Prof. Dr. Alfred Toth

Trajektionen semiotischer Differentiation

1. Zwei mal vier bifunktorielle Produkte (vgl. Toth 2025a, b)

(a.b), (c.d) =

1. (a.c), (b.d)	|	2. (d.b), (c.a)
3. (b.c), (a.d)	|	4. (d.a), (c.b)
5. (a.d), (b.c)	|	6. (c.b), (d.a)
7. (b.d), (a.c)	|	8. (c.a), (d.b)

2. Im folgenden zeigen wir die obigen 8 Möglichkeiten, semiotische Dyadenpaare abzuleiten und bestimmen die zugehörigen Trajektionen. Sei

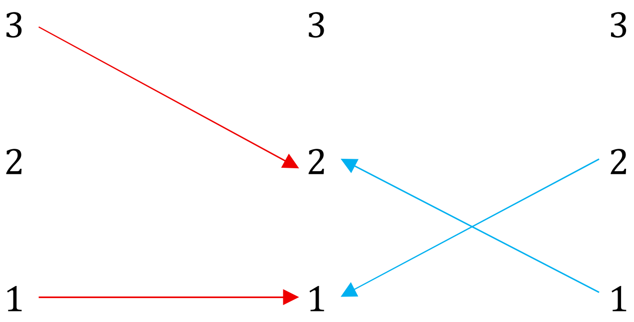
ZKl = (3.1, 2.1, 1.2)

Methode 1

(3.1, 2.1, 1.2)' = ((3.2, 1.1), (2.1, 1.2))

((3.2, 1.1), (2.1, 1.2))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((3.2, 1.1), (2.1, 1.2)) #

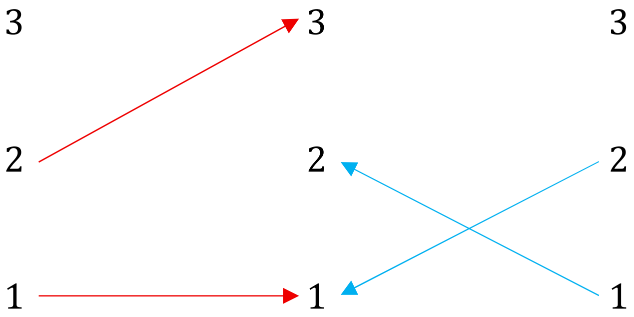


Methode 2

(3.1, 2.1, 1.2)' = ((1.1, 2.3), (2.1, 1.2))

((1.1, 2.3), (2.1, 1.2))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((1.1, 2.3), (2.1, 1.2)) #



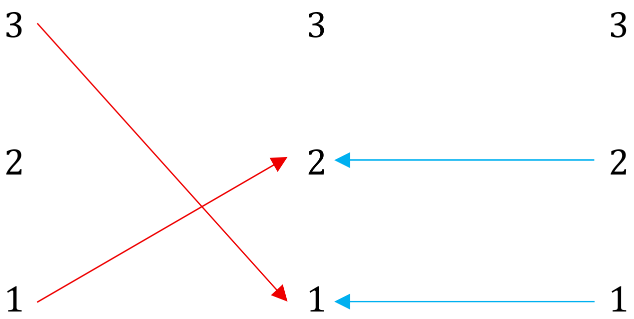
Methode 3

(3.1, 2.1, 1.2)' = ((1.2, 3.1), (1.1, 2.2))

((1.2, 3.1), (1.1, 2.2))' = ((2.3, 1.1), (1.2, 1.2))

((2.3, 1.1), (1.2, 1.2))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((1.2, 3.1), (1.1, 2.2)) #



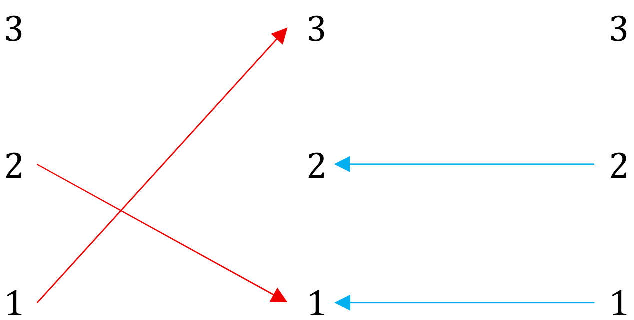
Methode 4

(3.1, 2.1, 1.2)' = ((1.3, 2.1), (2.2, 1.1))

