

Prof. Dr. Alfred Toth

Grenzen, Ränder, Grenzränder und Nachbarschaften semiotischer Subrelationen

1. Im Anschluß an Toth (2013a, b) und weitere Arbeiten stellen wir im folgenden die Grenzen, Ränder, Grenzränder und Nachbarschaften für alle 9 dyadischen semiotischen Subrelationen, wie sie durch die semiotische Matrix $\mathfrak{M}_{3 \times 3}$ konstruierbar sind, dar. Selbstverständlich ist G immer automorph, und $\mathfrak{G}$ ist immer $= \emptyset$.

2. Die dyadischen semiotischen Subrelationen

2.1. $R = (1.1)$

$$G(1.1, 1.1) = (1.1)$$

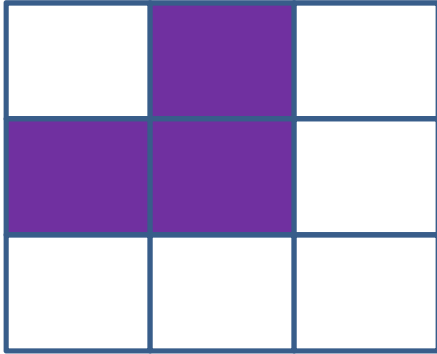
$$R_\lambda(1.1) = \emptyset$$

$$R_\rho(1.1) = (1.2, 1.3, 2.1, 3.1)$$

$$\mathfrak{G}_\lambda = G(1.1) \cap \emptyset = \emptyset$$

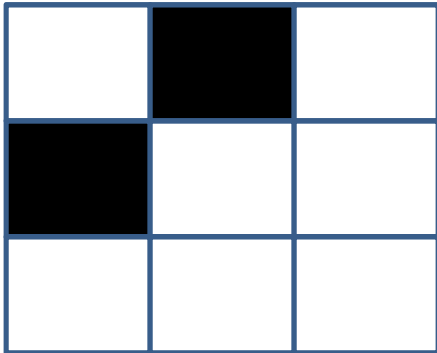
$$\mathfrak{G}_\rho = G(1.1) \cap (1.2, 1.3, 2.1, 3.1) = \emptyset$$

$$N(1.1) = (1.2, 2.1, 2.2)$$



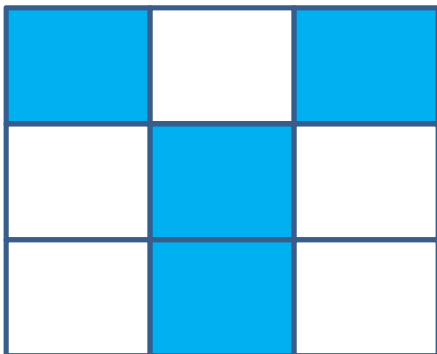
$$2.2. R = (1.2)$$

$$G(1.2, 2.1) = (1.2, 2.1)$$



$$R_\lambda(1.2) = (1.1)$$

$$R_\rho(1.2) = (1.3, 2.2, 3.2)$$

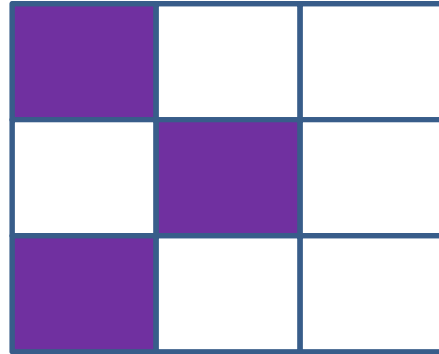
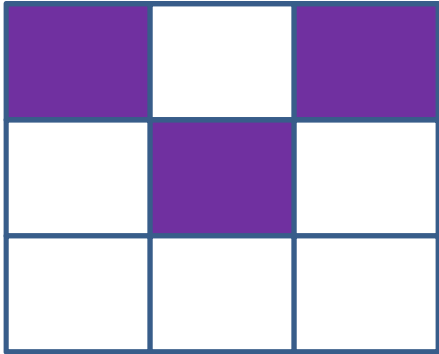


