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## **Elemente einer qualitativen semiotischen Handlungstheorie**

Eine quantitative semiotische Handlungstheorie wurde in Toth (2008) vorgelegt. Zu Motivation, Hintergründen und Anwendungen vgl. man dieses Buch. Wie in Toth (2008), wird auch hier ausgegangen von der polykontexturalen Erweiterung der triadischen Peirceschen Zeichenrelation zur tetradischen präsemiotischen Zeichenrelation, in welche das Objekt des Zeichens als kategoriales Objekt eingebettet ist:

$$\text{PZR} = \{0.1, 0.2, 0.3, 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3\} = \\ \{\square, \sqcup, \sqsubset, \triangle, \blacktriangle, \blacktriangle, \square, \blacksquare, \blacksquare, \circ, \bullet, \bullet\}$$

Für die nur in Realitätsthematiken aufscheinenden Primzeichen (1.0), (2.0), (3.0) stehen die qualitativen Zeichen  $\{\square^*, \sqcup^*, \sqsubset^*\}$ . Als Interpretationsgrundlage des qualitativ-semiotischen Formalismus dieser Arbeit dient die folgende qualitative Matrix aus Bense (1979, S. 61):

Qualität	Quantität	Essenz
Abstraktion	Relation	Komprehension
Konnexion	Limitation	Komplettierung

Eine tetradische semiotische Zeichenrelation hat die folgenden Partialrelationen:

monadische Partialrelationen: (.0.), (.1.), (.2.), (.3.).

dyadische Partialrelationen: ( $\square$ ), ( $\sqcup$ ), ( $\sqsubset$ ), ( $\square^*$ ), ( $\sqcup^*$ ), ( $\sqsubset^*$ ), ( $\blacktriangle$ ), ( $\blacktriangle$ ), ( $\blacksquare$ ), ( $\blacksquare$ ), ( $\circ$ ), ( $\bullet$ ), ( $\bullet$ ).

triadische Partialrelationen: (0., 2., 1.), (0., 1., 2.), (1., 2., 0.), (1., 0., 2),

(2., 1., 0.), (2., 0., 1), (3., 2., 1), (3., 1., 2.),  
 (2., 3., 1.), (2., 1., 3.), (1., 3., 2.), (1., 2., 3),  
 (0., 3., 2.), (0., 2., 3.), (2., 3., 0.), (2., 0., 3.),  
 (3., 2., 0.), (3., 0., 2.), (0., 3., 1.), (0., 1., 3.),  
 (1., 3., 0.), (1., 0., 3.), (3., 1., 0.), (3., 0., 1.).

tetradische Partialrelationen: (3., 2., 1., 0.), (2., 3., 1., 0.), (2., 1., 3., 0.),  
 (1., 2., 3., 0.), (3., 1., 2., 0.), (1., 3., 2., 0.),  
 (2., 3., 0., 1.), (3., 2., 0., 1.), (2., 1., 0., 3.),  
 (1., 2., 0., 3.), (3., 1., 0., 2.), (1., 3., 0., 2.),  
 (2., 0., 3., 1.), (3., 0., 2., 1.), (2., 0., 1., 3.),  
 (1., 0., 2., 3.), (3., 0., 1., 2.), (1., 0., 3., 2.),  
 (0., 2., 3., 1.), (0., 3., 2., 1.), (0., 1., 2., 3.),  
 (0., 2., 1., 3.), (0., 3., 1., 2.), (0., 1., 3., 2.).

Total ergeben sich damit  $15 \cdot 2 \cdot 67 = 2'010$  semiotische Handlungsschemata, die also wegen der Aufhebung der Diskontextualität zwischen Zeichen und Objekt qua kategoriales Objekt innerhalb der präsemiotischen tetradischen Zeichenrelation polykontextural sind (vgl. Toth 2009).

In Toth (2008) wurde ebenfalls gezeigt, dass die präsemiotische tetradische Zeichenrelation insofern erkenntnistheoretisch, logisch und ontologisch vollständig ist, als wir die folgenden Entsprechungen zwischen logischen Relationen und semiotischen Kategorien haben:

subjektives Subjekt (sS)  $\cong$  Drittheit (Interpretantenbezug, I)  
 objektives Objekt (oO)  $\cong$  Zweitheit (Objektbezug, O)  
 subjektives Objekt (sO)  $\cong$  Erstheit (Mittelbezug, M)  
 objektives Subjekt (oS)  $\cong$  Nullheit (Qualität, Q)

Wir können deshalb die obigen 67 semiotisch-numerischen Partialrelationen auch in der folgenden semiotisch-logischen Form notieren:

Monadische semiotisch-logische Partialrelationen:

(sO), (oS), (oO), (sS)

Dyadische semiotisch-logische Partialrelationen:

((sO), (oS)); ((sO), (oO)); ((sO), (sS)); ((oS), (sO)); ((oO), (sO)); ((sS), (sO));  
 ((oS), (oS)); ((oS), (oO)); ((oS), (sS)); ((oO), (oS)); ((oO), (oO)); ((oO), (sS));  
 ((sS), (oS)); ((sS), (oO)), ((sS), (sS))

Triadische semiotisch-logische Partialrelationen:

((sO), (oO), (oS)); ((sO), (oS)), (oO)); ((oS), (oO), (sO)); ((oS), (sO), (oO));  
 ((oO), (oS), (sO)); ((oO), (sO), (oS)); ((sS), (oO), (oS)); ((sS), (oS), (oO));  
 ((oO), (sS), (oS)); ((oO), (oS), (sS)); ((oS), (sS), (oO)); ((oS), (oO), (sS));  
 ((sO), (sS), (oO)); ((sO), (oO), (sS)); ((oO), (sS), (sO)); ((oO), (sO), (sS));  
 ((sS), (oO), (sO)); ((sS), (sO), (oO)); ((sO), (sS), (oS)); ((sO), (oS), (sS));  
 ((oS), (sS), (sO)); ((oS), (sO), (sS)); ((sS), (oS), (sO)); ((sS), (sO), (oS))

Nun ist eine triadische Partialrelation einer tetradischen semiotischen Relation eine kombinatorische Auswahl aus den vier präsemiotischen Kategorien (0.), (.1.), (.2.), (.3.) bzw. (sO), (oS), (oO), (sS). Dabei können also entweder (0., .1., .2.), (.1., .2., .3.), (0., .2., .3.) oder (0., .1., .3.) zu Triaden zusammenfasst werden.

Wir erhalten damit die folgenden  $2 \cdot 24 = 48$  Permutationen:

(0.d 2.b 1.c) × (c.1 b.2 d.0) → ((sO), (oO), (oS)) × ((sO), (oO), (oS))  
 (0.d 1.c 2.b) × (b.2 c.1 d.0) → ((sO), (oS), (oO)) × ((oO), (sO), (oS))  
 (1.c 2.b 0.d) × (d.0 b.2 c.1) → ((oS), (oO), (sO)) × ((oS), (oO), (sO))  
 (1.c 0.d 2.b) × (b.2 d.0 c.1) → ((oS), (sO), (oO)) × ((oO), (oS), (sO))  
 (2.b 1.c 0.d) × (d.0 c.1 b.2) → ((oO), (oS), (sO)) × ((oS), (sO), (oO))  
 (2.b 0.d 1.c) × (c.1 d.0 b.2) → ((oO), (sO), (oS)) × ((sO), (oS), (oO))

(3.a 2.b 1.c) × (c.1 b.2 a.3) → ((sS), (oO), (oS)) × ((sO), (oO), (sS))  
 (3.a 1.c 2.b) × (b.2 c.1 a.3) → ((sS), (oS), (oO)) × ((oO), (sO), (sS))  
 (2.b 3.a 1.c) × (c.1 a.3 b.2) → ((oO), (sS), (oS)) × ((sO), (sS), (oO))  
 (2.b 1.c 3.a) × (a.3 c.1 b.2) → ((oO), (oS), (sS)) × ((sS), (sO), (oO))  
 (1.c 3.a 2.b) × (b.2 a.3 c.1) → ((oS), (sS), (oO)) × ((oO), (sS), (sO))  
 (1.c 2.b 3.a) × (a.3 b.2 c.1) → ((oS), (oO), (sS)) × ((sS), (oO), (sO))

