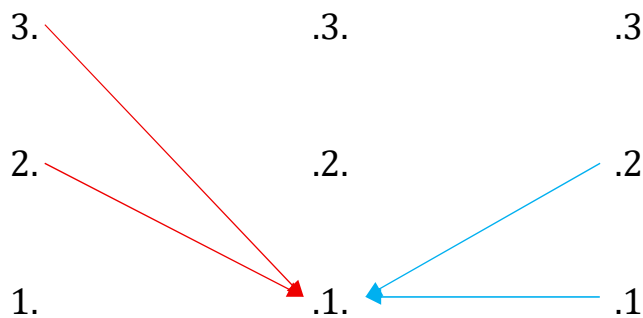


Die zehn Zeichenklassen als trajektische Grenz- und Randabbildungen

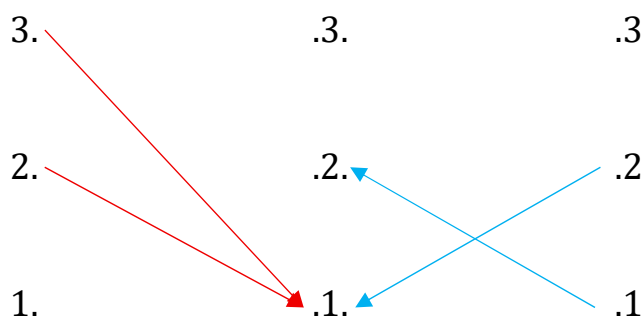
1. Mit Hilfe der Differenzierung trajektischer Abbildungen in Grenz- und in Randabbildungen (vgl. Toth 2025a) werden im folgenden die 10 Zeichenklassen (vgl. Bense 1976, S. 57) unter Berücksichtigung der topologischen Ausdifferenzierung der Peirce-Zahlen (vgl. Toth 2025b) dargestellt.

Trajektische Grenzen

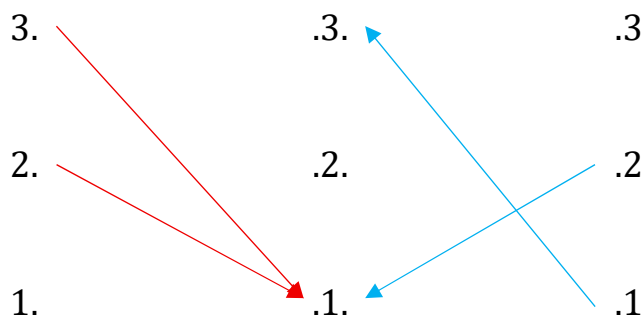
$$1. \mathfrak{T}^{\text{Gr}}(3.1, 2.1, 1.1) = (3. \rightarrow .1, 2. \rightarrow .1 \mid 1. \leftarrow .2, 1. \leftarrow .1) =$$



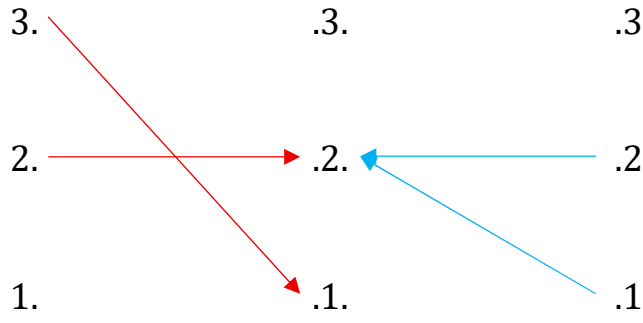
$$2. \mathfrak{T}^{\text{Gr}}(3.1, 2.1, 1.2) = (3. \rightarrow .1, 2. \rightarrow .1 \mid 1. \leftarrow .2, 2. \leftarrow .1) =$$



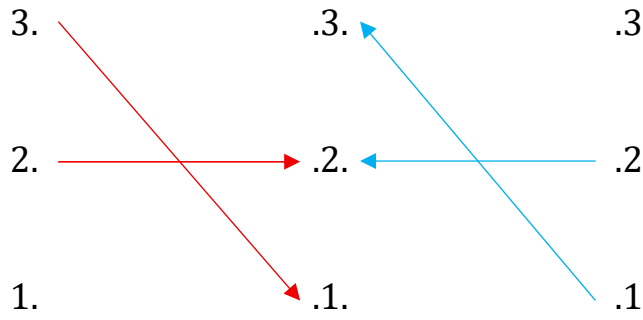
$$3. \mathfrak{T}^{\text{Gr}}(3.1, 2.1, 1.3) = (3. \rightarrow .1, 2. \rightarrow .1 \mid 1. \leftarrow .2, 3. \leftarrow .1) =$$