$$\mathfrak{G}_\lambda = G(1.2, 2.1) \cap (1.1) = \emptyset$$

$$\mathfrak{G}_\rho = G(1.2, 2.1) \cap (1.3, 2.2, 3.2) = \emptyset$$

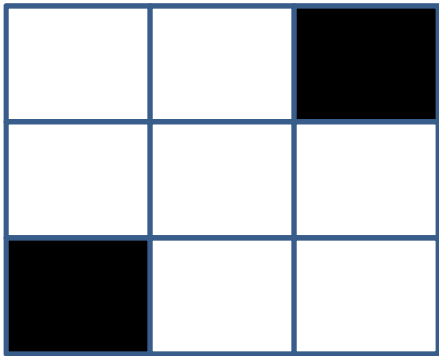
$$N(1.2) = (1.1, 1.3, 2.2)$$

$$N(2.1) = (1.1, 2.2, 3.1)$$



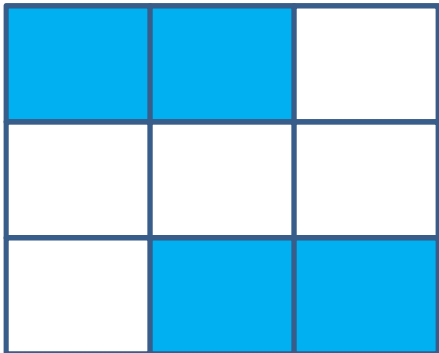
$$2.3. R = (1.3)$$

$$G(1.3) = (1.3, 3.1)$$



$$R_\lambda(1.3) = (1.1, 1.2)$$

$$R_\rho(3.1) = (3.2, 3.3)$$

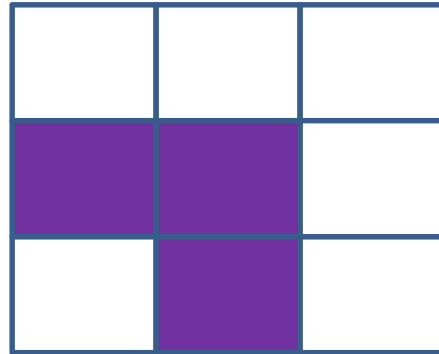
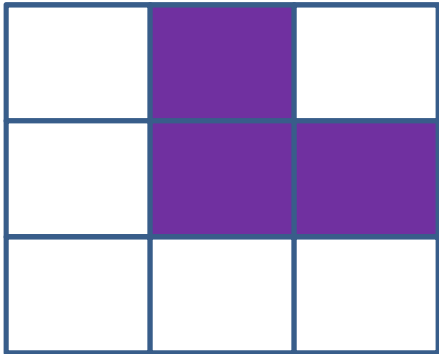


