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Die Morphismen der polykontexturalen Semiotik für $K = 4$

1. Bereits in Toth (2019a) hatten wir Abbildungen zwischen qualitativen Zahlen, d.h. zwischen Proto-, Deutero- und Tritozahlen, für eine 4-kontexturale Semiotik definiert. Allerdings war diese ein Vorläufer der erst später, in Toth (2019b-g) konstruierten echten polykontexturalen Semiotik, für welche die beiden morphogrammatischen Bedingungen

$$(\text{Protozahl}) \subset (\text{Deuterozahl}) \subset (\text{Tritozahl})$$

$$(K = 1) \subset (K = 2) \subset (K = 3) \subset (K = 4) \subset \dots \subset (K = n)$$

erfüllt sind.

2. Im folgenden seien also die Morphismen der polykontexturalen Semiotik für $K = 4$ definiert, und zwar sowohl in der Notation als semio-Morphogramme als auch als Zeichenzahlen.

Identitive Morphismen

$$1 \rightarrow 1 := \text{id}_1$$

$$2 \rightarrow 2 := \text{id}_2$$

$$3 \rightarrow 3 := \text{id}_3$$

Nicht-identitive Morphismen

$$1 \rightarrow 2 := \alpha$$

$$2 \rightarrow 3 := \beta \quad 1 \rightarrow 3 = \beta\alpha$$

$$3 \rightarrow 4 := \gamma \quad 1 \rightarrow 4 = \gamma\beta\alpha \quad 2 \rightarrow 4 = \gamma\beta$$

$$4 \rightarrow 5 := \delta \quad 1 \rightarrow 5 = \delta\gamma\beta\alpha \quad 2 \rightarrow 5 = \delta\gamma\beta \quad 3 \rightarrow 5 = \delta\gamma.$$

2.1. Protozeichen

$$0000 \rightarrow 1.1$$

$$0001 \rightarrow 1.2$$

$$0012 \rightarrow 1.3$$

2.2. Deuterozeichen

0000 $\rightarrow$ 1.1

0001 $\rightarrow$ 1.2

0011 $\rightarrow$ 1.5

0012 $\rightarrow$ 1.3

0123 $\rightarrow$ 3.3

2.3. Tritozeichen

0000 $\rightarrow$ 1.1

0001 $\rightarrow$ 1.2

0010 $\rightarrow$ 1.4

0011 $\rightarrow$ 1.5

0012 $\rightarrow$ 1.3

0100 $\rightarrow$ 2.1

0101 $\rightarrow$ 2.2

0102 $\rightarrow$ 2.4

0110 $\rightarrow$ 2.5

0111 $\rightarrow$ 2.3

0112 $\rightarrow$ 3.1

0120 $\rightarrow$ 3.2

0121 $\rightarrow$ 3.4

0122 $\rightarrow$ 3.5

0123 $\rightarrow$ 3.3.

2.4. Abbildungen zwischen qualitativen Zeichen

0000 $\rightarrow$ 0000 = 1.1 $\rightarrow$ 1.1 = $\text{id}_1 \rightarrow \text{id}_1$

0000 $\rightarrow$ 0001 = 1.1 $\rightarrow$ 1.2 = $\text{id}_1 \rightarrow \alpha$

$0000 \rightarrow 0010 = 1.1 \rightarrow 1.4 = \text{id}_1 \rightarrow \gamma\beta\alpha$
 $0000 \rightarrow 0011 = 1.1 \rightarrow 1.5 = \text{id}_1 \rightarrow \delta\gamma\beta\alpha$
 $0000 \rightarrow 0012 = 1.1 \rightarrow 1.3 = \text{id}_1 \rightarrow \beta\alpha$
 $0000 \rightarrow 0100 = 1.1 \rightarrow 2.1 = \text{id}_1 \rightarrow \alpha^\circ$
 $0000 \rightarrow 0101 = 1.1 \rightarrow 2.2 = \text{id}_1 \rightarrow \text{id}_2$
 $0000 \rightarrow 0102 = 1.1 \rightarrow 2.4 = \text{id}_1 \rightarrow \gamma\beta$
 $0000 \rightarrow 0110 = 1.1 \rightarrow 2.5 = \text{id}_1 \rightarrow \delta\gamma\beta$
 $0000 \rightarrow 0111 = 1.1 \rightarrow 2.3 = \text{id}_1 \rightarrow \beta$
 $0000 \rightarrow 0112 = 1.1 \rightarrow 3.1 = \text{id}_1 \rightarrow \alpha^\circ\beta^\circ$
 $0000 \rightarrow 0120 = 1.1 \rightarrow 3.2 = \text{id}_1 \rightarrow \beta^\circ$
 $0000 \rightarrow 0121 = 1.1 \rightarrow 3.4 = \text{id}_1 \rightarrow \gamma$
 $0000 \rightarrow 0122 = 1.1 \rightarrow 3.5 = \text{id}_1 \rightarrow \delta\gamma$
 $0000 \rightarrow 0123 = 1.1 \rightarrow 3.3 = \text{id}_1 \rightarrow \text{id}_3$