(0.d 3.a 2.b) × (b.2 a.3 d.0) → ((sO), (sS), (oO)) × ((oO), (sS), (oS))  
 (0.d 2.b 3.a) × (a.3 b.2 d.0) → ((sO), (oO), (sS)) × ((sS), (oO), (oS))  
 (2.b 3.a 0.d) × (d.0 a.3 b.2) → ((oO), (sS), (sO)) × ((oS), (sS), (oO))

$$\begin{array}{l}
(2.b\ 0.d\ 3.a) \times (a.3\ d.0\ b.2) \rightarrow (oO), (sO), (sS) \quad \times \quad ((sS), (oS), (oO)) \\
(3.a\ 2.b\ 0.d) \times (d.0\ b.2\ a.3) \rightarrow ((sS), (oO), (sO)) \quad \times \quad ((oS), (oO), (sS)) \\
(3.a\ 0.d\ 2.b) \times (b.2\ d.0\ a.3) \rightarrow ((sS), (sO), (oO)) \quad \times \quad ((oO), (oS), (sS)) \\
\\
(0.d\ 3.a\ 1.c) \times (c.1\ a.3\ d.0) \rightarrow ((sO), (sS), (oS)) \quad \times \quad ((sO), (sS), (oS)) \\
(0.d\ 1.c\ 3.a) \times (a.3\ c.1\ d.0) \rightarrow ((sO), (oS), (sS)) \quad \times \quad ((sS), (sO), (oS)) \\
(1.c\ 3.a\ 0.d) \times (d.0\ a.3\ c.1) \rightarrow ((oS), (sS), (sO)) \quad \times \quad ((oS), (sS), (sO)) \\
(1.c\ 0.d\ 3.a) \times (a.3\ d.0\ c.1) \rightarrow ((oS), (sO), (sS)) \quad \times \quad ((sS), (oS), (sO)) \\
(3.a\ 1.c\ 0.d) \times (d.0\ c.1\ a.3) \rightarrow ((sS), (oS), (sO)) \quad \times \quad ((oS), (sO), (sS)) \\
(3.a\ 0.d\ 1.c) \times (c.1\ d.0\ a.3) \rightarrow ((sS), (sO), (oS)) \quad \times \quad ((sO), (oS), (sS))
\end{array}$$

Tetradisch semiotisch-logische Partialrelationen:

$$\begin{array}{l}
((sS), (oO), (oS), (sO)); ((oO), (sS), (oS), (sO)); ((oO), (oS), (sS), (sO)); \\
((oS), (oO), (sS), (sO)); ((sS), (oS), (oO), (sO)); ((oS), (sS), (oO), (sO)); \\
((oO), (sS), (sO), (oS)); ((sS), (oO), (sO), (oS)); ((oO), (oS), (sO), (sS)); \\
((oS), (oO), (sO), (sS)); ((sS), (oS), (sO), (oO)); ((oS), (sS), (sO), (oO)); \\
((oO), (sO), (sS), (oS)); ((sS), (sO), (oO), (oS)); ((oO), (sO), (oS), (sS)); \\
((oS), (sO), (oO), (sS)); ((sS), (sO), (oS), (oO)); ((oS), (sO), (sS), (oO)); \\
((sO), (oO), (sS), (oS)); ((sO), (sS), (oO), (oS)); ((sO), (oS), (oO), (sS)); \\
((sO), (oO), (oS), (sS)); ((sO), (sS), (oS), (oO)); ((sO), (oS), (sS), (oO)).
\end{array}$$

Vollständige Auflistung der  $2 \cdot 24 = 48$  tetradischen Permutationen:

$$\begin{array}{l}
(3.a\ 2.b\ 1.c\ 0.d) \times (d.0\ c.1\ b.2\ a.3) \rightarrow ((sS), (oO), (oS), (sO)) \quad \times \quad ((oS), (sO), (oO), (sS)) \\
(2.b\ 3.a\ 1.c\ 0.d) \times (d.0\ c.1\ a.3\ b.2) \rightarrow ((oO), (sS), (oS), (sO)) \quad \times \quad ((oS), (sO), (sS), (oO)) \\
(2.b\ 1.c\ 3.a\ 0.d) \times (d.0\ a.3\ c.1\ b.2) \rightarrow ((oO), (oS), (sS), (sO)) \quad \times \quad ((oS), (sS), (sO), (oO)) \\
(1.c\ 2.b\ 3.a\ 0.d) \times (d.0\ a.3\ b.2\ c.1) \rightarrow ((oS), (oO), (sS), (sO)) \quad \times \quad ((oS), (sS), (oO), (sO)) \\
(3.a\ 1.c\ 2.b\ 0.d) \times (d.0\ b.2\ c.1\ a.3) \rightarrow ((sS), (oS), (oO), (sO)) \quad \times \quad ((oS), (oO), (sO), (sS)) \\
(1.c\ 3.a\ 2.b\ 0.d) \times (d.0\ b.2\ a.3\ c.1) \rightarrow ((oS), (sS), (oO), (sO)) \quad \times \quad ((oS), (oO), (sS), (sO)) \\
\\
(2.b\ 3.a\ 0.d\ 1.c) \times (c.1\ d.0\ a.3\ b.2) \rightarrow ((oO), (sS), (sO), (oS)) \quad \times \quad ((sO), (oS), (sS), (oO)) \\
(3.a\ 2.b\ 0.d\ 1.c) \times (c.1\ d.0\ b.2\ a.3) \rightarrow ((sS), (oO), (sO), (oS)) \quad \times \quad ((sO), (oS), (oO), (sS)) \\
(2.b\ 1.c\ 0.d\ 3.a) \times (a.3\ d.0\ c.1\ b.2) \rightarrow ((oO), (oS), (sO), (sS)) \quad \times \quad ((sS), (oS), (sO), (oO)) \\
(1.c\ 2.b\ 0.d\ 3.a) \times (a.3\ d.0\ b.2\ c.1) \rightarrow ((oS), (oO), (sO), (sS)) \quad \times \quad ((sS), (oS), (oO), (sO)) \\
(3.a\ 1.c\ 0.d\ 2.b) \times (b.2\ d.0\ c.1\ a.3) \rightarrow ((sS), (oS), (sO), (oO)) \quad \times \quad ((oO), (oS), (sO), (sS)) \\
(1.c\ 3.a\ 0.d\ 2.b) \times (b.2\ d.0\ a.3\ c.1) \rightarrow ((oS), (sS), (sO), (oO)) \quad \times \quad ((oO), (oS), (sS), (sO)) \\
\\
(2.b\ 0.d\ 3.a\ 1.c) \times (c.1\ a.3\ d.0\ b.2) \rightarrow ((oO), (sO), (sS), (oS)) \quad \times \quad ((sO), (sS), (oS), (oO)) \\
(3.a\ 0.d\ 2.b\ 1.c) \times (c.1\ b.2\ d.0\ a.3) \rightarrow ((sS), (sO), (oO), (oS)) \quad \times \quad ((sO), (oO), (oS), (sS))
\end{array}$$

(2.b 0.d 1.c 3.a) × (a.3 c.1 d.0 b.2) → ((oO), (sO), (oS), (sS)) × ((sS), (sO), (oS), (oO))  
 (1.c 0.d 2.b 3.a) × (a.3 b.2 d.0 c.1) → ((oS), (sO), (oO), (sS)) × ((sS), (oO), (oS), (sO))  
 (3.a 0.d 1.c 2.b) × (b.2 c.1 d.0 a.3) → ((sS), (sO), (oS), (oO)) × ((oO), (sO), (oS), (sS))  
 (1.c 0.d 3.a 2.b) × (b.2 a.3 d.0 c.1) → ((oS), (sO), (sS), (oO)) × ((oO), (sS), (oS), (sO))

(0.d 2.b 3.a 1.c) × (c.1 a.3 b.2 d.0) → ((sO), (oO), (sS), (oS)) × ((sO), (sS), (oO), (oS))  
 (0.d 3.a 2.b 1.c) × (c.1 b.2 a.3 d.0) → ((sO), (sS), (oO), (oS)) × ((sO), (oO), (sS), (oS))  
 (0.d 1.c 2.b 3.a) × (a.3 b.2 c.1 d.0) → ((sO), (oS), (oO), (sS)) × ((sS), (oO), (sO), (oS))  
 (0.d 2.b 1.c 3.a) × (a.3 c.1 b.2 d.0) → ((sO), (oO), (oS), (sS)) × ((sS), (sO), (oO), (oS))  
 (0.d 3.a 1.c 2.b) × (b.2 c.1 a.3 d.0) → ((sO), (sS), (oS), (oO)) × ((oO), (sO), (sS), (oS))  
 (0.d 1.c 3.a 2.b) × (b.2 a.3 c.1 d.0) → ((sO), (oS), (sS), (oO)) × ((oO), (sS), (sO), (oS))

Wir erhalten demnach ein Grobraster semiotischer Handlungstypen nach dem “Output” der Handlungen:

1. Qualitativ-pragmatisches Handeln (Q = (sO))
2. Mediales Handeln (M = (oS))
3. Objektives Handeln (O = (oO))
4. Interpretatives Handeln (I = (sS))

Diese Klassifikation nach dem Output von Handlungen trägt also der Tatsache Rechnung, dass “Handlungen (...) untrennbar mit ihrem Produkt, ihren Resultaten, verknüpft” sind (Kummer 1975, S. 17).