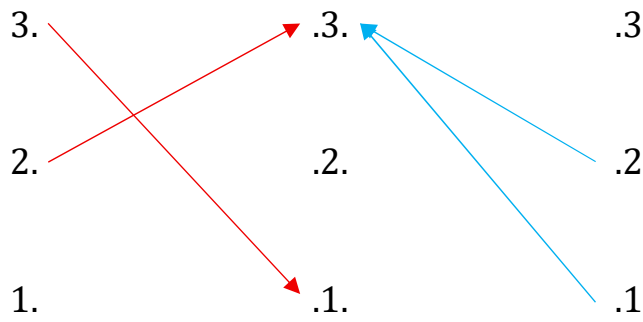
$$4. \mathfrak{T}^{\text{Gr}}(3.1, 2.2, 1.2) = (3. \rightarrow .1, 2. \rightarrow .2 \mid 2. \leftarrow .2, 2. \leftarrow .1) =$$



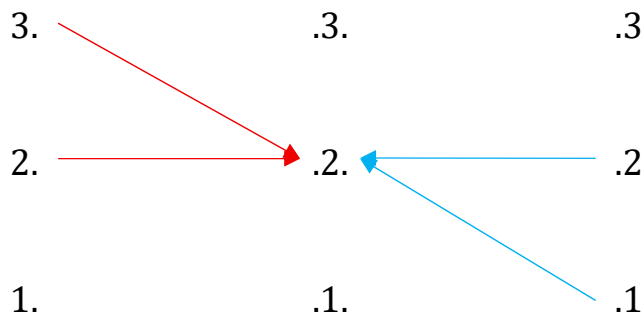
$$5. \mathfrak{T}^{\text{Gr}}(3.1, 2.2, 1.3) = (3. \rightarrow .1, 2. \rightarrow .2 \mid 2. \leftarrow .2, 3. \leftarrow .1) =$$



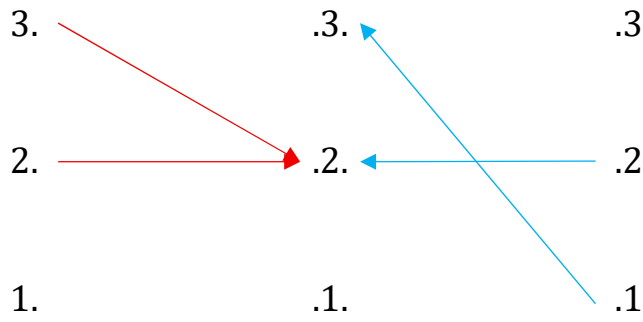
$$6. \mathfrak{T}^{\text{Gr}}(3.1, 2.3, 1.3) = (3. \rightarrow .1, 2. \rightarrow .3 \mid 3. \leftarrow .2, 3. \leftarrow .1) =$$



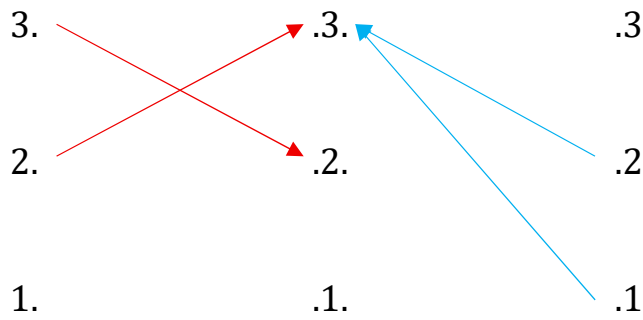
$$7. \mathfrak{T}^{\text{Gr}}(3.2, 2.2, 1.2) = (3. \rightarrow .2, 2. \rightarrow .2 \mid 2. \leftarrow .2, 2. \leftarrow .1) =$$



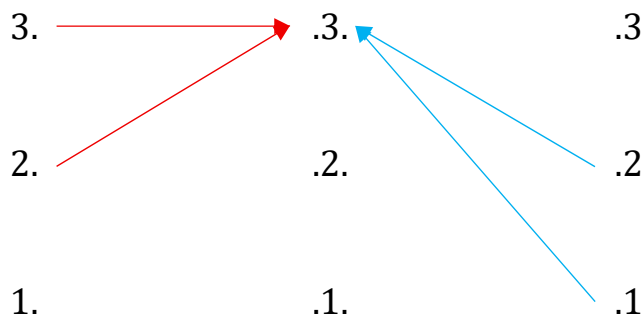
$$8. \mathfrak{T}^{\text{Gr}}(3.2, 2.2, 1.3) = (3. \rightarrow .2, 2. \rightarrow .2 \mid 2. \leftarrow .2, 3. \leftarrow .1) =$$



$$9. \mathfrak{T}^{\text{Gr}}(3.2, 2.3, 1.3) = (3. \rightarrow .2, 2. \rightarrow .3 \mid 3. \leftarrow .2, 3. \leftarrow .1) =$$

