

Trajektische Ableitungen

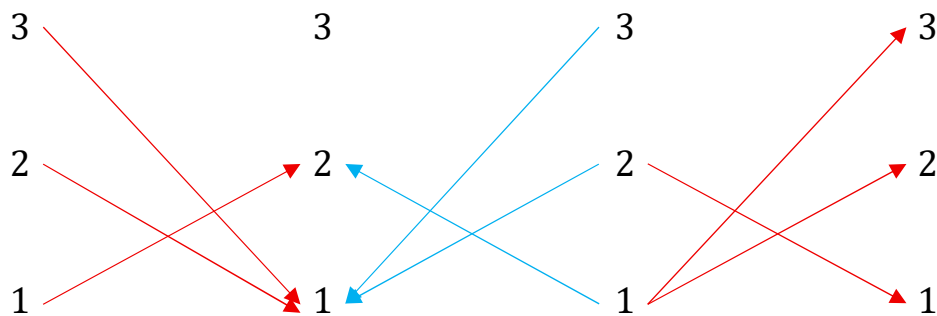
1. Im folgenden gehen wir aus von der Trajektion quadralektischer semiotischer Relationen, wie sie in Toth (2025a) dargestellt wurden, untersuchen nun aber die Trajekte 2. Stufe (vgl. Toth 2025b) oder abgeleiteten Trajekte und stellen sie den nicht-abgeleiteten Trajekten oder Trajekten 1. Stufe gegenüber.

2. Nicht-abgeleitete und abgeleitete Trajekte

1.a. $\mathfrak{T}[(3.1, 2.1, 1.2), (1.2, 2.1, 3.1), (2.1, 1.2, 1.3)] =$

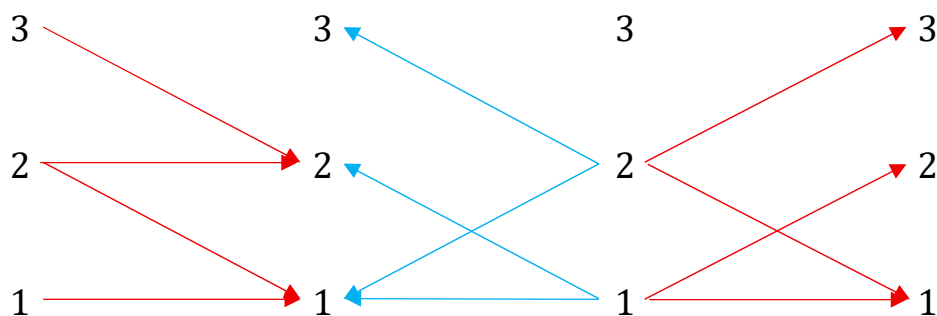
3.1 2.1 1.2 | 2.1 1.2 1.3

1.2 2.1 | 2.1 3.1



1.b. $\mathfrak{T}'[(3.1, 2.1, 1.2), (1.2, 2.1, 3.1), (2.1, 1.2, 1.3)] =$

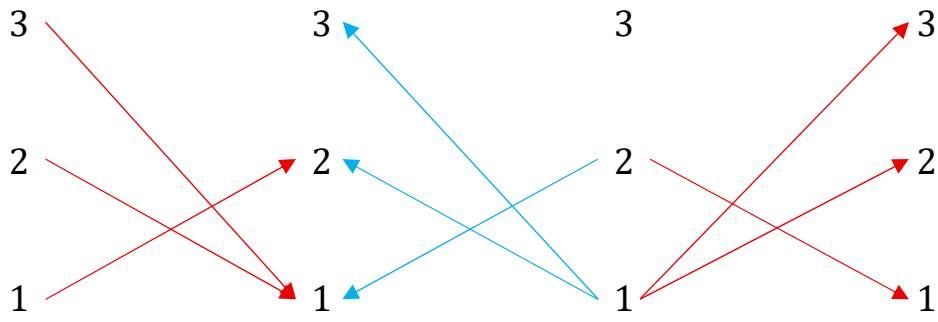
$((3.2, 1.1), (2.1, 2.2), (1.2, 2.1), (2.3, 1.1), (2.1, 1.2), (1.1, 2.3)) =$