Da die Handlungsschemata der **4 monadischen semiotischen Partialrelationen**

(sO), (oS), (oO), (sS)

sowie der **15 dyadischen semiotischen Partialrelationen**

(sO) ↔ (oS)      (sS) ↔ (sO)      (oO) ↔ (oO)  
 (sO) ↔ (oO)      (oS) ↔ (oS))      (oO) ↔ (sS)  
 (sO) ↔ (sS)      (oS) ↔ (oO)      (sS) ↔ (oS)  
 (oS) ↔ (sO)      (oS) ↔ (sS)      (sS) ↔ (oO)  
 (oO) ↔ (sO)      (oO) ↔ (oS)      (sS) ↔ (sS)

trivial sind, beschränken wir uns hier auf den Aufweis der 24 triadischen und der 24 tetradischen semiotischen Partialrelationen für alle 15 präsemiotischen Zeichenklassen und ihre dualen Realitätsthematiken.

**I. Handlungsschemata der 2 · 24 triadischen semiotischen Partialrelationen**

1. Präsemiotisches Dualsystem  $(\circ \square \sqsubset \sqsupset) \times (\sqsupset^* \square \blacktriangle \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsupset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsupset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsupset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsupset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsupset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsupset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: M = oS} \\
 \\
 \text{Input: O = oO} \\
 \\
 \text{Input: I = sS} \\
 \\
 \text{Input: I = sS}
 \end{array}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\sqsupset) \end{array} \right) \times \left( \begin{array}{l} (\sqsupset^*) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\sqsupset) \end{array} \right) \times \left( \begin{array}{l} (\sqsupset^*) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\sqcap) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\sqcap^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\sqcap) \end{array} \right) \times \left( \begin{array}{l} (\sqcap^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\sqcap) \end{array} \right) \times \left( \begin{array}{l} (\sqcap^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\sqcap) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\sqcap^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\sqcap) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\sqcap^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$



2. Präsemiotisches Dualsystem  $(\circ \square \sqsubset \sqcup) \times (\sqcup^* \sqsubset \blacktriangle \blacktriangleright)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqcup) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqcup) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqcup) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\sqsubset) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqcup) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqcup) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\sqsubset) \end{array} \right) \\
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqcup) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } M = oS \\
 \\ \\
 \text{Input: } O = oO \\
 \\ \\
 \text{Input: } I = sS
 \end{array}$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\square) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\square) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\sqcup) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

### 3. Präsemiotisches Dualsystem $(\circ \square \sqsubset \sqsubset) \times (\sqsubset^* \sqsubset \blacktriangle \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\sqsubset) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqsubset) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\sqsubset) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

4. Präsemiotisches Dualsystem  $(\circ \square \blacktriangle \sqcup) \times (\sqcup^* \square \blacktriangle \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqcup) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqcup) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqcup) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqcup) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqcup^*) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } M = oS \\
 \\
 \text{Input: } O = oO \\
 \\
 \text{Input: } I = sS
 \end{array}$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$
  

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$
  

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$



$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \end{array} \right\} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \\ (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \left. \vphantom{\begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \end{array}} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\sqcup) \end{array} \right) \times \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\sqcup) \end{array} \right) \times \end{array} \right\} \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \\ (\sqcup^*) \\ (\square) \end{array} \right) \left. \vphantom{\begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\sqcup) \end{array} \right) \times \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\sqcup) \end{array} \right) \times \end{array}} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \times \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \times \end{array} \right\} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \\ (\square) \\ (\sqcup^*) \end{array} \right) \left. \vphantom{\begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \times \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \times \end{array}} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \end{array} \right\} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \\ (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \left. \vphantom{\begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \end{array}} \right\} \text{Input: O = oO}$$

5. Präsemiotisches Dualsystem  $(\circ \square \blacktriangle \sqsubset) \times (\sqsubset^* \square \blacktriangle \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } M = oS \\
 \\
 \text{Input: } O = oO \\
 \\
 \text{Input: } I = sS
 \end{array}$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\}
 \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\circ) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \times \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\circ) \\ (\square) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

6. Präsemiotisches Dualsystem  $(\square \blacktriangle \sqsubset) \times (\sqsupset^* \circ \blacktriangle \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsupset^*) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsupset^*) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (O) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\square) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (O) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (O) \\ \lambda \gg (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (O) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (O) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

7. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \sqcup) \times (\sqcup^* \square \blacksquare \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqcup) \\ \blacktriangle \end{array} \right) \times \left( \begin{array}{l} \square \\ \lambda \gg (\sqcup^*) \\ \blacksquare \end{array} \right) \\
 \left( \begin{array}{l} \circ \\ \lambda \gg (\sqcup) \\ \blacktriangle \end{array} \right) \times \left( \begin{array}{l} \square \\ \lambda \gg (\sqcup^*) \\ \blacktriangle \end{array} \right) \\
 \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqcup) \\ \blacksquare \end{array} \right) \times \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqcup^*) \\ \square \end{array} \right) \\
 \left( \begin{array}{l} \circ \\ \lambda \gg (\sqcup) \\ \blacksquare \end{array} \right) \times \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqcup^*) \\ \blacktriangle \end{array} \right) \\
 \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqcup) \\ \circ \end{array} \right) \times \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqcup^*) \\ \square \end{array} \right) \\
 \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqcup) \\ \circ \end{array} \right) \times \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqcup^*) \\ \blacksquare \end{array} \right)
 \end{array} \right\} \begin{array}{l} \text{Input: } M = oS \\ \\ \text{Input: } O = oO \\ \\ \text{Input: } I = sS \end{array}$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\blacktriangle) \\ \sqcup \end{array} \right) \times \left( \begin{array}{l} \sqcup^* \\ \lambda \gg (\square) \\ \blacksquare \end{array} \right) \\
 \left( \begin{array}{l} \circ \\ \lambda \gg (\blacktriangle) \\ \sqcup \end{array} \right) \times \left( \begin{array}{l} \sqcup^* \\ \lambda \gg (\square) \\ \blacktriangle \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$



$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \end{array} \right) \times \\ (\circ) \end{array} \right\} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\
 \left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacksquare) \end{array} \right) \times \\ (\circ) \end{array} \right\} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\sqcup^*) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\circ) \end{array} \right) \times \\ (\sqcup) \end{array} \right\} \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \\
 \left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \end{array} \right) \times \\ (\sqcup) \end{array} \right\} \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right)
 \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\circ) \end{array} \right) \times \\ (\blacktriangle) \end{array} \right\} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \\
 \left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \end{array} \right) \times \\ (\blacktriangle) \end{array} \right\} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\sqcup^*) \end{array} \right)
 \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\circ) \end{array} \right) \times \\ (\blacksquare) \end{array} \right\} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\
 \left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\circ) \end{array} \right) \times \\ (\blacksquare) \end{array} \right\} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\sqcup^*) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$

8. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \sqsubset) \times (\sqsubset^* \square \blacksquare \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqsubset) \\ \blacktriangle \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset^*) \\ \blacksquare \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ \blacktriangle \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\sqsubset^*) \\ \blacktriangle \end{array} \right) \\
 \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqsubset) \\ \blacksquare \end{array} \right) \times \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqsubset^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ \blacksquare \end{array} \right) \times \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqsubset^*) \\ \blacktriangle \end{array} \right) \\
 \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqsubset^*) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} \blacktriangle \\ \lambda \gg (\sqsubset^*) \\ \blacksquare \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } M = oS \\
 \\
 \text{Input: } O = oO \\
 \\
 \text{Input: } I = sS
 \end{array}$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{l} \blacksquare \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\square) \\ \blacksquare \end{array} \right) \\
 \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\square) \\ \blacktriangle \end{array} \right)
 \end{array} \right\}
 \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

9. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \sqsubset) \times (\sqsubset^* \circ \blacksquare \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