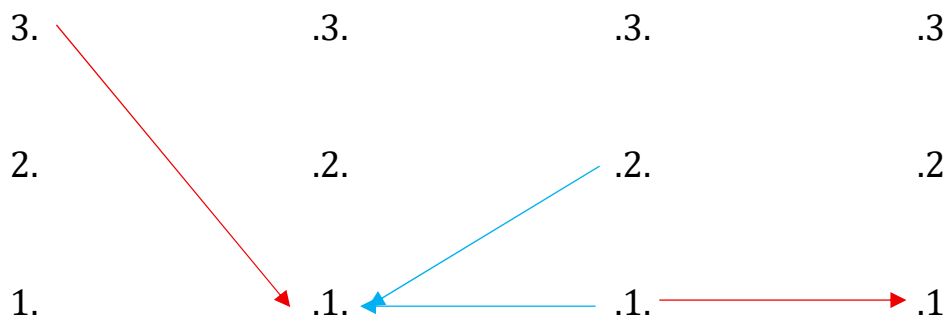


$$10. \mathfrak{T}^{\text{Gr}}(3.3, 2.3, 1.3) = (3. \rightarrow .3, 2. \rightarrow .3 \mid 3. \leftarrow .2, 3. \leftarrow .1) =$$

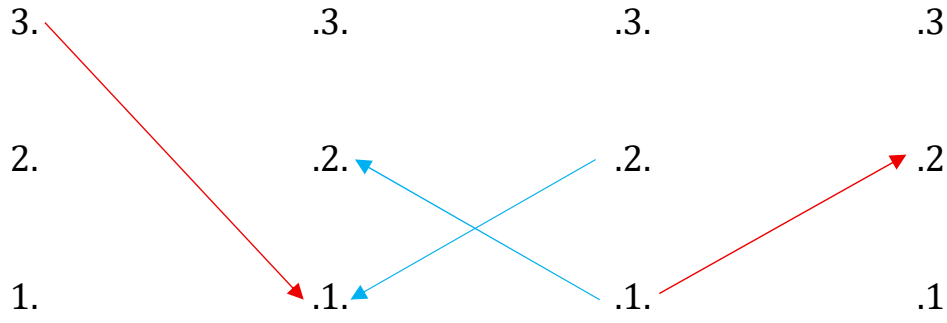


Trajektische Ränder

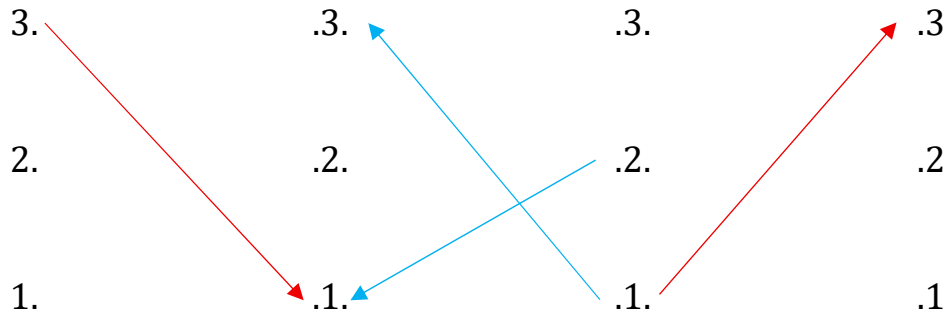
$$1. \mathfrak{T}^{\text{Ra}}(3.1, 2.1, 1.1) = (3. \rightarrow .1 \mid 1. \leftarrow .2, 1. \leftarrow .1 \mid 1. \rightarrow .1) =$$