2.a. $\mathfrak{T}[(3.1, 2.1, 1.2), (1.3, 1.2, 2.1), (2.1, 1.2, 1.3)] =$

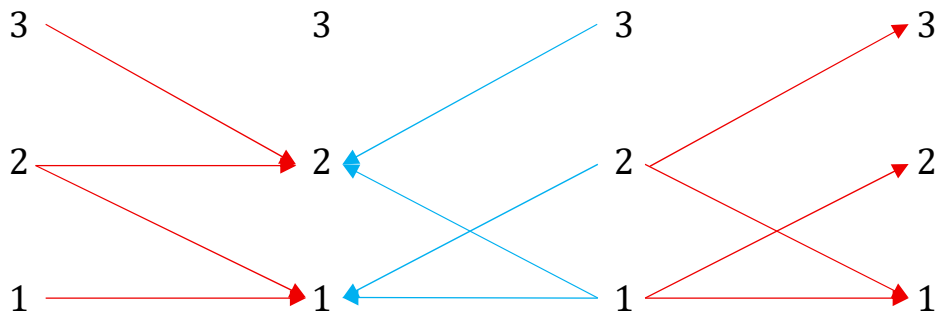
3.1 2.1 1.2 | 2.1 1.2 1.3

1.3 1.2 | 1.2 2.1



$$2.b. \mathfrak{T}'[(3.1, 2.1, 1.2), (1.3, 1.2, 2.1), (2.1, 1.2, 1.3)] =$$

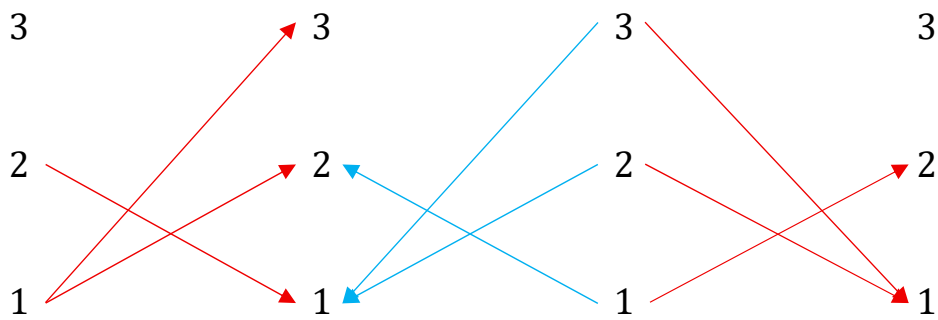
$$((3.2, 1.1), (2.1, 2.2), (1.1, 3.2), (1.2, 2.1), (2.1, 1.2), (1.1, 2.3)) =$$



$$3.a. \mathfrak{T}[(2.1, 1.2, 1.3), (3.1, 2.1, 1.2), (1.2, 2.1, 3.1)] =$$

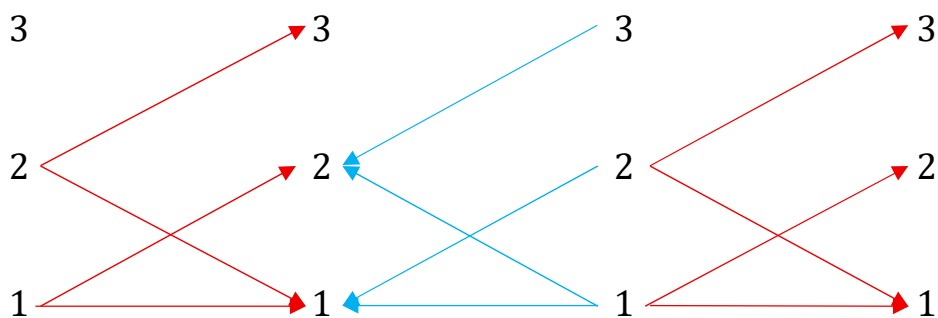
$$2.1 \quad 1.2 \quad 1.3 \quad | \quad 1.2 \quad 2.1 \quad 3.1$$