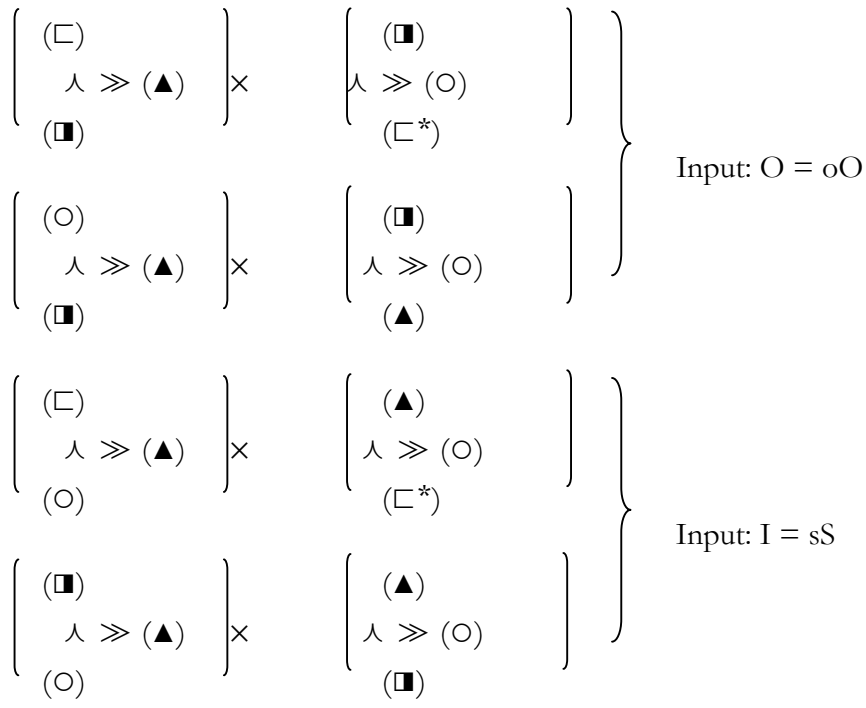
$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset^*) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\sqsubset^*) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\sqsubset) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\sqsubset^*) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

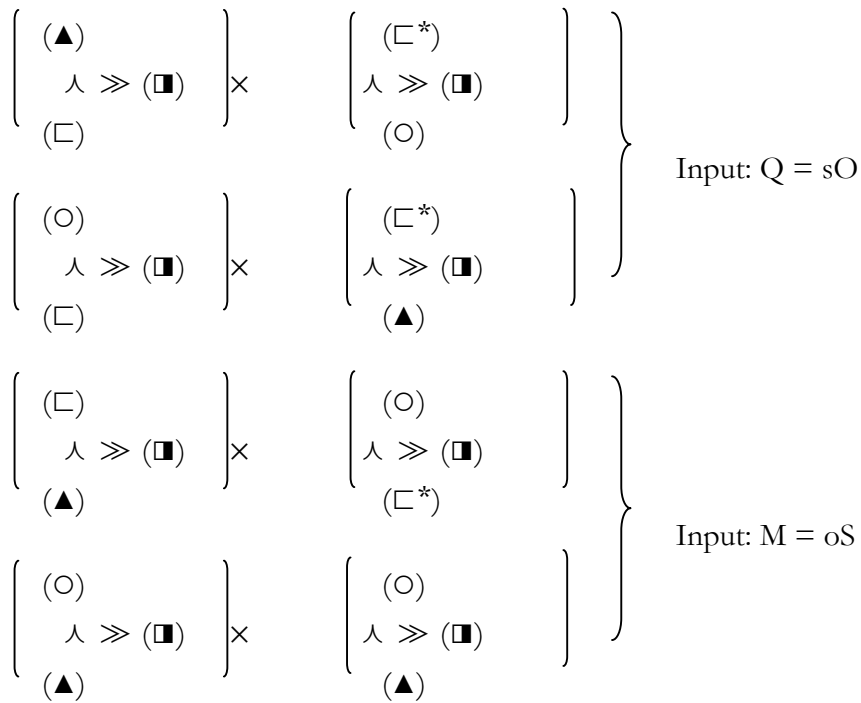
$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\sqsubset^*) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln ( $M = oS$ )

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\circ) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{l} (\sqsubset^*) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$



Objektales Handeln (O = oO)



$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (O) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (O) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (O) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (O) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$



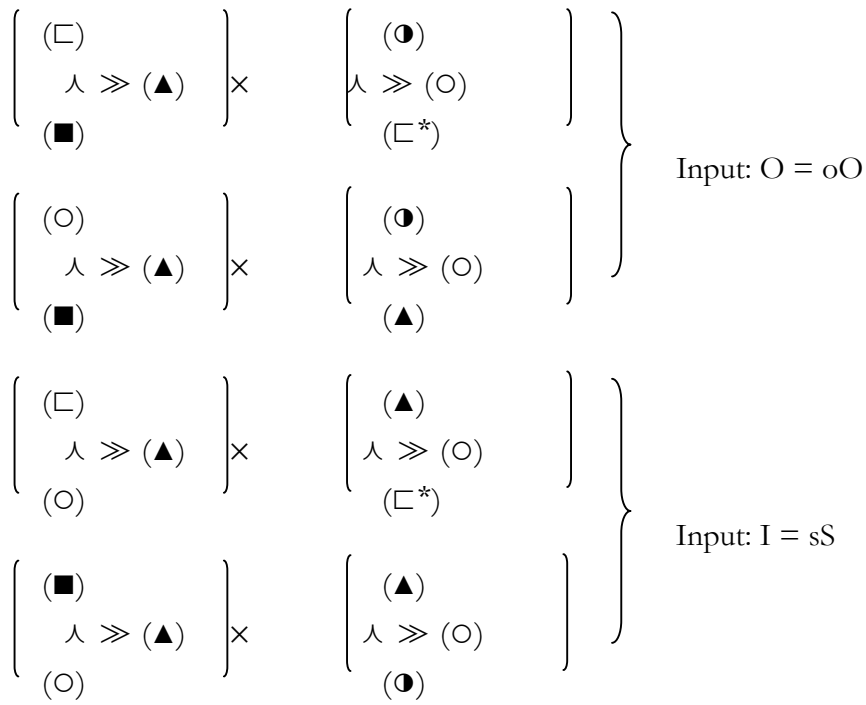
10. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \sqsubset) \times (\sqsupset^* \circ \bullet \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

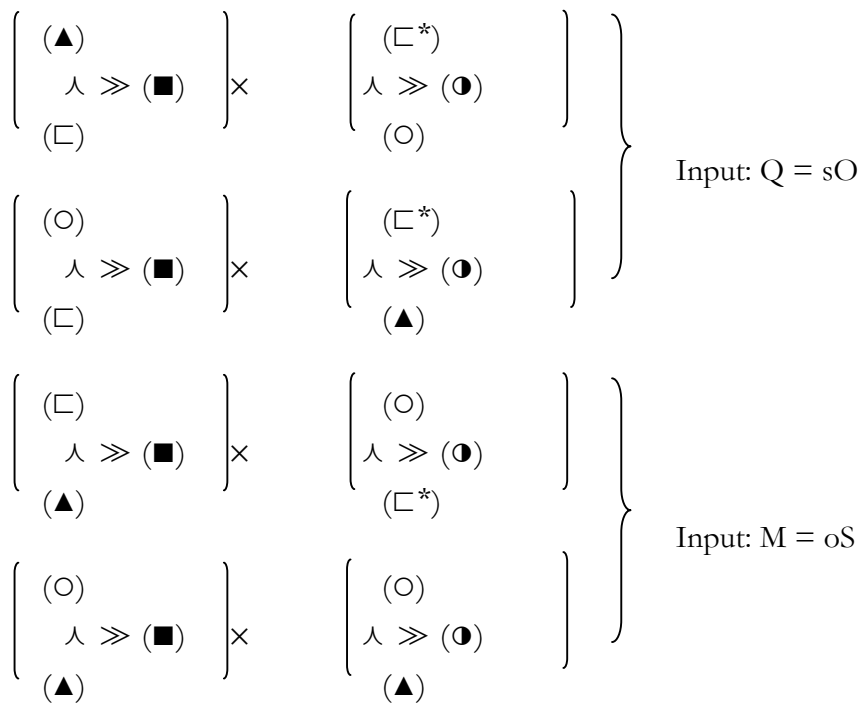
$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circ) \\ \lambda \gg (\sqsupset^*) \\ (\bullet) \end{array} \right)$	}	Input: $M = oS$
$\left( \begin{array}{c} (\circ) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circ) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqsupset^*) \\ (\circ) \end{array} \right)$	}	Input: $O = oO$
$\left( \begin{array}{c} (\circ) \\ \lambda \gg (\sqsubset) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqsupset^*) \\ (\blacktriangle) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\circ) \end{array} \right)$	}	Input: $I = sS$
$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqsubset) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqsupset^*) \\ (\bullet) \end{array} \right)$		