$$\mathfrak{G}_\lambda = G(1.3, 3.1) \cap (1.1, 1.2) = \emptyset$$

$$\mathfrak{G}_p = G(1.3, 3.1) \cap (2.3, 3.3) = \emptyset$$

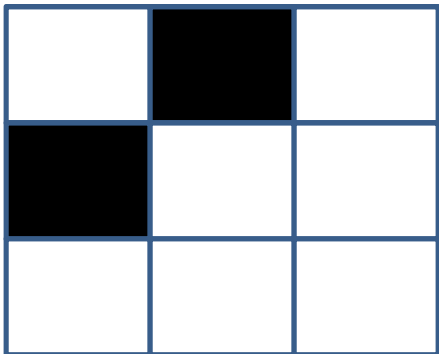
$$N(1.3) = (1.2, 2.2, 2.3)$$

$$N(3.1) = (2.1, 2.2, 3.2)$$



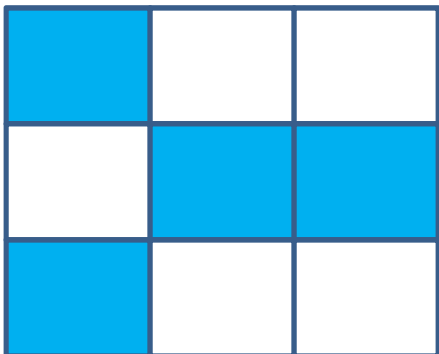
$$2.4. R = (2.1)$$

$$G(2.1, 1.2) = (2.1, 1.2)$$



$$R_\lambda(2.1) = (1.1)$$

$$R_p(2.1) = (2.2, 2.3, 3.1)$$

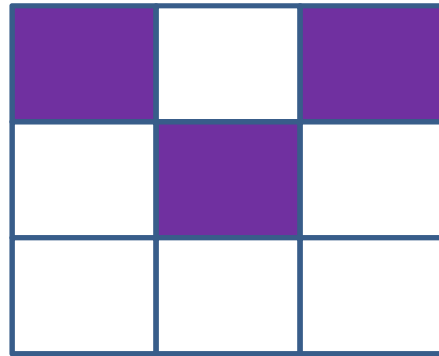
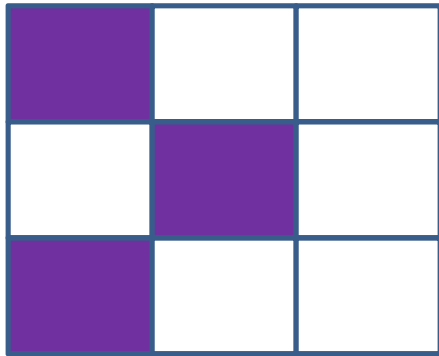


$$\mathfrak{G}_\lambda = G(2.1, 1.2) \cap (1.1) = \emptyset$$

$$\mathfrak{G}_\rho = G(2.1, 1.2) \cap (2.2, 2.3, 3.1) = \emptyset$$

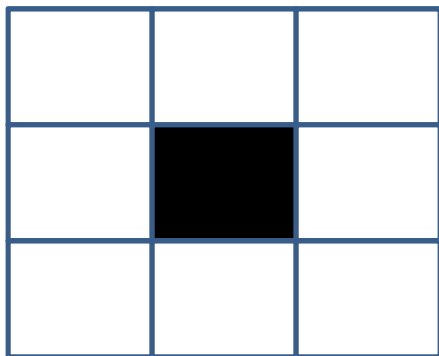
$$N(2.1) = (1.1, 2.2, 3.1)$$

$$N(1.2) = (1.1, 1.3, 2.2)$$



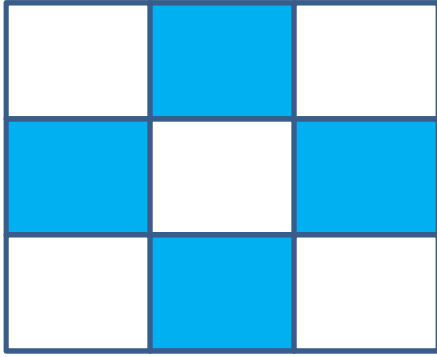
$$2.5. R = (2.2)$$

$$G(2.2, 2.2) = (2.2)$$



$$R_\lambda(2.2) = (1.2, 2.1)$$

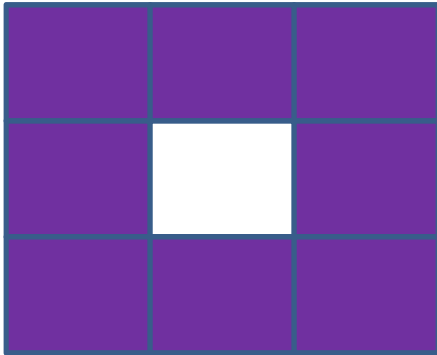
$$R_\rho(2.2) = (2.3, 3.2)$$



$$\mathfrak{G}_\lambda = G(2.2) \cap (1.2, 2.1) = \emptyset$$

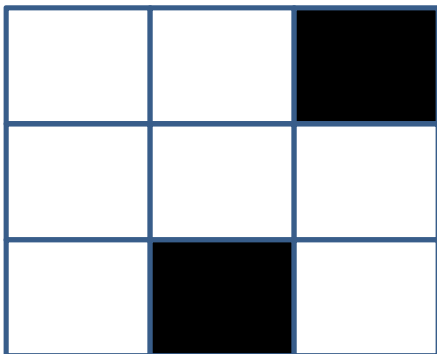
$$\mathfrak{G}_\rho = G(2.2) \cap (2.3, 3.2) = \emptyset$$