$$3.1 \quad 2.1 \quad | \quad 2.1 \quad 1.2$$



$$3.b. \mathfrak{T}[(2.1, 1.2, 1.3), (3.1, 2.1, 1.2), (1.2, 2.1, 3.1)] =$$

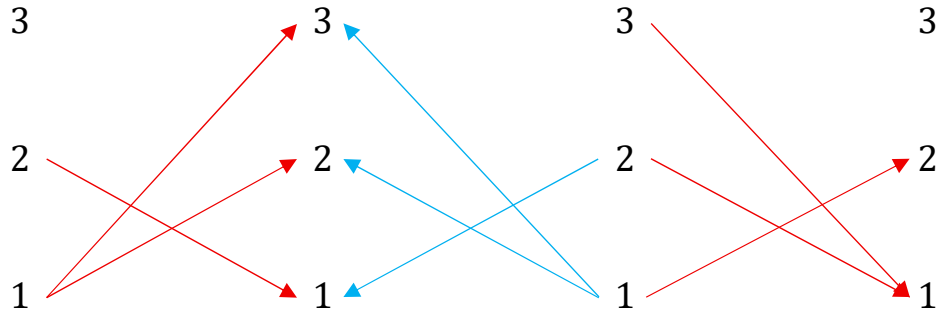
$$((2.1, 1.2), (1.1, 2.3), (3.2, 1.1), (2.1, 1.2), (1.2, 2.1), (2.3, 1.1)) =$$



4.a. $\mathfrak{T}[(2.1, 1.2, 1.3), (1.3, 1.2, 2.1), (1.2, 2.1, 3.1)] =$

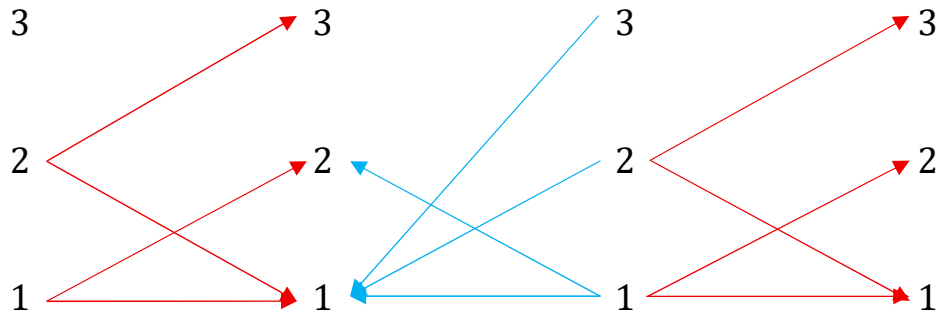
2.1 1.2 1.3 | 1.2 2.1 3.1

1.3 1.2 | 1.2 2.1



4.b. $\mathfrak{T}[(2.1, 1.2, 1.3), (1.3, 1.2, 2.1), (1.2, 2.1, 3.1)] =$

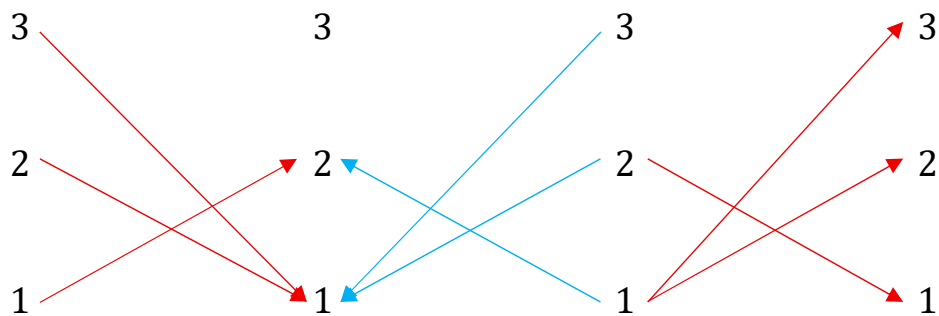
$((2.1, 1.2), (1.1, 2.3), (1.1, 3.2), (1.2, 2.1), (1.2, 2.1), (2.3, 1.1)) =$