Mediales Handeln ( $M = oS$ )

$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{c} (\sqsupset^*) \\ \lambda \gg (\circ) \\ (\bullet) \end{array} \right)$	}	Input: $Q = sO$
$\left( \begin{array}{c} (\circ) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{c} (\sqsupset^*) \\ \lambda \gg (\circ) \\ (\blacktriangle) \end{array} \right)$		



Objektales Handeln (O = oO)



$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (O) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (O) \end{array} \right) \times \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (\bullet) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacktriangle) \\ (O) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (O) \\ \lambda \gg (\blacktriangle) \\ (\bullet) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (O) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (O) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (O) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (O) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

11. Präsemiotisches Dualsystem  $(\bullet \blacksquare \blacktriangle \sqcup) \times (\sqcup^* \square \blacksquare \blacksquare)$

Qualitatives Handeln ( $Q = sO$ )

$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqcup) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \lambda \gg (\sqcup^*) \\ (\blacksquare) \end{array} \right)$	}	Input: $M = oS$
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqcup) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \lambda \gg (\sqcup^*) \\ (\blacksquare) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqcup) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqcup^*) \\ (\square) \end{array} \right)$	}	Input: $O = oO$
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqcup) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqcup^*) \\ (\blacksquare) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqcup) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqcup^*) \\ (\square) \end{array} \right)$	}	Input: $I = sS$
$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqcup) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqcup^*) \\ (\blacksquare) \end{array} \right)$		

Mediales Handeln ( $M = oS$ )

$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right)$	}	Input: $Q = sO$
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right)$		

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (2\bullet) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$
  

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacktriangle) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacksquare) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$
  

$$\left. \begin{array}{l} \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\sqcup^*) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\Delta) \\ \lambda \gg (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\sqcup^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\Delta) \\ \lambda \gg (\bullet) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{l} (\sqcup^*) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\Delta) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\bullet) \\ (\Delta) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\sqcup^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\Delta) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\sqcup) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\sqcup^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

12. Präsemiotisches Dualsystem  $(\bullet \blacksquare \blacktriangle \square) \times (\square^* \square \blacksquare \blacksquare)$

Qualitatives Handeln (Q = sO)

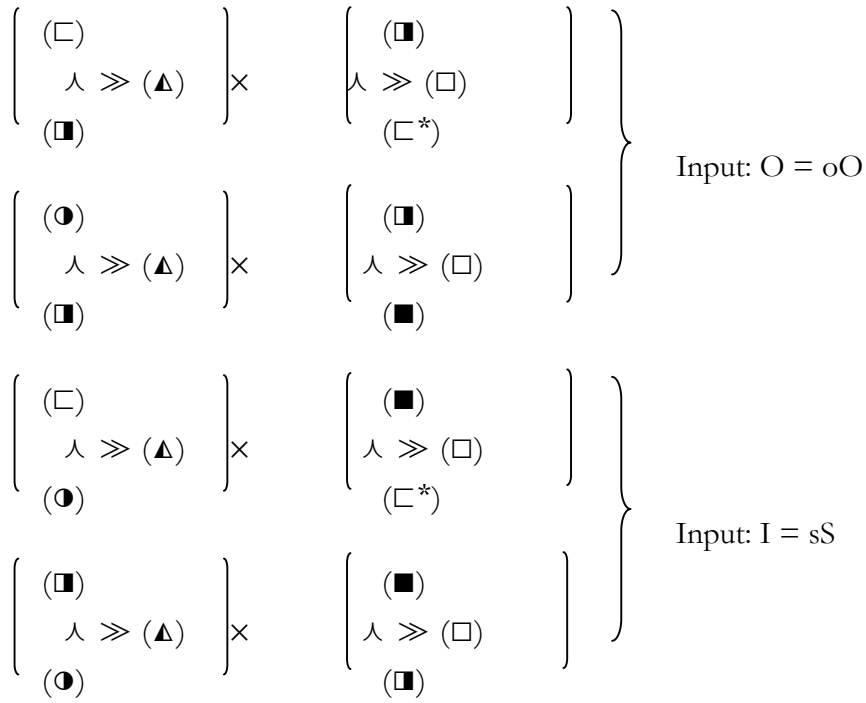
$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

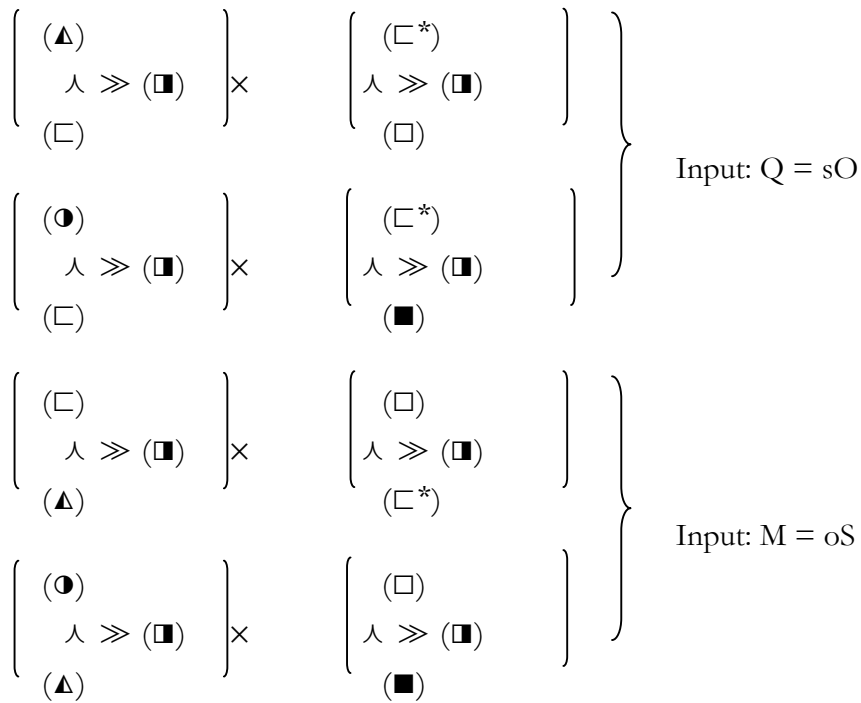
$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$



Objektales Handeln (O = oO)





$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

13. Präsemiotisches Dualsystem  $(\bullet \blacksquare \blacktriangle \square) \times (\square^* \circ \blacksquare \blacksquare)$

Qualitatives Handeln ( $Q = sO$ )

$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circ) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right)$	}	Input: M = oS
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circ) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\circ) \end{array} \right)$	}	Input: O = oO
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\square) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\circ) \end{array} \right)$	}	Input: I = sS
$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\square^*) \\ (\blacksquare) \end{array} \right)$		

Mediales Handeln ( $M = oS$ )

$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \\ \lambda \gg (\circ) \\ (\blacksquare) \end{array} \right)$	}	Input: Q = sO
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \\ \lambda \gg (\circ) \\ (\blacksquare) \end{array} \right)$		

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\circ) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\circ) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacktriangle) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\circ) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\circ) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacksquare) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacksquare) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\circ) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\blacksquare) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

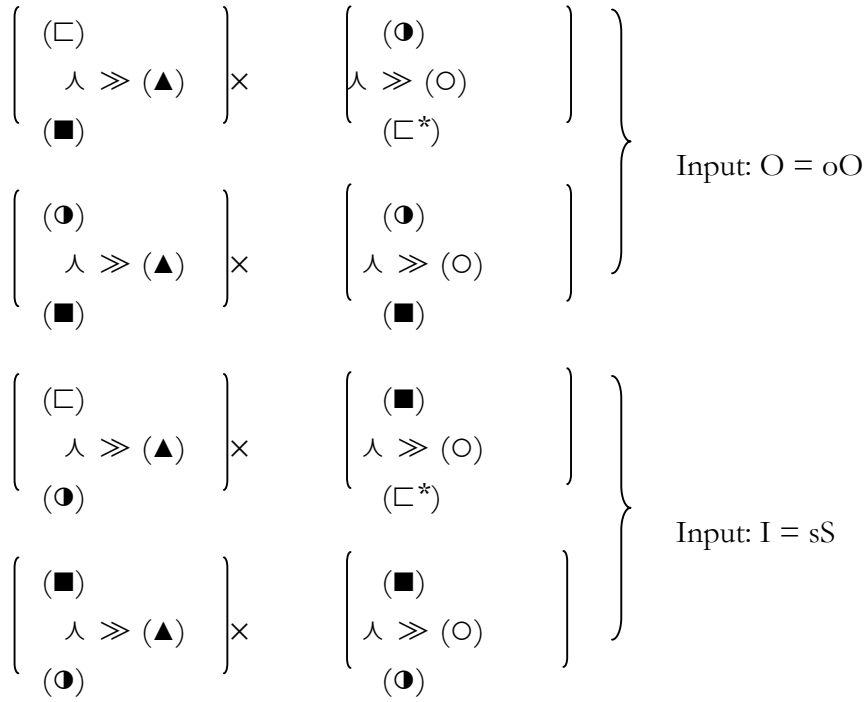
14. Präsemiotisches Dualsystem  $(\bullet \blacksquare \blacktriangle \sqsubset) \times (\sqsupset^* \circ \circ \blacksquare)$

