

## Semiotische Umgebungsklassen

1. Neben den in Toth (2013a, b) untersuchten semiotischen Randklassen und Nachbarschaftsklassen können Umgebungsklassen unterschieden werden, denn jede semiotische Matrix kann nach den Ergebnissen von Toth (2013c) in die drei Bereiche des semiotischen Systems, seiner Nachbarschaft und seiner Umgebung unterteilt werden. Im folgenden werden alle 10 regulären semiotischen Dualsysteme hinsichtlich ihrer Systeme (schwarz) und Nachbarschaften (rot markiert) dargestellt und die zugehörigen Umgebungsklassen für Zeichen- und Realitätsthematiken ermittelt.

$$2.1. DS = [(3.1, 2.1, 1.1) \times (1.1, 1.2, 1.3)]$$

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|---|---|---|
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$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{1.3, 2.3, 3.3\}$$

|   |   |   |
|---|---|---|
| ■ | ■ | ■ |
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| □ | □ | □ |

$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{3.1, 3.2, 3.3\}$$

$$2.2. DS = [(3.1, 2.1, 1.2) \times (2.1, 1.2, 1.3)]$$

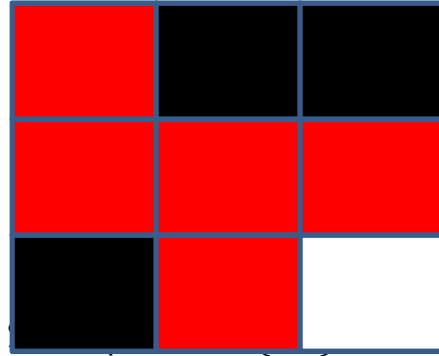
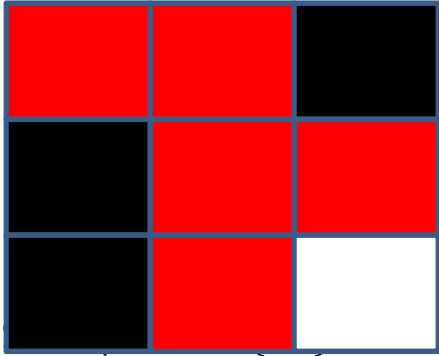
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$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{3.3\}$$

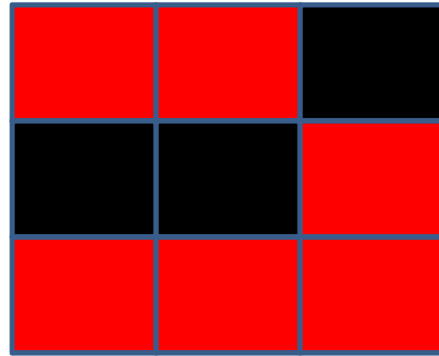
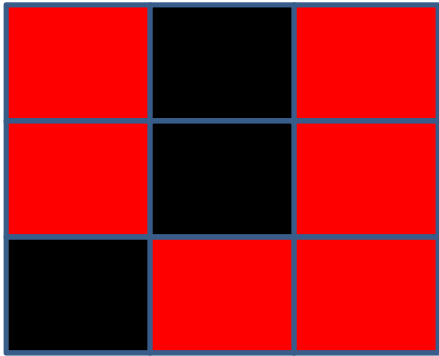
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$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{3.3\}$$

$$2.3. DS = [(3.1, 2.1, 1.3) \times (3.1, 1.2, 1.3)]$$



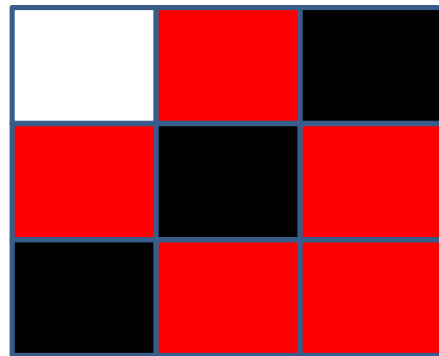
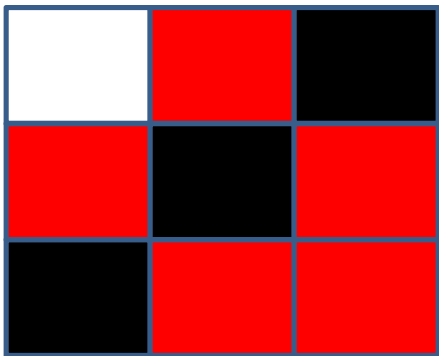
$$2.4. DS = [(3.1, 2.2, 1.2) \times (2.1, 2.2, 1.3)]$$



$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \emptyset$$

$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \emptyset$$

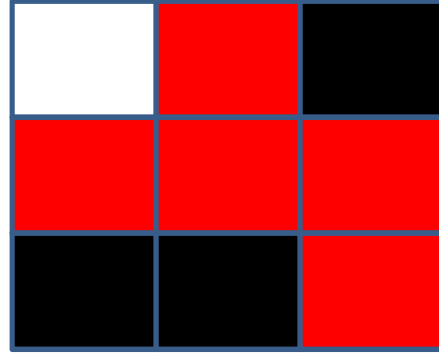
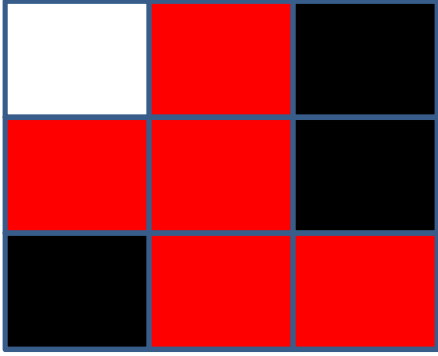
$$2.5. DS = [(3.1, 2.2, 1.3) \times (3.1, 2.2, 1.3)]$$