5.a. $\mathfrak{T}[(1.2, 2.1, 3.1), (3.1, 2.1, 1.2), (1.3, 1.2, 2.1)] =$

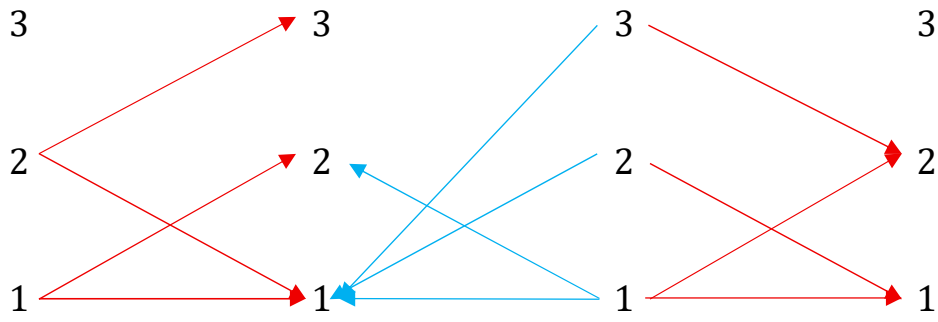
1.2 2.1 3.1 | 1.3 1.2 2.1

3.1 2.1 | 2.1 1.2



5.b. $\mathfrak{T}[(1.2, 2.1, 3.1), (3.1, 2.1, 1.2), (1.3, 1.2, 2.1)] =$

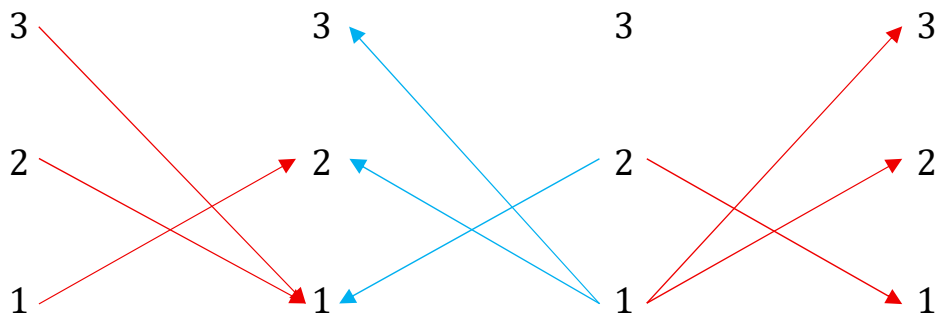
$((1.2, 2.1), (2.3, 1.1), (3.2, 1.1), (2.1, 1.2), (1.1, 3.2), (1.2, 2.1)) =$