Qualitatives Handeln (Q = sO)

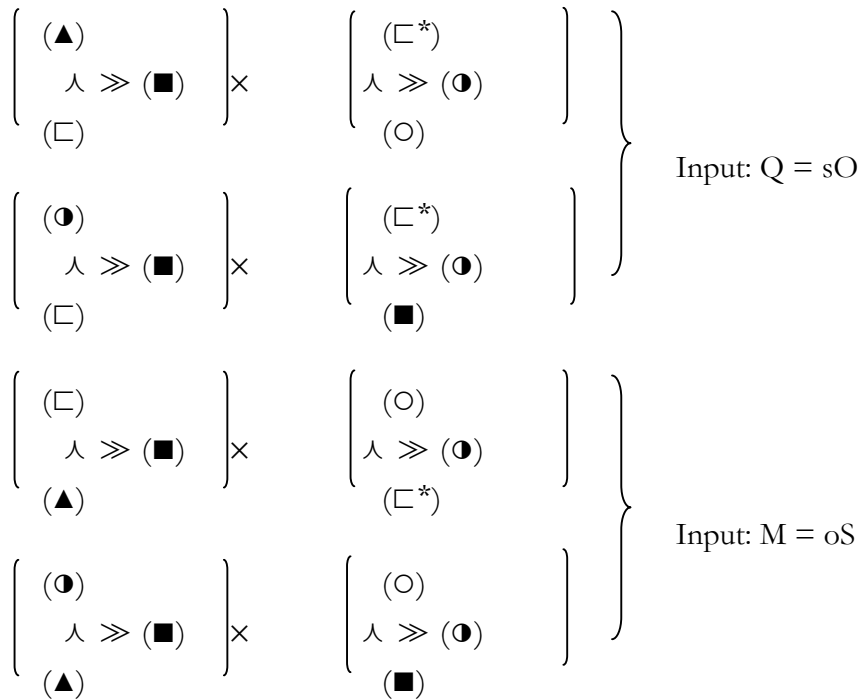
$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circ) \\ \lambda \gg (\sqsupset^*) \\ (\bullet) \end{array} \right)$	}	Input: M = oS
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqsubset) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circ) \\ \lambda \gg (\sqsupset^*) \\ (\blacksquare) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqsupset^*) \\ (\circ) \end{array} \right)$	}	Input: O = oO
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqsubset) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\bullet) \\ \lambda \gg (\sqsupset^*) \\ (\blacksquare) \end{array} \right)$		
$\left( \begin{array}{c} (\blacktriangle) \\ \lambda \gg (\sqsubset) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqsupset^*) \\ (\circ) \end{array} \right)$	}	Input: I = sS
$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqsubset) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\sqsupset^*) \\ (\bullet) \end{array} \right)$		

Mediales Handeln (M = oS)

$\left( \begin{array}{c} (\blacksquare) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{c} (\sqsupset^*) \\ \lambda \gg (\circ) \\ (\bullet) \end{array} \right)$	}	Input: Q = sO
$\left( \begin{array}{c} (\bullet) \\ \lambda \gg (\blacktriangle) \\ (\sqsubset) \end{array} \right) \times \left( \begin{array}{c} (\sqsupset^*) \\ \lambda \gg (\circ) \\ (\blacksquare) \end{array} \right)$		



Objektales Handeln (O = oO)



$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

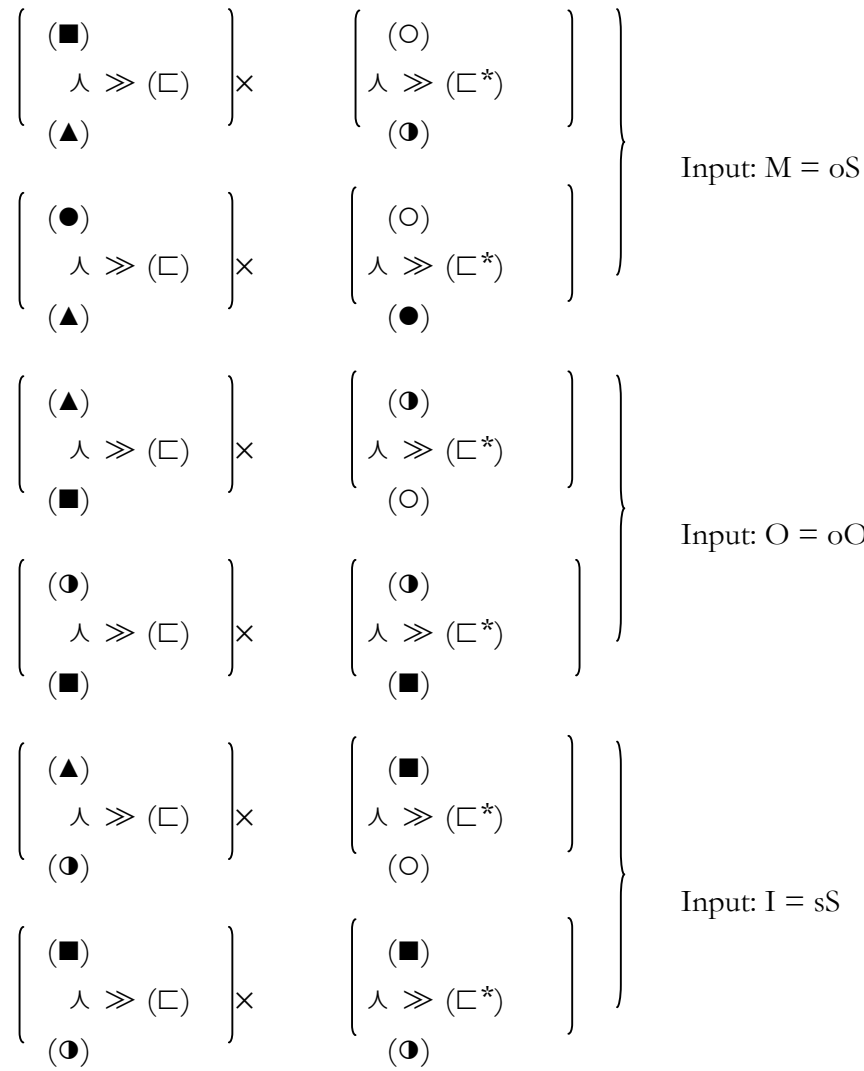
$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \\ \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\blacksquare) \\ (\circ) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \\ \left( \begin{array}{l} (\circ) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

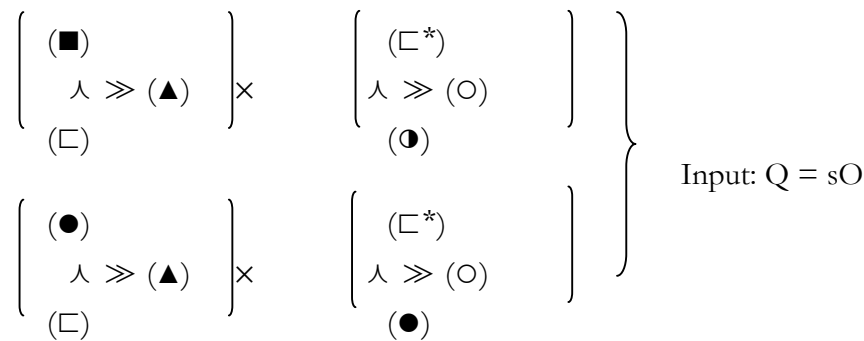
$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \end{array} \right\} \left. \begin{array}{l} \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacksquare) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\blacksquare) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