$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{1.1\}$$

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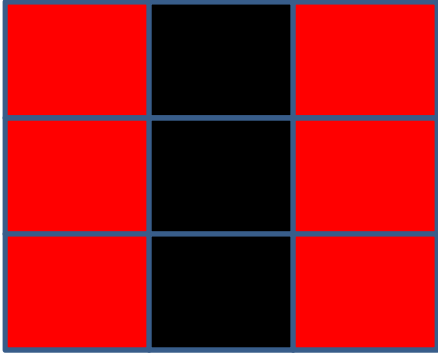
$$2.6. DS = [(3.1, 2.3, 1.3) \times (3.1, 3.2, 1.3)]$$



$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{1.1\}$$

$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{1.1\}$$

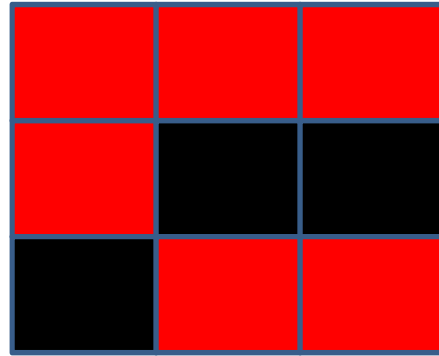
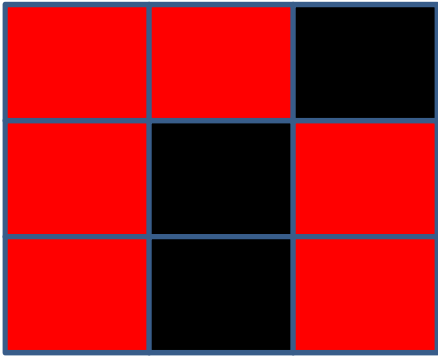
$$2.7. DS = [(3.2, 2.2, 1.2) \times (2.1, 2.2, 2.3)]$$



$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \emptyset$$

$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \emptyset$$

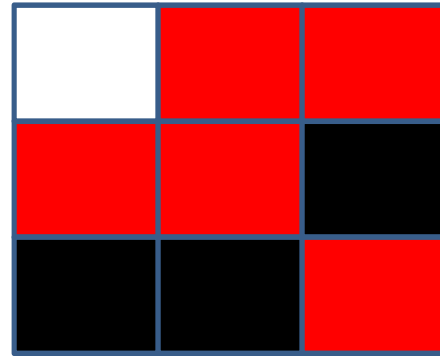
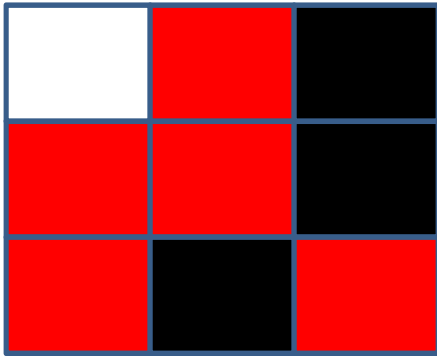
$$2.8. DS = [(3.2, 2.2, 1.3) \times (3.1, 2.2, 2.3)]$$



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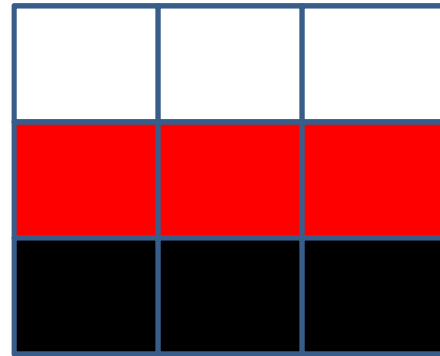
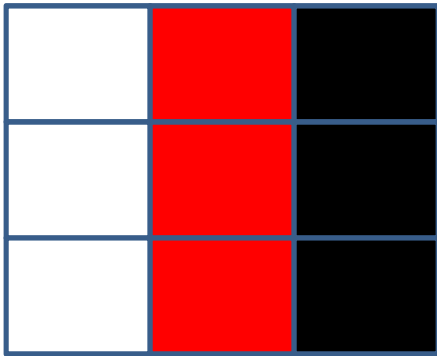
2.9. DS = [(3.2, 2.3, 1.3) × (3.1, 3.2, 2.3)]



$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{1.1\}$$

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2.10. DS = [(3.3, 2.3, 1.3) × (3.1, 3.2, 3.3)]



$$\mathfrak{M}_{3 \times 3} \setminus \underline{R} \cup \underline{N} = \{1.1, 2.1, 3.1\}$$

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Literatur

Toth, Alfred, Semiotische Nachbarschaftsklassen. In: Electronic Journal for Mathematical Semiotics, 2013a

Toth, Alfred, Semiotische Randklassen. In: Electronic Journal for Mathematical Semiotics, 2013b

Toth, Alfred, Semiotische Relationen aus konversen Nachbarschaften. In: Electronic Journal for Mathematical Semiotics, 2013c

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