6.a. $\mathfrak{T}[(1.2, 2.1, 3.1), (2.1, 1.2, 1.3), (1.3, 1.2, 2.1)] =$

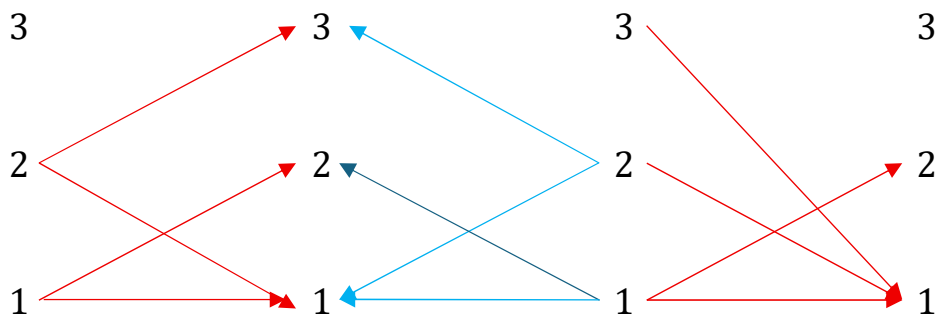
1.2 2.1 3.1 | 1.3 1.2 2.1

2.1 1.2 | 1.2 1.3



6.b. $\mathfrak{T}[(1.2, 2.1, 3.1), (2.1, 1.2, 1.3), (1.3, 1.2, 2.1)] =$

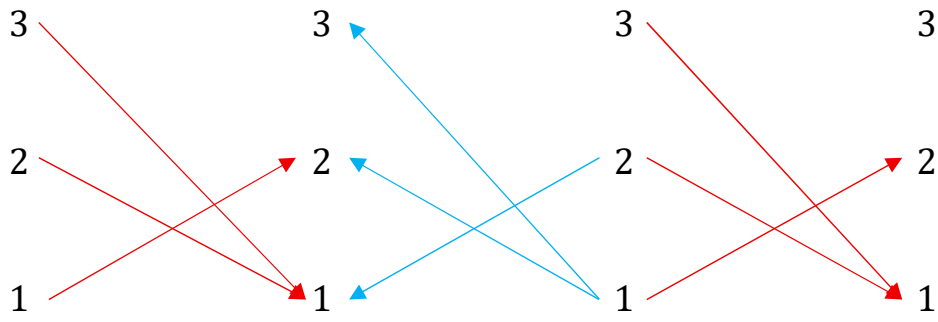
$((1.2, 2.1), (2.3, 1.1), (2.1, 1.2), (1.1, 2.3), (1.1, 3.2), (1.2, 2.1)) =$



7.a. $\mathfrak{T}[(3.1, 2.1, 1.2), (2.1, 1.2, 1.3), (1.2, 2.1, 3.1)] =$

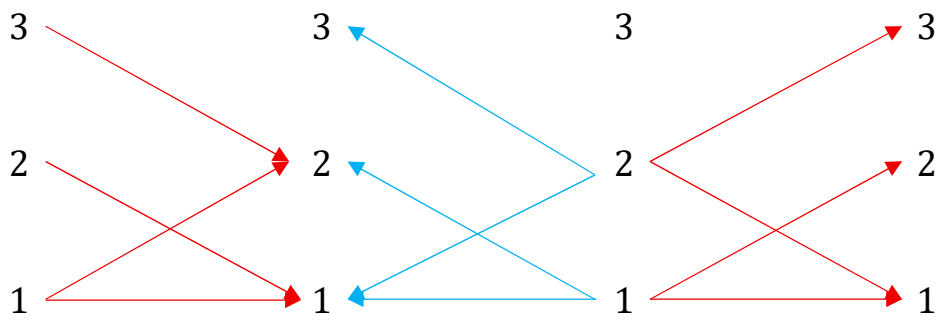
3.1 2.1 1.2 | 1.2 2.1 3.1

2.1 1.2 | 1.2 1.3



$$7.b. \mathfrak{T}[(3.1, 2.1, 1.2), (2.1, 1.2, 1.3), (1.2, 2.1, 3.1)] =$$

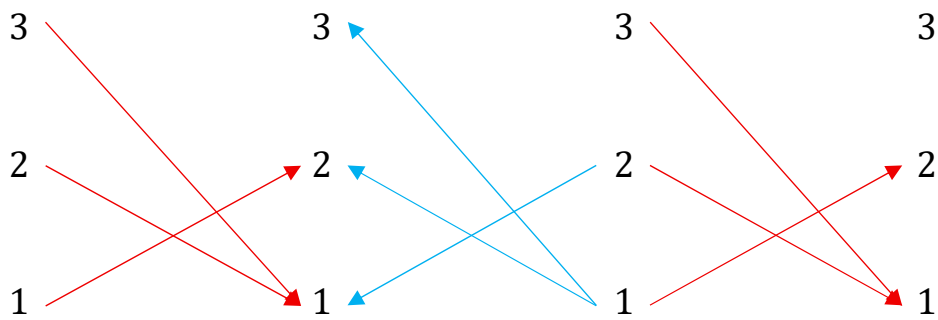
$$((3.2, 1.1), (2.1, 1.2), (2.1, 1.2), (1.1, 2.3), (1.2, 2.1), (2.3, 1.1)) =$$



