

Prof. Dr. Alfred Toth

Arithmetische und topologische semiotische Ränder II

1. Im folgenden bilden wir, aufbauend auf den Ergebnissen von Teil I (vgl. Toth 2015), Ränder und Systeme S^* der semiotischen Dualsysteme, wobei also folgende Definitionen gelten

$$R[S, U] = (ZTh) \cap (RTh)$$

$$S^* = [S, U] = (ZTh) \cup (RTh).$$

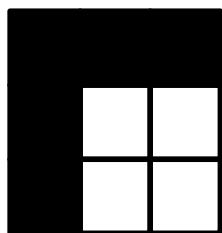
Wir gehen wiederum vom Gesamtsystem der 27 semiotischen Relationen aus, welche in 9 trichotomische Triaden abgeteilt werden können.

2.1. Erste trichotomische Triade

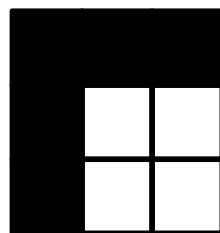
$$(3.1, 2.1, 1.1) \quad \times \quad (1.1, 1.2, 1.3)$$

$$(3.1, 2.1, 1.2) \quad \times \quad (2.1, 1.2, 1.3)$$

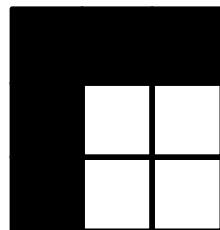
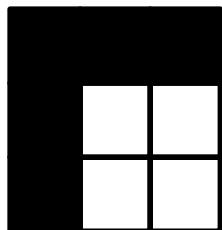
$$(3.1, 2.1, 1.3) \quad \times \quad (3.1, 1.2, 1.3)$$



Rand-Matrix



S^* -Matrix

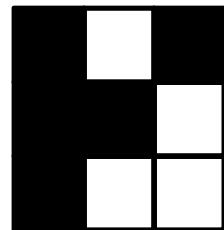
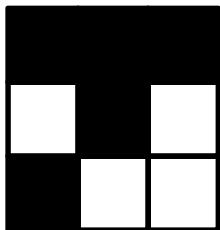


2.2. Zweite trichotomische Triade

(3.1, 2.2, 1.1) \times (1.1, 2.2, 1.3)

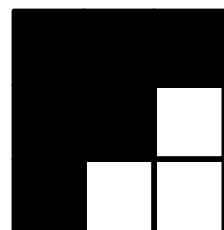
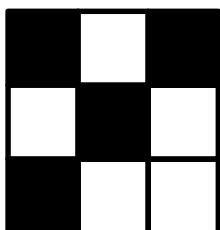
(3.1, 2.2, 1.2) \times (2.1, 2.2, 1.3)

(3.1, 2.2, 1.3) \times (3.1, 2.2, 1.3)



Rand-Matrix

S*-Matrix

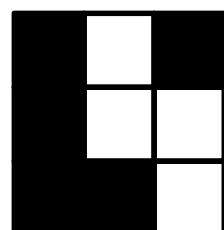
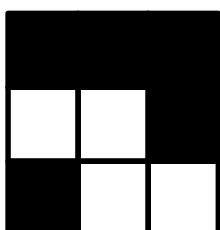


2.3. Dritte trichotomische Triade

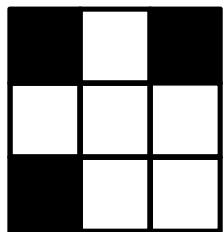
(3.1, 2.3, 1.1) \times (1.1, 3.2, 1.3)

(3.1, 2.3, 1.2) \times (2.1, 3.2, 1.3)

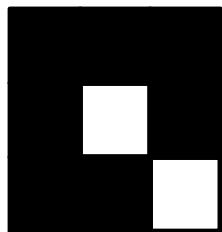
(3.1, 2.3, 1.3) \times (3.1, 3.2, 1.3)



Rand-Matrix



S*-Matrix

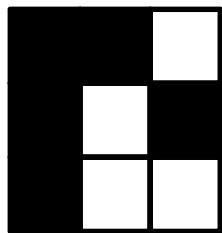
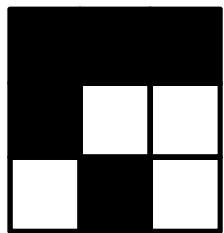


2.4. Vierte trichotomische Triade

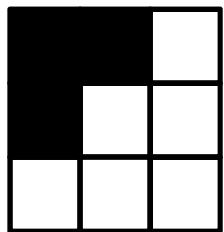
(3.2, 2.1, 1.1) \times (1.1, 1.2, 2.3)

(3.2, 2.1, 1.2) \times (2.1, 1.2, 2.3)

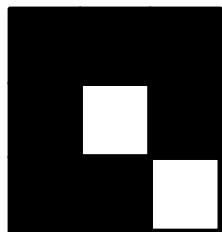
(3.2, 2.1, 1.3) \times (3.1, 1.2, 2.3)