$0001 \rightarrow 0001 = 1.2 \rightarrow 1.2 = \alpha \rightarrow \alpha$
 $0001 \rightarrow 0010 = 1.2 \rightarrow 1.4 = \alpha \rightarrow \gamma\beta\alpha$
 $0001 \rightarrow 0011 = 1.2 \rightarrow 1.5 = \alpha \rightarrow \delta\gamma\beta\alpha$
 $0001 \rightarrow 0012 = 1.2 \rightarrow 1.3 = \alpha \rightarrow \beta\alpha$
 $0001 \rightarrow 0100 = 1.2 \rightarrow 2.1 = \alpha \rightarrow \alpha^\circ$
 $0001 \rightarrow 0101 = 1.2 \rightarrow 2.2 = \alpha \rightarrow \text{id}_2$
 $0001 \rightarrow 0102 = 1.2 \rightarrow 2.4 = \alpha \rightarrow \gamma\beta$
 $0001 \rightarrow 0110 = 1.2 \rightarrow 2.5 = \alpha \rightarrow \delta\gamma\beta$
 $0001 \rightarrow 0111 = 1.2 \rightarrow 2.3 = \alpha \rightarrow \beta$
 $0001 \rightarrow 0112 = 1.2 \rightarrow 3.1 = \alpha \rightarrow \alpha^\circ\beta^\circ$
 $0001 \rightarrow 0120 = 1.2 \rightarrow 3.2 = \alpha \rightarrow \beta^\circ$

$$0001 \rightarrow 0121 = 1.2 \rightarrow 3.4 = \alpha \rightarrow \gamma$$

$$0001 \rightarrow 0122 = 1.2 \rightarrow 3.5 = \alpha \rightarrow \delta\gamma$$

$$0001 \rightarrow 0123 = 1.2 \rightarrow 3.3 = \alpha \rightarrow \text{id}_3$$

$$0010 \rightarrow 0010 = 1.4 \rightarrow 1.4 = \gamma\beta\alpha \rightarrow \gamma\beta\alpha$$

$$0010 \rightarrow 0011 = 1.4 \rightarrow 1.5 = \gamma\beta\alpha \rightarrow \delta\gamma\beta\alpha$$

$$0010 \rightarrow 0012 = 1.4 \rightarrow 1.3 = \gamma\beta\alpha \rightarrow \beta\alpha$$

$$0010 \rightarrow 0100 = 1.4 \rightarrow 2.1 = \gamma\beta\alpha \rightarrow \alpha^\circ$$

$$0010 \rightarrow 0101 = 1.4 \rightarrow 2.2 = \gamma\beta\alpha \rightarrow \text{id}_2$$

$$0010 \rightarrow 0102 = 1.4 \rightarrow 2.4 = \gamma\beta\alpha \rightarrow \gamma\beta$$

$$0010 \rightarrow 0110 = 1.4 \rightarrow 2.5 = \gamma\beta\alpha \rightarrow \delta\gamma\beta$$

$$0010 \rightarrow 0111 = 1.4 \rightarrow 2.3 = \gamma\beta\alpha \rightarrow \beta$$

$$0010 \rightarrow 0112 = 1.4 \rightarrow 3.1 = \gamma\beta\alpha \rightarrow \alpha^\circ\beta^\circ$$

$$0010 \rightarrow 0120 = 1.4 \rightarrow 3.2 = \gamma\beta\alpha \rightarrow \beta^\circ$$

$$0010 \rightarrow 0121 = 1.4 \rightarrow 3.4 = \gamma\beta\alpha \rightarrow \gamma$$

$$0010 \rightarrow 0122 = 1.4 \rightarrow 3.5 = \gamma\beta\alpha \rightarrow \delta\gamma$$

$$0010 \rightarrow 0123 = 1.4 \rightarrow 3.3 = \gamma\beta\alpha \rightarrow \text{id}_3$$

$$0011 \rightarrow 0011 = 1.5 \rightarrow 1.5 = \delta\gamma\beta\alpha \rightarrow \delta\gamma\beta\alpha$$

$$0011 \rightarrow 0012 = 1.5 \rightarrow 1.3 = \delta\gamma\beta\alpha \rightarrow \beta\alpha$$