$$8.a. \mathfrak{T}[(3.1, 2.1, 1.2), (1.3, 1.2, 2.1), (1.2, 2.1, 3.1)] =$$

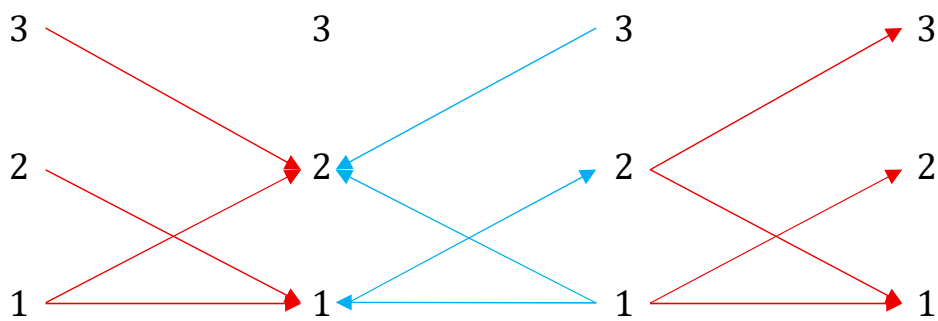
$$3.1 \quad 2.1 \quad 1.2 \quad | \quad 1.2 \quad 2.1 \quad 3.1$$

$$1.3 \quad 1.2 \quad | \quad 1.2 \quad 2.1$$



$$8.b. \mathfrak{T}[(3.1, 2.1, 1.2), (1.3, 1.2, 2.1), (1.2, 2.1, 3.1)] =$$

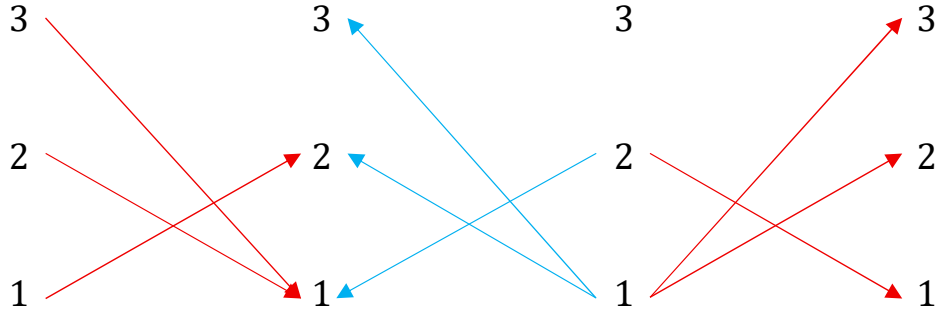
$$((3.2, 1.1), (2.1, 1.2), (1.1, 3.2), (1.2, 2.1), (1.2, 2.1), (2.3, 1.1)) =$$