$$N(2.2) = (1.1, 1.2, 1.3, 2.1, 2.3, 3.1, 3.2, 3.3)$$



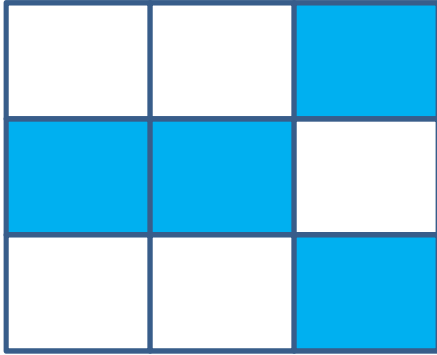
$$2.6. R = (2.3)$$

$$G(2.3, 3.2) = (2.3, 3.2)$$



$$R_\lambda(2.3) = (1.3, 2.1, 2.2)$$

$$R_\rho(2.3) = (3.3)$$

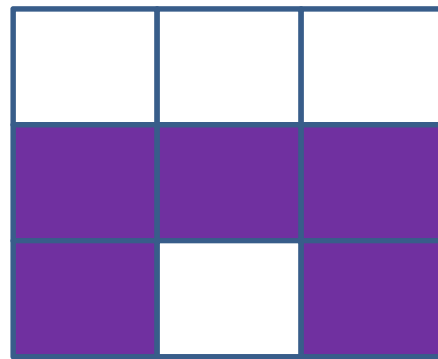
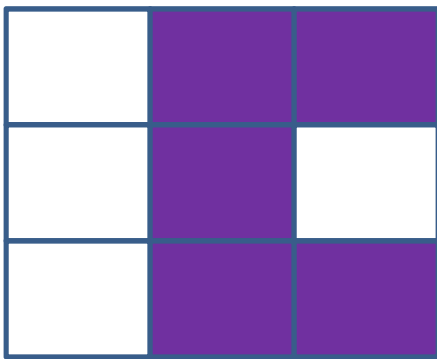


$$\mathfrak{G}_\lambda = G(2.3, 3.2) \cap (1.3, 2.1, 2.2) = \emptyset$$

$$\mathfrak{G}_\rho = G(2.3, 3.2) \cap (3.3) = \emptyset$$

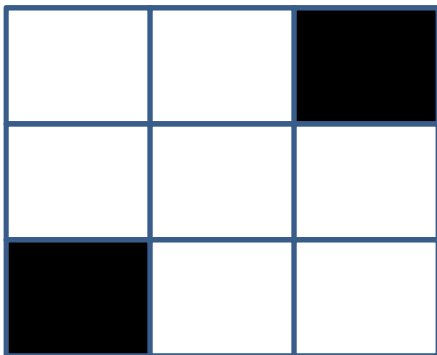
$$N(2.3) = (1.2, 1.3, 2.1, 3.2, 3.3)$$

$$N(3.2) = (2.1, 2.2, 2.3, 3.1, 3.3)$$



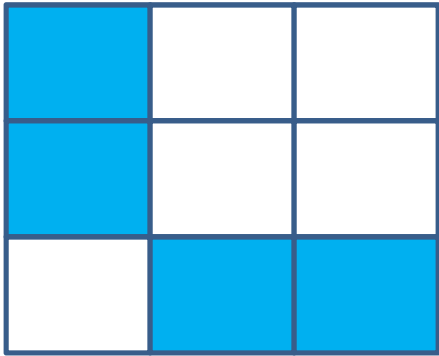
$$2.7. R = (3.1)$$

$$G(3.1, 1.3) = (1.3, 3.1)$$



$$R_\lambda(3.1) = (1.1, 2.1)$$

$$R_\rho(3.1) = (3.2, 3.3)$$

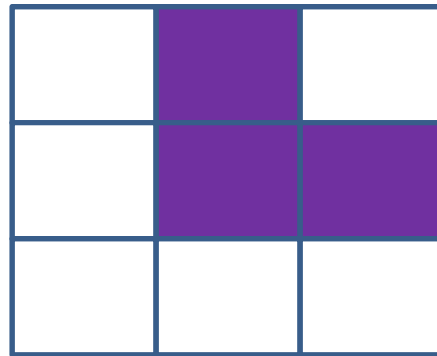
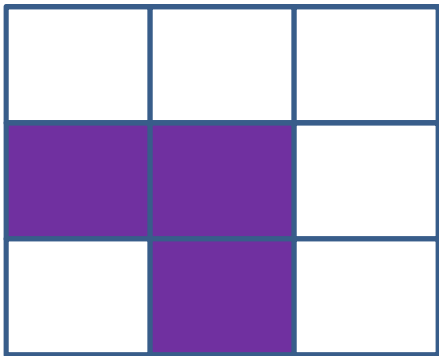