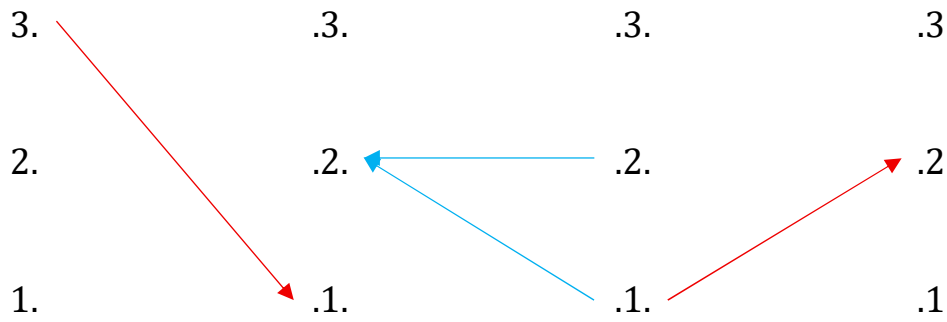
$$2. \mathfrak{T}^{\text{Ra}}(3.1, 2.1, 1.2) = (3. \rightarrow .1 \mid 1. \leftarrow .2, 2. \leftarrow .1 \mid 1. \rightarrow .2) =$$



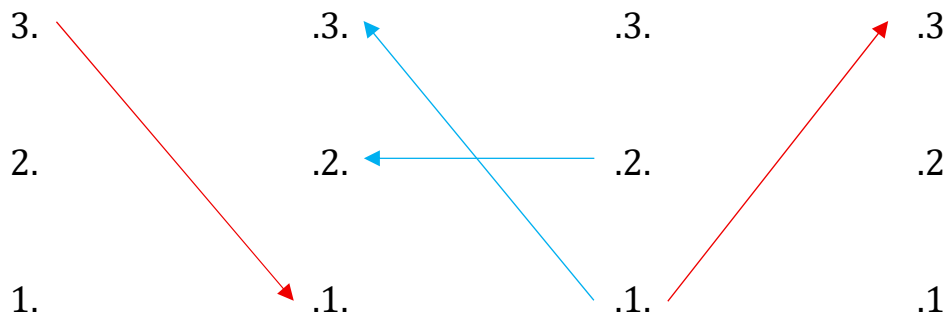
$$3. \mathfrak{T}^{\text{Ra}}(3.1, 2.1, 1.3) = (3. \rightarrow .1 \mid 1. \leftarrow .2, 3. \leftarrow .1 \mid 1. \rightarrow .3) =$$



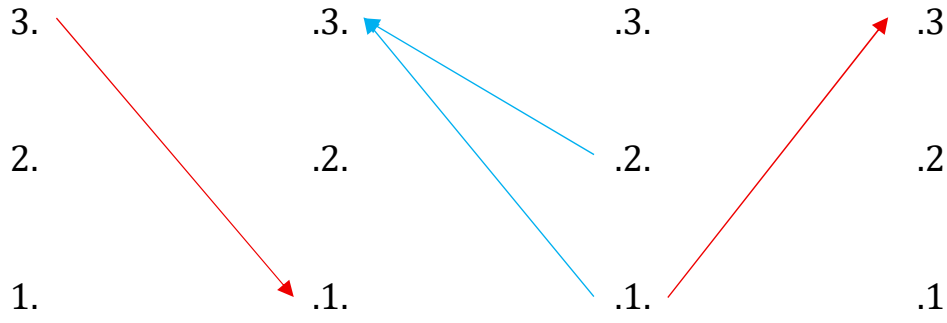
$$4. \mathfrak{T}^{\text{Ra}}(3.1, 2.2, 1.2) = (3. \rightarrow .1 \mid 2. \leftarrow .2, 2. \leftarrow .1 \mid 1. \rightarrow .2) =$$



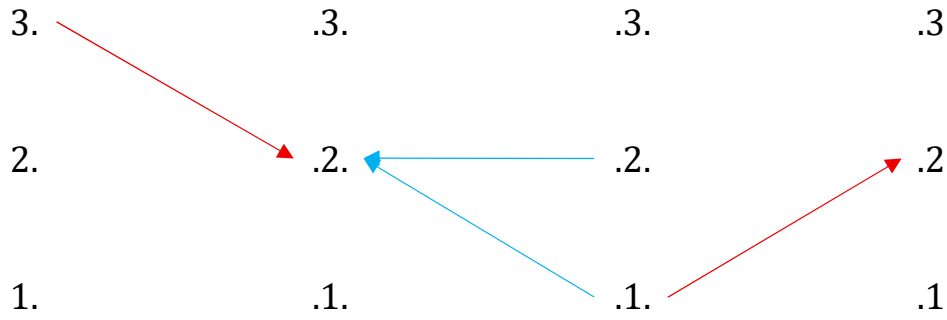
$$5. \mathfrak{T}^{\text{Ra}}(3.1, 2.2, 1.3) = (3. \rightarrow .1 \mid 2. \leftarrow .2, 3. \leftarrow .1 \mid 1. \rightarrow .3) =$$