9.a. $\mathfrak{T}[(3.1, 2.1, 1.2), (2.1, 1.2, 1.3), (1.3, 1.2, 2.1)] =$

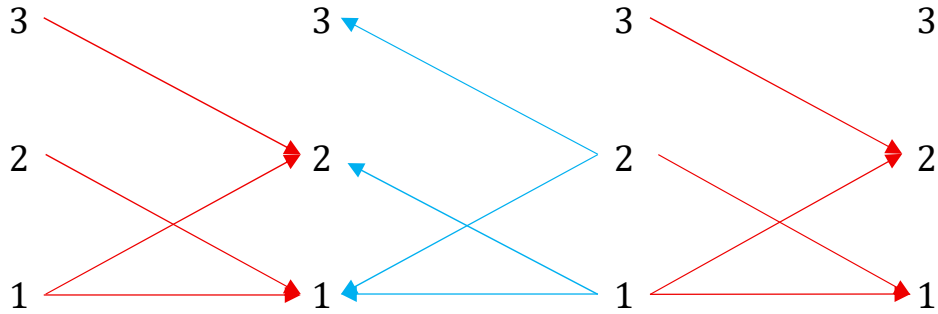
3.1 2.1 1.2 | 1.3 1.2 2.1

2.1 1.2 | 1.2 1.3



9.b. $\mathfrak{T}[(3.1, 2.1, 1.2), (2.1, 1.2, 1.3), (1.3, 1.2, 2.1)] =$

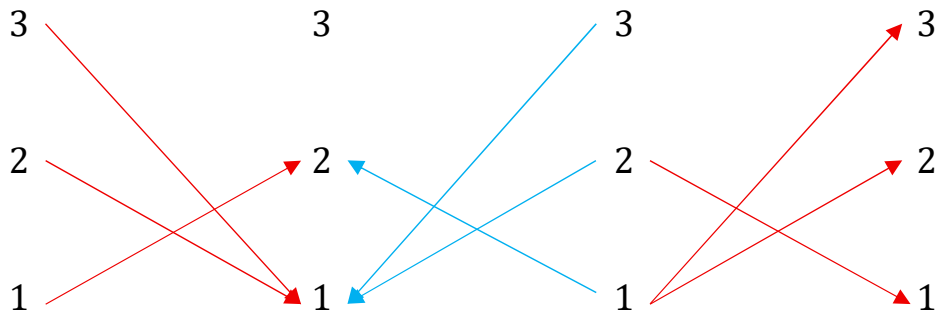
$((3.2, 1.1), (2.1, 1.2), (2.1, 1.2), (1.1, 2.3), (1.1, 3.2), (1.2, 2.1)) =$



10.a. $\mathfrak{T}[(3.1, 2.1, 1.2), (1.2, 2.1, 3.1), (1.3, 1.2, 2.1)] =$

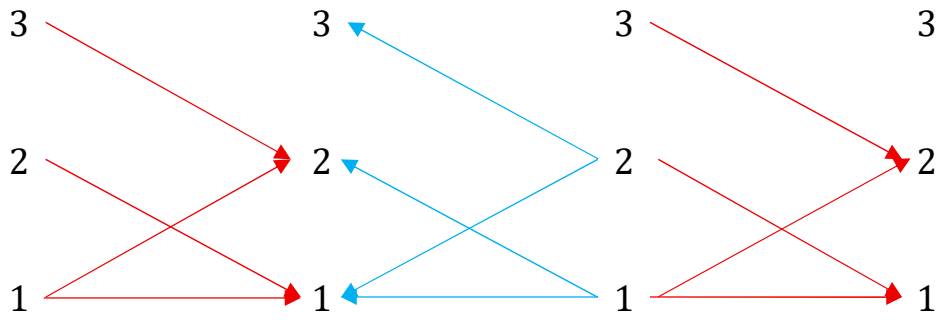
3.1 2.1 1.2 | 1.3 1.2 2.1

1.2 2.1 | 2.1 3.1



10.b. $\mathfrak{T}[(3.1, 2.1, 1.2), (1.2, 2.1, 3.1), (1.3, 1.2, 2.1)] =$

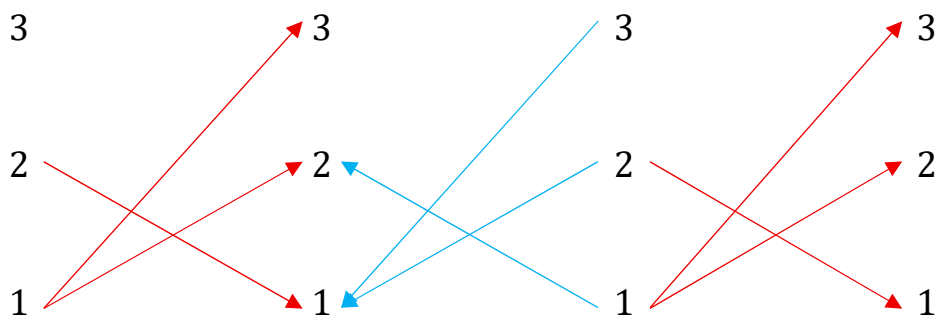
$((3.2, 1.1), (2.1, 1.2), (1.2, 2.1), (2.3, 1.1), (1.1, 3.2), (1.2, 2.1)) =$



