektische Zeichenklassen

ZKl = (3.1, 2.1, 1.2) = (3 → 1, 2 → 1 | 1 ← 2, 2 ← 1)

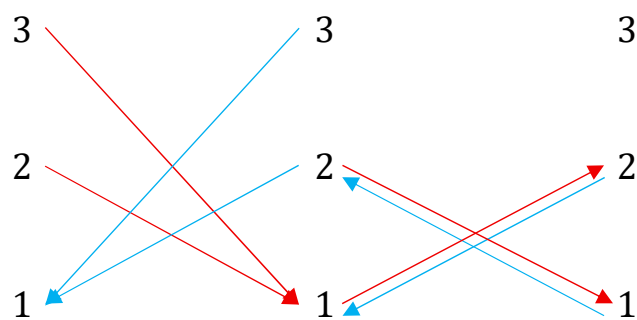


Links-Rechts-Dualität

$$\mathfrak{T}^{-1}_{\text{ZKI}} = (1 \leftarrow 2, 2 \leftarrow 1 \mid 3 \rightarrow 1, 2 \rightarrow 1)$$

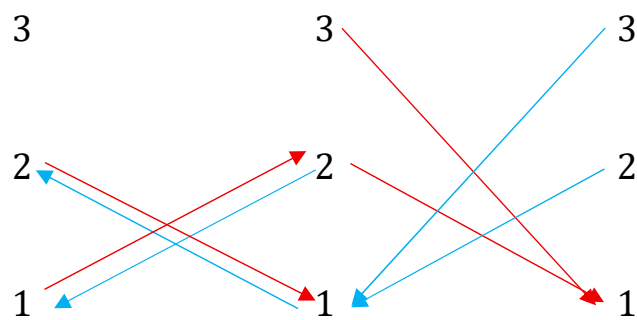


$$\mathfrak{T}_{\text{ZKI}} = (3 \rightarrow 1, 1 \leftarrow 3, 2 \rightarrow 1, 1 \leftarrow 2 \mid 1 \leftarrow 2, 2 \rightarrow 1, 2 \leftarrow 1, 1 \rightarrow 2)$$



Links-Rechts-Dualität

$$\mathfrak{T}^{-1}_{\text{ZKI}} = (1 \leftarrow 2, 2 \rightarrow 1, 2 \leftarrow 1, 1 \rightarrow 2 \mid 3 \rightarrow 1, 1 \leftarrow 3, 2 \rightarrow 1, 1 \leftarrow 2)$$



Literatur

Kaehr, Rudolf, Steps Towards a Diamond Category Theory. Glasgow, U.K. 2007

Toth, Alfred, Multiple Trajektionen. In: Electronic Journal for Mathematical Semiotics, 2025

23.9.2025