$$\mathfrak{G}_\lambda = G(3.1, 1.3) \cap (1.1, 2.1) = \emptyset$$

$$\mathfrak{G}_\rho = G(3.1, 1.3) \cap (3.2, 3.3) = \emptyset$$

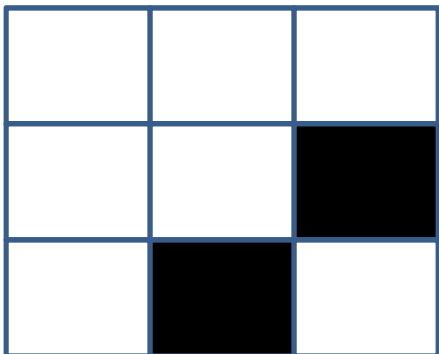
$$N(3.1) = (2.1, 2.2, 3.2)$$

$$N(1.3) = (1.2, 2.2, 2.3)$$



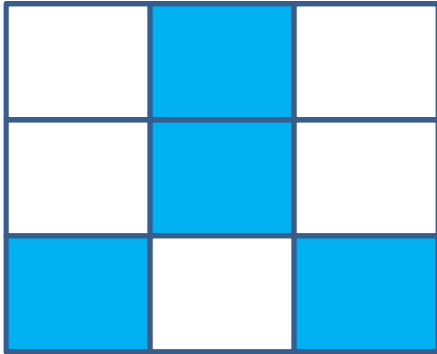
$$2.8. R = (3.2)$$

$$G(3.2, 2.3) = (2.3, 3.2)$$



$$R_\lambda(3.2) = (1.2, 2.2, 3.1)$$

$$R_\rho(3.2) = (3.3)$$

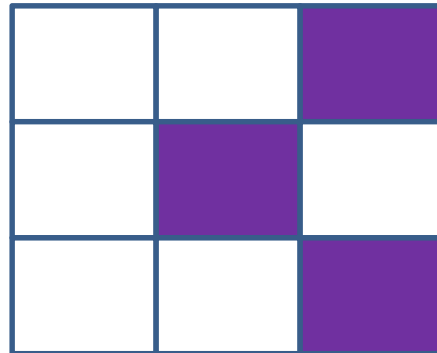
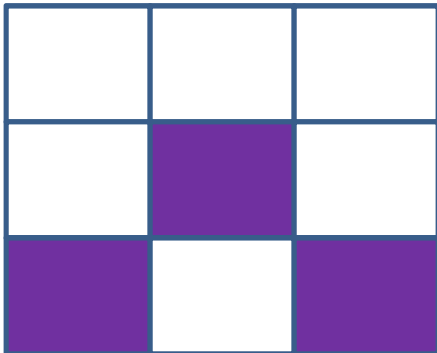


$$\mathfrak{G}_\lambda = G(3.2, 2.3) \cap (1.2, 2.2, 3.1) = \emptyset$$

$$\mathfrak{G}_\rho = G(3.2, 2.3) \cap (3.3) = \emptyset$$

$$N(3.2) = (2.2, 3.1, 3.3)$$

$$N(2.3) = (1.3, 2.2, 3.3)$$



$$2.9. R = (3.3)$$

$$G(3.3, 3.3) = (3.3)$$

$$R_{\lambda}(3.3) = (1.3, 2.3, 3.1, 3.2)$$

$$R_{\rho}(2.1) = \emptyset$$

$$\mathfrak{G}_{\lambda} = G(3.3) \cap (1.3, 2.3, 3.1, 3.2) = \emptyset$$

$$\mathfrak{G}_{\rho} = G(3.3) \cap \emptyset = \emptyset$$

$$N(3.3) = (2.2, 2.3, 3.2)$$

Literatur

Toth, Alfred, Zur Topologie semiotischer Grenzen und Ränder I-II. In: Electronic Journal for Mathematical Semiotics, 2013a

Toth, Alfred, Semiotische Ränder und Nachbarschaften. In: Electronic Journal for Mathematical Semiotics, 2013b

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