15. Präsemiotisches Dualsystem (● ■ ▲ □) × (□\* ○ ● ●)

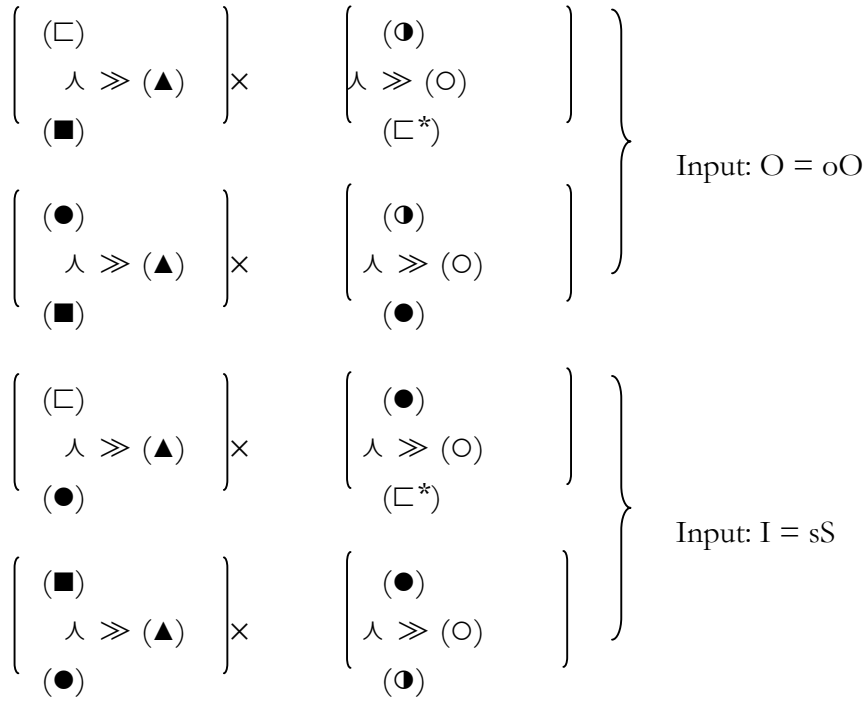
Qualitatives Handeln (Q = sO)



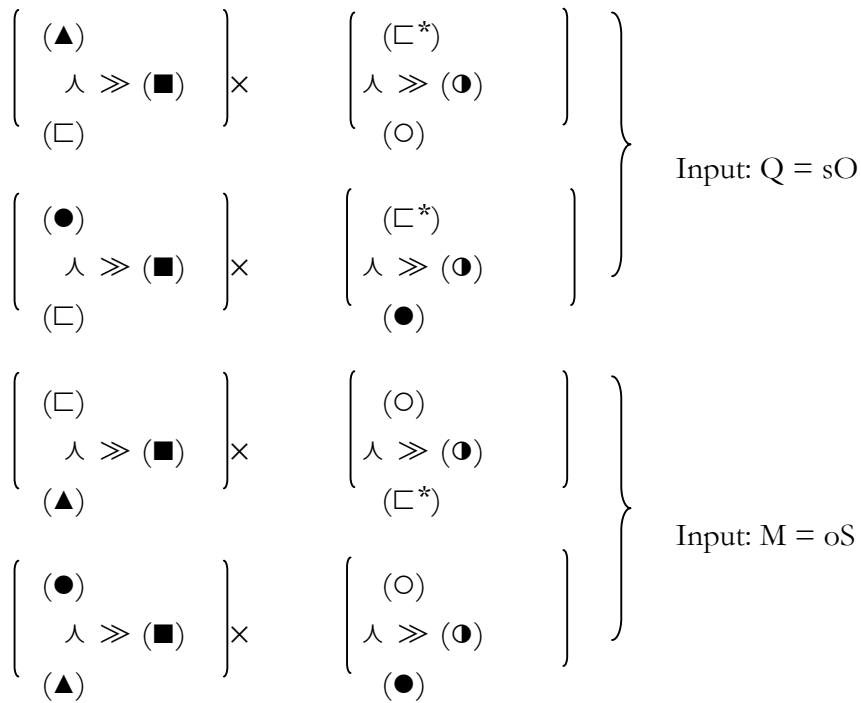
Mediales Handeln (M = oS)







Objektales Handeln (O = oO)



$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\blacksquare) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{l} (\bullet) \\ \lambda \gg (\circ) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\bullet) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\square) \end{array} \right) \times \left( \begin{array}{l} (\square^*) \\ \lambda \gg (\bullet) \\ (\circ) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacksquare) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\bullet) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\bullet) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (\blacktriangle) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\bullet) \\ (\circ) \end{array} \right) \\ \left( \begin{array}{l} (\square) \\ \lambda \gg (\bullet) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{l} (\circ) \\ \lambda \gg (\bullet) \\ (\square^*) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

## II. Handlungsschemata der 2 · 24 tetradischen semiotischen Partialrelationen

### 1. Präsemiotisches Dualsystem (○ □ □ □) × (□\* □ ▲ ▲)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \Upsilon & \succ (\square) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square^*) \gg & \Upsilon & \succ (\square) \\ & (\blacktriangle) & \end{array} \right] \\
 \left[ \begin{array}{ccc} & (\square) & \\ (\square) \gg & \Upsilon & \succ (\square) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square^*) \gg & \Upsilon & \succ (\square) \\ & (\blacktriangle) & \end{array} \right]
 \end{array} \right\} \text{Regulativ:} \\
 \text{M = oS} \\
 \\
 \left. \begin{array}{l}
 \left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \Upsilon & \succ (\square) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\square) & \\ (\square^*) \gg & \Upsilon & \succ (\blacktriangle) \\ & (\blacktriangle) & \end{array} \right] \\
 \left[ \begin{array}{ccc} & (\square) & \\ (\square) \gg & \Upsilon & \succ (\square) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square^*) \gg & \Upsilon & \succ (\blacktriangle) \\ & (\square) & \end{array} \right]
 \end{array} \right\} \text{Regulativ:} \\
 \text{O = oO} \\
 \\
 \left. \begin{array}{l}
 \left[ \begin{array}{ccc} & (\square) & \\ (\circ) \gg & \Upsilon & \succ (\square) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square^*) \gg & \Upsilon & \succ (\blacktriangle) \\ & (\square) & \end{array} \right] \\
 \left[ \begin{array}{ccc} & (\square) & \\ (\circ) \gg & \Upsilon & \succ (\square) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\square) & \\ (\square^*) \gg & \Upsilon & \succ (\blacktriangle) \\ & (\blacktriangle) & \end{array} \right]
 \end{array} \right\} \text{Regulativ:} \\
 \text{I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\square) \gg (\circ) \\ \gamma \gamma (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \gamma \gamma (\square^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\square) \\ \gamma \gamma (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \gamma \gamma (\square^*) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\square) \\ \gamma \gamma (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \gamma \gamma (\blacktriangle) \\ (\square^*) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\circ) \\ \gamma \gamma (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \\ \gamma \gamma (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\square) \\ \gamma \gamma (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \gamma \gamma (\blacktriangle) \\ (\square^*) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\square) \\ \gamma \gamma (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \\ \gamma \gamma (\blacktriangle) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (O) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (O) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (O) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (O) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \gamma (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (O) \end{array} \gamma (\square) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (O) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\square) \end{array} \right]$$

$$\left[ \begin{array}{c} (O) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square^*) \end{array} \gamma (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (O) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (O) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right]$$

Interpretatives Handeln (I = sS)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \gamma (O) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \gamma (O) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \gamma (O) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\square) \gg (\sqcap) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\sqcap^*) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\sqcap) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\sqcap^*) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg (\sqcap) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\sqcap^*) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\sqcap) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\sqcap^*) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \end{array}$$

2. Präsemiotisches Dualsystem  $(\circ \square \square \sqcup) \times (\sqcup^* \square \blacktriangle \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\square) \gg (\circ) \\ \Upsilon \Upsilon (\sqcup) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \Upsilon (\sqcup) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \end{array}$$



$$\left[ \begin{array}{ccc} (\circ) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\sqcup^*) \end{array} \gamma (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\circ) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \end{array} \right]} \right\} \text{Regulativ: } I = sS$$

$$\left[ \begin{array}{ccc} (\circ) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\sqcup) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup^*) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacktriangle) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \end{array} \right]} \right\} \text{Regulativ: } Q = sO$$

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \gamma (\sqcup^*) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\circ) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\sqcup^*) \end{array} \gamma (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\circ) \end{array} \end{array} \right]} \right\} \text{Regulativ: } M = oS$$

$$\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\circ) \\ \gamma \\ (\sqcup) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\sqcup^*) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\square) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\circ) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\sqcup^*) \end{array} \gamma (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\circ) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \end{array} \right]} \right\} \text{Regulativ: } I = sS$$

$$\left[ \begin{array}{ccc} (\circ) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\sqcup) \end{array} \gamma (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\sqcup^*) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right]$$