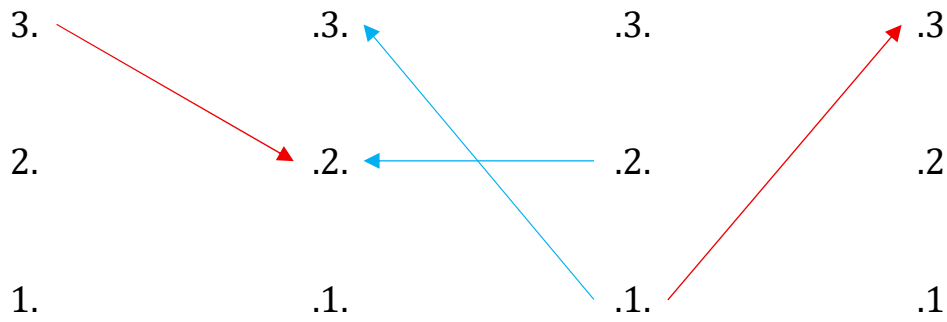
$$6. \mathfrak{T}^{\text{Ra}}(3.1, 2.3, 1.3) = (3. \rightarrow .1 \mid 3. \leftarrow .2, 3. \leftarrow .1 \mid 1. \rightarrow .3) =$$



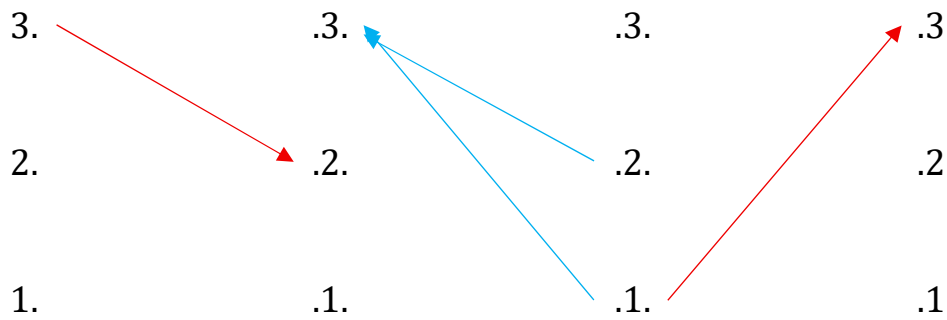
$$7. \mathfrak{T}^{\text{Ra}}(3.2, 2.2, 1.2) = (3. \rightarrow .2 \mid 2. \leftarrow .2, 2. \leftarrow .1 \mid 1. \rightarrow .2) =$$



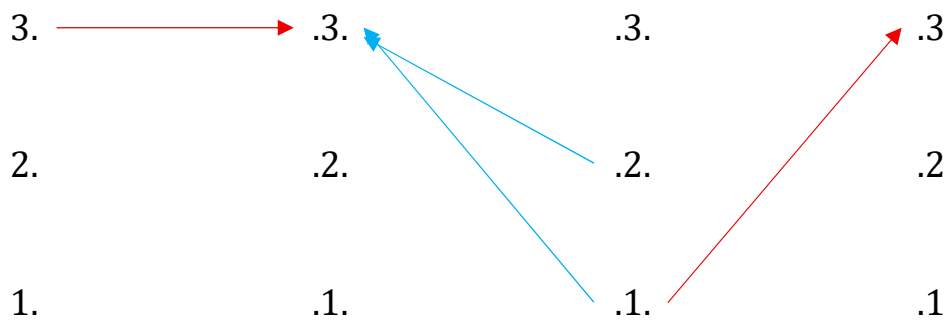
$$8. \mathfrak{T}^{\text{Ra}}(3.2, 2.2, 1.3) = (3. \rightarrow .2 \mid 2. \leftarrow .2, 3. \leftarrow .1 \mid 1. \rightarrow .3) =$$



$$9. \mathfrak{T}^{\text{Ra}}(3.2, 2.3, 1.3) = (3. \rightarrow .2 \mid 3. \leftarrow .2, 3. \leftarrow .1 \mid 1. \rightarrow .3) =$$



$$10. \mathfrak{T}^{\text{Ra}}(3.3, 2.3, 1.3) = (3. \rightarrow .3 \mid 3. \leftarrow .2, 3. \leftarrow .1 \mid 1. \rightarrow .3) =$$



Literatur

Toth, Alfred, Trajektische Ränder und Grenzen. In: Electronic Journal for Mathematical Semiotics, 2025a

Toth, Alfred, Topologische Differenzierungen von Peirce-Zahlen. In: Electronic Journal for Mathematical Semiotics, 2025b

1.10.2025