11.a. $\mathfrak{T}[(2.1, 1.2, 1.3), (3.1, 2.1, 1.2), (1.3, 1.2, 2.1)] =$

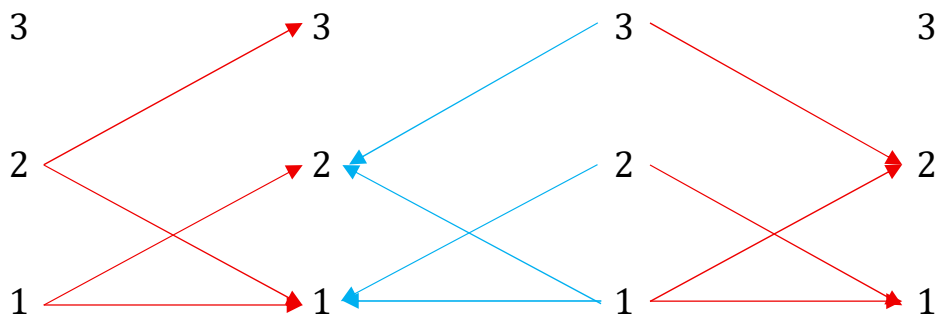
2.1 1.2 1.3 | 1.3 1.2 2.1

3.1 2.1 | 2.1 1.2



11.b. $\mathfrak{T}[(2.1, 1.2, 1.3), (3.1, 2.1, 1.2), (1.3, 1.2, 2.1)] =$

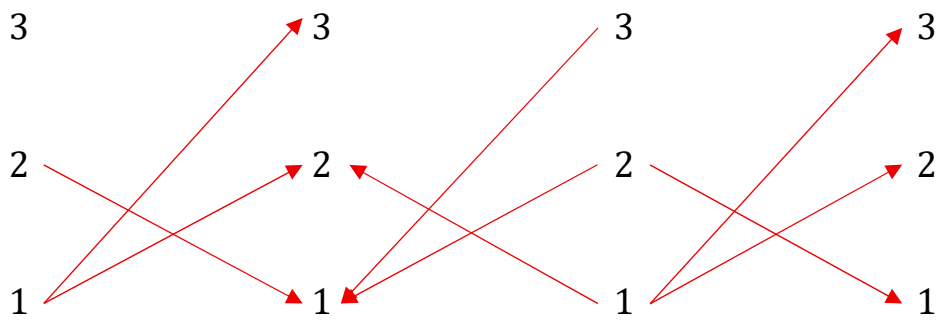
$((2.1, 1.2), (1.1, 2.3), (3.2, 1.1), (2.1, 1.2), (1.1, 3.2), (1.2, 2.1)) =$



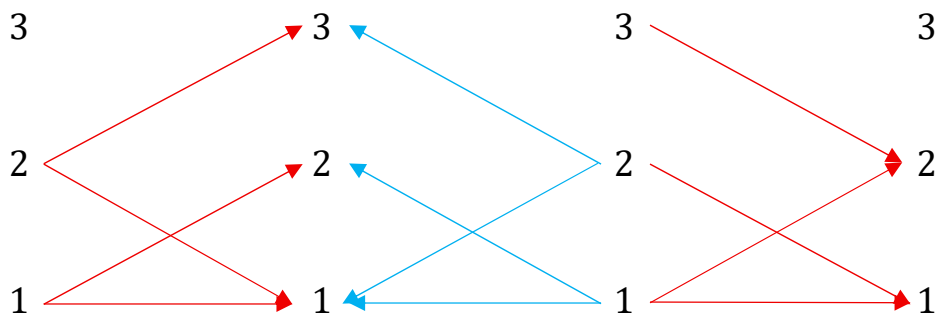
12.a. $\mathfrak{T}[(2.1, 1.2, 1.3), (1.2, 2.1, 3.1), (1.3, 1.2, 2.1)] =$

2.1 1.2 1.3 | 1.3 1.2 2.1

1.2 2.1 | 2.1 3.1



12.b. $\mathfrak{T}[(2.1, 1.2, 1.3), (1.2, 2.1, 3.1), (1.3, 1.2, 2.1)] =$
 $((2.1, 1.2), (1.1, 2.3), (1.2, 2.1), (2.3, 1.1), (1.1, 3.2), (1.2, 2.1)) =$



Literatur

Toth, Alfred, Trajektion quadralektischer semiotischer Relationen. In: Electronic Journal for Mathematical Semiotics, 2025a

Toth, Alfred, Kleine Theorie trajektischer Abbildungen. In: Electronic Journal for Mathematical Semiotics, 2025b

26.9.2025