$$0011 \rightarrow 0100 = 1.5 \rightarrow 2.1 = \delta\gamma\beta\alpha \rightarrow \alpha^\circ$$

$$0011 \rightarrow 0101 = 1.5 \rightarrow 2.2 = \delta\gamma\beta\alpha \rightarrow \text{id}_2$$

$$0011 \rightarrow 0102 = 1.5 \rightarrow 2.4 = \delta\gamma\beta\alpha \rightarrow \gamma\beta$$

$$0011 \rightarrow 0110 = 1.5 \rightarrow 2.5 = \delta\gamma\beta\alpha \rightarrow \delta\gamma\beta$$

$$0011 \rightarrow 0111 = 1.5 \rightarrow 2.3 = \delta\gamma\beta\alpha \rightarrow \beta$$

$$0011 \rightarrow 0112 = 1.5 \rightarrow 3.1 = \delta\gamma\beta\alpha \rightarrow \alpha^\circ\beta^\circ$$

$$0011 \rightarrow 0120 = 1.5 \rightarrow 3.2 = \delta\gamma\beta\alpha \rightarrow \beta^\circ$$

$$0011 \rightarrow 0121 = 1.5 \rightarrow 3.4 = \delta\gamma\beta\alpha \rightarrow \gamma$$

$$0011 \rightarrow 0122 = 1.5 \rightarrow 3.5 = \delta\gamma\beta\alpha \rightarrow \delta\gamma$$

$$0011 \rightarrow 0123 = 1.5 \rightarrow 3.3 = \delta\gamma\beta\alpha \rightarrow \text{id}_3$$

$$0012 \rightarrow 0012 = 1.3 \rightarrow 1.3 = \beta\alpha \rightarrow \beta\alpha$$

$$0012 \rightarrow 0100 = 1.3 \rightarrow 2.1 = \beta\alpha \rightarrow \alpha^\circ$$

$$0012 \rightarrow 0101 = 1.3 \rightarrow 2.2 = \beta\alpha \rightarrow \text{id}_2$$

$$0012 \rightarrow 0102 = 1.3 \rightarrow 2.4 = \beta\alpha \rightarrow \gamma\beta$$

$$0012 \rightarrow 0110 = 1.3 \rightarrow 2.5 = \beta\alpha \rightarrow \delta\gamma\beta$$

$$0012 \rightarrow 0111 = 1.3 \rightarrow 2.3 = \beta\alpha \rightarrow \beta$$

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$$0012 \rightarrow 0120 = 1.3 \rightarrow 3.2 = \beta\alpha \rightarrow \beta^\circ$$

$$0012 \rightarrow 0121 = 1.3 \rightarrow 3.4 = \beta\alpha \rightarrow \gamma$$

$$0012 \rightarrow 0122 = 1.3 \rightarrow 3.5 = \beta\alpha \rightarrow \delta\gamma$$

$$0012 \rightarrow 0123 = 1.3 \rightarrow 3.3 = \beta\alpha \rightarrow \text{id}_3$$

$$0100 \rightarrow 0100 = 2.1 \rightarrow 2.1 = \alpha^\circ \rightarrow \alpha^\circ$$

$$0100 \rightarrow 0101 = 2.1 \rightarrow 2.2 = \alpha^\circ \rightarrow \text{id}_2$$

$$0100 \rightarrow 0102 = 2.1 \rightarrow 2.4 = \alpha^\circ \rightarrow \gamma\beta$$

$$0100 \rightarrow 0110 = 2.1 \rightarrow 2.5 = \alpha^\circ \rightarrow \delta\gamma\beta$$

$$0100 \rightarrow 0111 = 2.1 \rightarrow 2.3 = \alpha^\circ \rightarrow \beta$$

$$0100 \rightarrow 0112 = 2.1 \rightarrow 3.1 = \alpha^\circ \rightarrow \alpha^\circ\beta^\circ$$

$$0100 \rightarrow 0120 = 2.1 \rightarrow 3.2 = \alpha^\circ \rightarrow \beta^\circ$$

$$0100 \rightarrow 0121 = 2.1 \rightarrow 3.4 = \alpha^\circ \rightarrow \gamma$$

$$0100 \rightarrow 0122 = 2.1 \rightarrow 3.5 = \alpha^\circ \rightarrow \delta\gamma$$

$$0100 \rightarrow 0123 = 2.1 \rightarrow 3.3 = \alpha^\circ \rightarrow \text{id}_3$$

$$0101 \rightarrow 0101 = 2.2 \rightarrow 2.2 = \text{id}_2 \rightarrow \text{id}_2$$