((1.3, 2.1), (2.2, 1.1))' = ((1.1, 2.3), (1.2, 1.2))

((1.1, 2.3), (1.2, 1.2))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((1.3, 2.1), (2.2, 1.1)) #



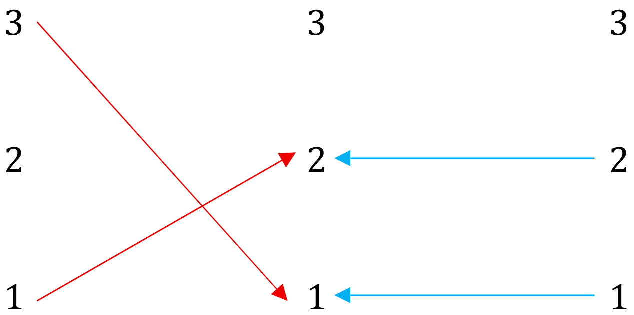
Methode 5

(3.1, 2.1, 1.2)' = ((3.1, 1.2), (2.2, 1.1))

((3.1, 1.2), (2.2, 1.1))' = ((3.2, 1.1), (2.1, 2.1))

((3.2, 1.1), (2.1, 2.1))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((3.1, 1.2), (2.2, 1.1)) #



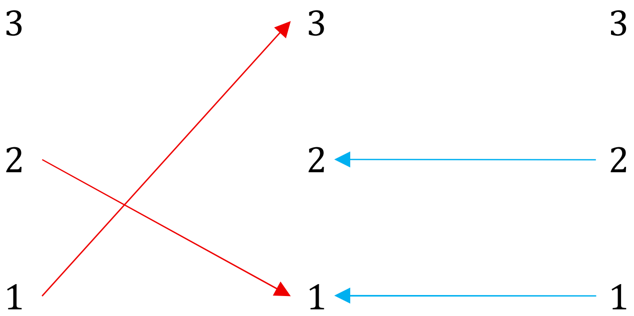
Methode 6

(3.1, 2.1, 1.2)' = ((2.1, 1.3), (1.1, 2.2))

((2.1, 1.3), (1.1, 2.2))' = ((1.1, 3.2), (2.1, 2.1))

((1.1, 3.2), (2.1, 2.1))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((2.1, 1.3), (1.1, 2.2)) #



Methode 7

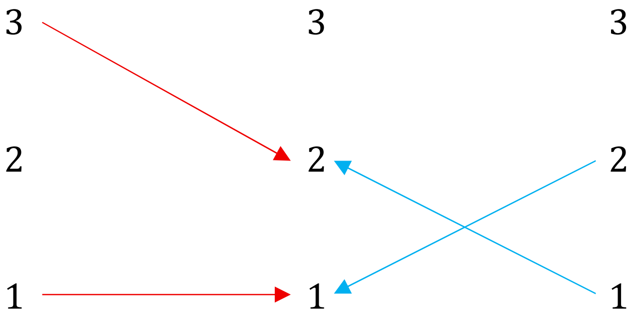
(3.1, 2.1, 1.2)' = ((1.1, 3.2), (1.2, 2.1))

((1.1, 3.2), (1.2, 2.1))' = ((1.2, 1.3), (2.1, 1.2))

((1.2, 1.3), (2.1, 1.2))' = ((2.3, 1.1), (1.2, 2.1))

((2.3, 1.1), (1.2, 2.1))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((1.1, 3.2), (1.2, 2.1)) #



Methode 8

(a.b), (c.d) = 8. (c.a), (d.b)

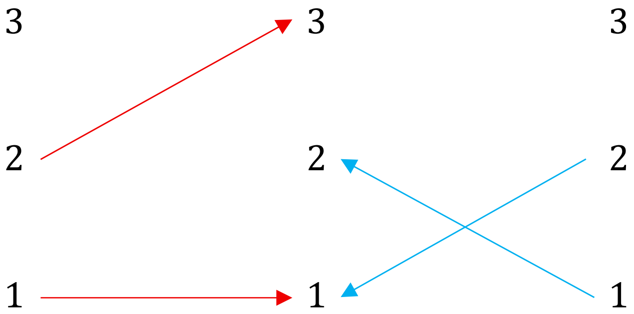
(3.1, 2.1, 1.2)' = ((2.3, 1.1), (1.2, 2.1))

