Prof. Dr. Alfred Toth

Semiotische Differentiation II

1. Die Ausführungen von Teil I (vgl. Toth 2025a) werden hier vor dem Hintergrund einiger Vorarbeiten (vgl. Toth 2025b-d) fortgesetzt.

2. Zwei mal vier bifunktorielle Produkte

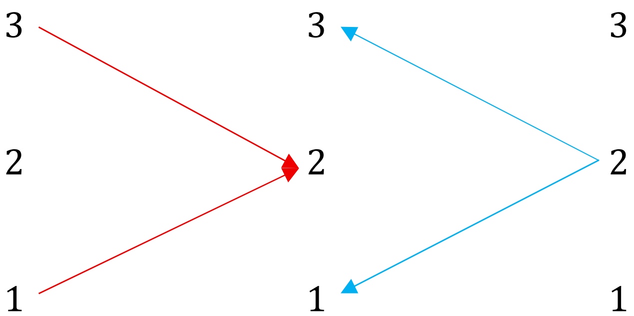
(a.b), (c.d) =

| | | |
|---|---|---|
| 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) |

Beispiel:

| | | |
|---|---|---|
| 1. (1.2), (3.2) | \| | 2. (2.3), (2.1) |
| 3. (3.2), (1.2) | \| | 4. (2.1), (2.3) |
| 5. (1.2), (3.2) | \| | 6. (2.3), (2.1) |
| 7. (3.2), (1.2) | \| | 8. (2.1), (2.3) |

Trajektionsschema für 1. bis 8.




3. 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)) ⋕

Man kann somit die Methoden bifunktorieller Produktbildung durch die Anzahl der ihnen inhärenten Ableitungsstufen subkategorisieren:

| Methoden | Ableitungsstufen |
|---|---|
| 1, 2 | 3 |
| 3, 4, 5, 6 | 4 |
| 7, 8 | 5 |

Literatur

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

Toth, Alfred, Trajektische Ableitungen. In: Electronic Journal for Mathematical Semiotics, 2025b

Toth, Alfred, Metaverschränkungen. In: Electronic Journal for Mathematical Semiotics, 2025c

Toth, Alfred, Dreistufige Trajektion. In: Electronic Journal for Mathematical Semiotics, 2025d

28.9.2025