Rand-Matrix



S*-Matrix

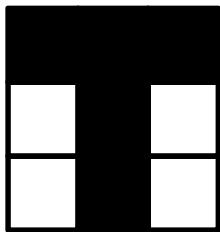


2.5. Fünfte trichotomische Triade

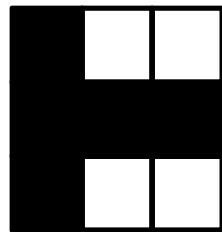
$$(3.2, 2.2, 1.1) \quad \times \quad (1.1, 2.2, 2.3)$$

$$(3.2, 2.2, 1.2) \quad \times \quad (2.1, 2.2, 2.3)$$

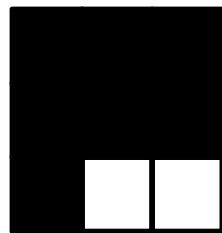
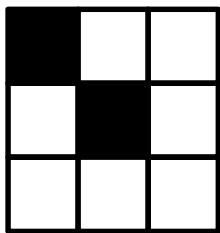
$$(3.2, 2.2, 1.3) \quad \times \quad (3.1, 2.2, 2.3)$$



Rand-Matrix



S*-Matrix

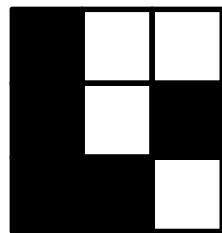
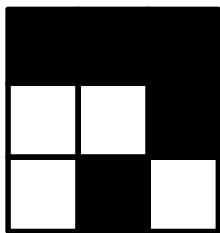


2.6. Sechste trichotomische Triade

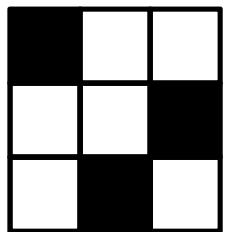
$$(3.2, 2.3, 1.1) \quad \times \quad (1.1, 3.2, 2.3)$$

$$(3.2, 2.3, 1.2) \quad \times \quad (2.1, 3.2, 2.3)$$

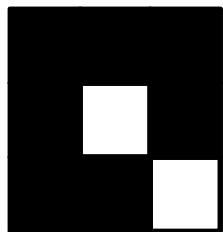
$$(3.2, 2.3, 1.3) \quad \times \quad (3.1, 3.2, 2.3)$$



Rand-Matrix



S*-Matrix

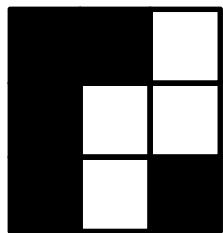
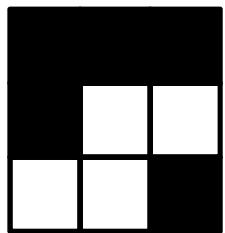


2.7. Siebte trichotomische Triade

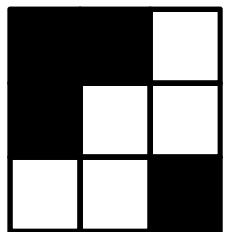
(3.3, 2.1, 1.1) \times (1.1, 1.2, 3.3)

(3.3, 2.1, 1.2) \times (2.1, 1.2, 3.3)

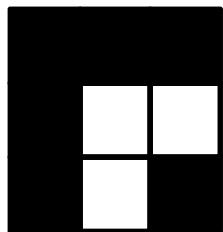
(3.3, 2.1, 1.3) \times (3.1, 1.2, 3.3)



Rand-Matrix



S*-Matrix

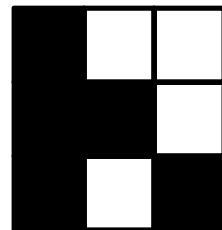
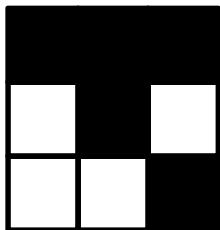


2.8. Achte trichotomische Triade

$$(3.3, 2.2, 1.1) \quad \times \quad (1.1, 2.2, 3.3)$$

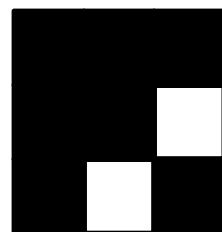
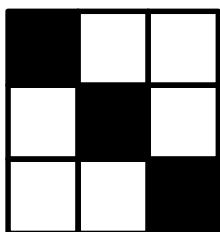
$$(3.3, 2.2, 1.2) \quad \times \quad (2.1, 2.2, 3.3)$$

$$(3.3, 2.2, 1.3) \quad \times \quad (3.1, 2.2, 3.3)$$



Rand-Matrix

S*-Matrix

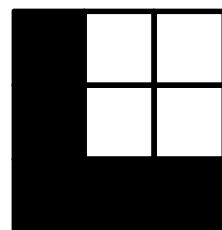
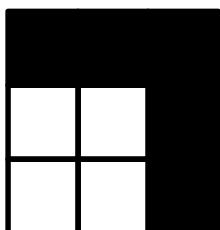


2.9. Neunte trichotomische Triade

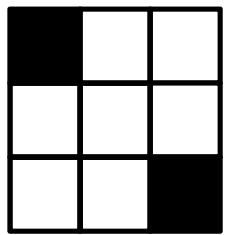
$$(3.3, 2.3, 1.1) \quad \times \quad (1.1, 3.2, 3.3)$$

$$(3.3, 2.3, 1.2) \quad \times \quad (2.1, 3.2, 3.3)$$

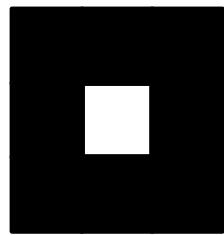
$$(3.3, 2.3, 1.3) \quad \times \quad (3.1, 3.2, 3.3)$$



Rand-Matrix



S*-Matrix



Literatur

Toth, Alfred, Arithmetische und topologische semiotische Ränder (I). In:
Electronic Journal for Mathematical Semiotics 2015

1.4.2015