$$0101 \rightarrow 0102 = 2.2 \rightarrow 2.4 = \text{id}_2 \rightarrow \gamma\beta$$

$$0101 \rightarrow 0110 = 2.2 \rightarrow 2.5 = \text{id}_2 \rightarrow \delta\gamma\beta$$

$$0101 \rightarrow 0111 = 2.2 \rightarrow 2.3 = \text{id}_2 \rightarrow \beta$$

$$0101 \rightarrow 0112 = 2.2 \rightarrow 3.1 = \text{id}_2 \rightarrow \alpha^\circ\beta^\circ$$

$$0101 \rightarrow 0120 = 2.2 \rightarrow 3.2 = \text{id}_2 \rightarrow \beta^\circ$$

$$0101 \rightarrow 0121 = 2.2 \rightarrow 3.4 = \text{id}_2 \rightarrow \gamma$$

$$0101 \rightarrow 0122 = 2.2 \rightarrow 3.5 = \text{id}_2 \rightarrow \delta\gamma$$

$$0101 \rightarrow 0123 = 2.2 \rightarrow 3.3 = \text{id}_2 \rightarrow \text{id}_3$$

$$0102 \rightarrow 0102 = 2.4 \rightarrow 2.4 = \gamma\beta \rightarrow \gamma\beta$$

$$0102 \rightarrow 0110 = 2.4 \rightarrow 2.5 = \gamma\beta \rightarrow \delta\gamma\beta$$

$$0102 \rightarrow 0111 = 2.4 \rightarrow 2.3 = \gamma\beta \rightarrow \beta$$

$$0102 \rightarrow 0112 = 2.4 \rightarrow 3.1 = \gamma\beta \rightarrow \alpha^\circ\beta^\circ$$

$$0102 \rightarrow 0120 = 2.4 \rightarrow 3.2 = \gamma\beta \rightarrow \beta^\circ$$

$$0102 \rightarrow 0121 = 2.4 \rightarrow 3.4 = \gamma\beta \rightarrow \gamma$$

$$0102 \rightarrow 0122 = 2.4 \rightarrow 3.5 = \gamma\beta \rightarrow \delta\gamma$$

$$0102 \rightarrow 0123 = 2.4 \rightarrow 3.3 = \gamma\beta \rightarrow \text{id}_3$$

$$0110 \rightarrow 0110 = 2.5 \rightarrow 2.5 = \delta\gamma\beta \rightarrow \delta\gamma\beta$$

$$0110 \rightarrow 0111 = 2.5 \rightarrow 2.3 = \delta\gamma\beta \rightarrow \beta$$

$$0110 \rightarrow 0112 = 2.5 \rightarrow 3.1 = \delta\gamma\beta \rightarrow \alpha^\circ\beta^\circ$$

$$0110 \rightarrow 0120 = 2.5 \rightarrow 3.2 = \delta\gamma\beta \rightarrow \beta^\circ$$

$$0110 \rightarrow 0121 = 2.5 \rightarrow 3.4 = \delta\gamma\beta \rightarrow \gamma$$

$$0110 \rightarrow 0122 = 2.5 \rightarrow 3.5 = \delta\gamma\beta \rightarrow \delta\gamma$$

$$0110 \rightarrow 0123 = 2.5 \rightarrow 3.3 = \delta\gamma\beta \rightarrow \text{id}_3$$

$$0111 \rightarrow 0111 = 2.3 \rightarrow 2.3 = \beta \rightarrow \beta$$

$$0111 \rightarrow 0112 = 2.3 \rightarrow 3.1 = \beta \rightarrow \alpha^\circ\beta^\circ$$

$$0111 \rightarrow 0120 = 2.3 \rightarrow 3.2 = \beta \rightarrow \beta^\circ$$

$$0111 \rightarrow 0121 = 2.3 \rightarrow 3.4 = \beta \rightarrow \gamma$$

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$$0112 \rightarrow 0112 = 3.1 \rightarrow 3.1 = \alpha^\circ\beta^\circ \rightarrow \alpha^\circ\beta^\circ$$

$$0112 \rightarrow 0120 = 3.1 \rightarrow 3.2 = \alpha^\circ\beta^\circ \rightarrow \beta^\circ$$

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$$0122 \rightarrow 0122 = 3.5 \rightarrow 3.5 = \delta\gamma \rightarrow \delta\gamma$$

$$0122 \rightarrow 0123 = 3.5 \rightarrow 3.3 = \delta\gamma \rightarrow \text{id}_3$$

$$0123 \rightarrow 0123 = 3.3 \rightarrow 3.3 = \text{id}_3 \rightarrow \text{id}_3$$

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