((2.3, 1.1), (1.2, 2.1))' = ((1.2, 1.3), (2.1, 1.2))

((1.2, 1.3), (2.1, 1.2))' = ((1.1, 3.2), (1.2, 2.1))

((1.1, 3.2), (1.2, 2.1))' = ((3.1, 2.1), (2.1, 1.2))

((3.1, 2.1), (2.1, 1.2))' = ((2.3, 1.1), (1.2, 2.1)) #



Es gilt:

M1 = M7

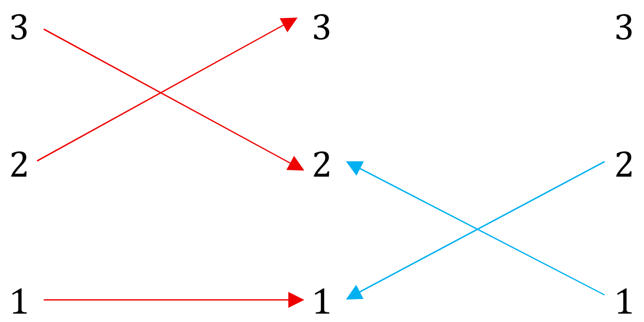
M2 = M8

M3 = M5

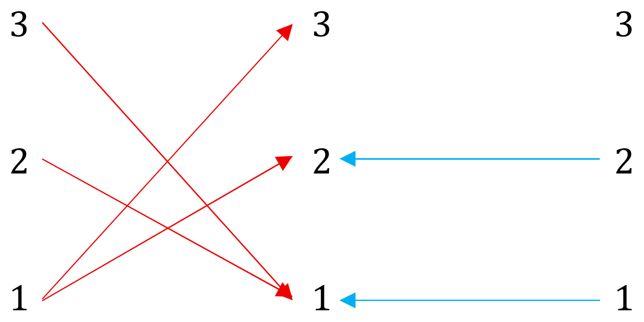
M4 = M6

3. Vereinigungsgraphen

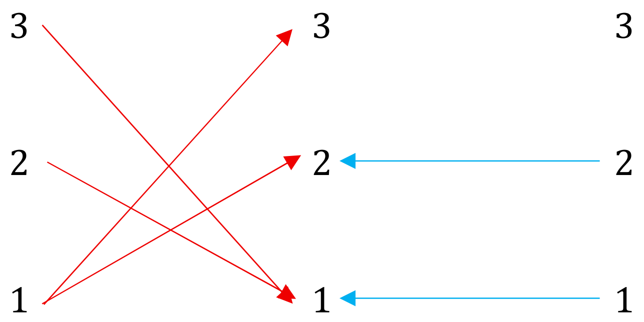
∪(M1, M2)



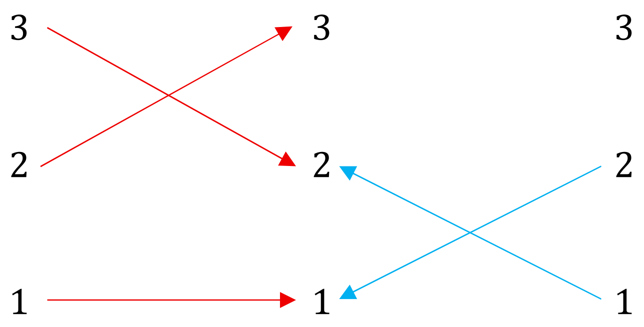
∪(M3, M4)



∪(M5, M6)



∪(M7, M8)



Es gilt somit:

∪(M1, M2) = ∪(M7, M8)

∪(M3, M4) = ∪(M5, M6).

Die Vereinigungsgraphen jedes der vier Paare von bifunktoriellen Ableitungen lassen sich also auf nur zwei Paare zurückführen.

Literatur

Toth, Alfred, Semiotische Differentiation. In: Electronic Journal for Mathematical Semiotics, 2025a

Toth, Alfred, Semiotische Differentiation II. In: Electronic Journal for Mathematical Semiotics, 2025b

28.9.2025