Interpretatives Handeln (I = sS)

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \succ (\sqcup^*) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\sqcup^*) \end{array} \succ (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \end{array}$$

$$\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\sqcup) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\sqcup^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\sqcup^*) \end{array} \succ (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\square) \end{array} \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\sqcup) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacktriangle) & \gg & \begin{array}{c} (\sqcup^*) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right]$$

3. Präsemiotisches Dualsystem  $(\circ \square \square \square) \times (\square^* \square \blacktriangle \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (\square) \gg (\circ) \\ \Upsilon \succ (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \\ \Upsilon \succ (\square) \\ (\blacktriangle) \end{array} \right] \\
 \left[ \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \succ (\square) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \\ \Upsilon \succ (\square) \\ (\blacktriangle) \end{array} \right]
 \end{array} \right\} \text{Regulativ: } M = oS$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (\square) \gg (\circ) \\ \Upsilon \succ (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \\ \Upsilon \succ (\blacktriangle) \\ (\blacktriangle) \end{array} \right] \\
 \left[ \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \succ (\square) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \\ \Upsilon \succ (\blacktriangle) \\ (\square) \end{array} \right]
 \end{array} \right\} \text{Regulativ: } O = oO$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (\circ) \gg (\square) \\ \Upsilon \succ (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \\ \Upsilon \succ (\blacktriangle) \\ (\square) \end{array} \right] \\
 \left[ \begin{array}{c} (\circ) \gg (\square) \\ \Upsilon \succ (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \\ \Upsilon \succ (\blacktriangle) \\ (\blacktriangle) \end{array} \right]
 \end{array} \right\} \text{Regulativ: } I = sS$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \succ (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\square) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\blacktriangle) \end{array} \right]$$

$$\left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \succ (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\blacktriangle) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \succ (\square^*) \end{array} \right]$$

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \succ (\square) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square^*) \end{array} \succ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \\ \\ \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \succ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \succ (\square) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \\ \\ \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square^*) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{O} = \text{oO}$$

4. Präsemiotisches Dualsystem  $(\circ \square \blacktriangle \sqcup) \times (\sqcup^* \square \blacktriangle \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \Upsilon \Upsilon (\sqcup) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\sqcup) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\circ) \\ \Upsilon \Upsilon (\sqcup) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\sqcup) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\sqcup) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\square) \\ \Upsilon \Upsilon (\sqcup) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{M} = \text{oS} \\
 \text{O} = \text{oO} \\
 \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{ccc} & (\circ) & \\ (\sqcup) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square) \gg & \gamma & \gamma (\sqcup^*) \\ & (\blacktriangle) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\circ) & \\ (\sqcup) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{ccc} & (\square) & \\ (\sqcup) \gg & \gamma & \gamma (\blacktriangle) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square) \gg & \gamma & \gamma (\sqcup^*) \\ & (\blacktriangle) & \end{array} \right]$$

$$\left[ \begin{array}{ccc} & (\sqcup) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\sqcup^*) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\sqcup) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\circ) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\sqcup) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\sqcup^*) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\blacktriangle) & \end{array} \right]$$

$$\left[ \begin{array}{ccc} & (\sqcup) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\sqcup^*) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\sqcup) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{ccc} & (\square) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\sqcup) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\sqcup^*) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\blacktriangle) & \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{ccc} & (\circ) & \\ (\sqcup) \gg & \gamma & \gamma (\square) \\ & (\blacktriangle) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\square) & \\ (\blacktriangle) \gg & \gamma & \gamma (\sqcup^*) \\ & (\blacktriangle) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\circ) & \\ (\sqcup) \gg & \gamma & \gamma (\square) \\ & (\blacktriangle) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\sqcup) \gg & \gamma & \gamma (\square) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\blacktriangle) \gg & \gamma & \gamma (\sqcup^*) \\ & (\square) & \end{array} \right]$$

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup) \\ \gamma \quad \gamma (\square) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \gamma \quad \gamma (\square) \\ (\sqcup^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \quad \gamma (\square) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup^*) \\ \gamma \quad \gamma (\square) \\ (\blacktriangle) \end{array} \right]
\end{array} \right\} \text{Regulativ:} \\
\text{M = oS}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\circ) \gg (\sqcup) \\ \gamma \quad \gamma (\square) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \quad \gamma (\blacktriangle) \\ (\sqcup^*) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \gamma \quad \gamma (\square) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup^*) \\ \gamma \quad \gamma (\blacktriangle) \\ (\square) \end{array} \right]
\end{array} \right\} \text{Regulativ:} \\
\text{I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\sqcup) \gg (\square) \\ \gamma \quad \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \quad \gamma (\sqcup^*) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\sqcup) \gg (\blacktriangle) \\ \gamma \quad \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \gamma \quad \gamma (\sqcup^*) \\ (\square) \end{array} \right]
\end{array} \right\} \text{Regulativ:} \\
\text{Q = sO}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup) \\ \gamma \quad \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \gamma \quad \gamma (\square) \\ (\sqcup^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \quad \gamma (\circ) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup^*) \\ \gamma \quad \gamma (\square) \\ (\blacktriangle) \end{array} \right]
\end{array} \right\} \text{Regulativ:} \\
\text{M = oS}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\square) \gg (\sqcup) \\ \Upsilon \Upsilon (\circ) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\sqcup^*) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\circ) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{O} = \text{oO}$$

5. Präsemiotisches Dualsystem  $(\circ \square \blacktriangle \square) \times (\square^* \square \blacktriangle \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \Upsilon \Upsilon (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\circ) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\square) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{M} = \text{oS} \\
 \text{O} = \text{oO} \\
 \text{I} = \text{sS}$$



Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \succ (\blacktriangle) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\blacktriangle) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\blacktriangle) \end{array} \right]$$

$$\left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \succ (\blacktriangle) \end{array} \right] \left. \vphantom{\begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\blacktriangle) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\circ) \end{array} \succ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \succ (\square^*) \end{array} \right]$$

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \Upsilon \Upsilon (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg (\square) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \\ \\ \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\square^*) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square^*) \\ (\square) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \\ \\ \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\square) \gg (\square) \\ \Upsilon \Upsilon (\circ) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square^*) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right)
 \end{array} \right\} \text{Regulativ: } O = oO$$

6. Präsemiotisches Dualsystem  $(\circ \square \blacktriangle \square) \times (\square^* \circ \blacktriangle \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \Upsilon \Upsilon (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\circ) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\circ) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\circ) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg (\circ) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\circ) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\circ) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg (\square) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg (\circ) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacktriangle) \end{array} \right)
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\circ) \gg & \gamma & \gamma (\square^*) \\ & (\blacktriangle) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{ccc} & (\square) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\circ) \gg & \gamma & \gamma (\square^*) \\ & (\blacktriangle) & \end{array} \right]$$

$$\left[ \begin{array}{ccc} & (\square) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square^*) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\square) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\circ) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\square^*) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\blacktriangle) & \end{array} \right]$$

$$\left[ \begin{array}{ccc} & (\square) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square^*) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\square) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{ccc} & (\square) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\square) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\square^*) & \\ (\circ) \gg & \gamma & \gamma (\blacktriangle) \\ & (\blacktriangle) & \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \gamma & \gamma (\square) \\ & (\blacktriangle) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\circ) & \\ (\blacktriangle) \gg & \gamma & \gamma (\square^*) \\ & (\blacktriangle) & \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} & (\circ) & \\ (\square) \gg & \gamma & \gamma (\square) \\ & (\blacktriangle) & \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\square) \gg & \gamma & \gamma (\square) \\ & (\circ) & \end{array} \right] \times \left[ \begin{array}{ccc} & (\blacktriangle) & \\ (\blacktriangle) \gg & \gamma & \gamma (\square^*) \\ & (\circ) & \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\square) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\square) \\ (\circ) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right]$$

$$\left[ \begin{array}{c} (\circ) \gg (\square) \\ \gamma \gamma (\square) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\text{sS}) \\ \gamma \gamma (\blacktriangle) \\ (\text{oO}) \end{array} \right] \left. \vphantom{\begin{array}{c} (\circ) \gg (\square) \\ \gamma \gamma (\square) \\ (\blacktriangle) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

$$\left[ \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \gamma \gamma (\square) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \gamma \gamma (\blacktriangle) \\ (\circ) \end{array} \right]$$

Interpretatives Handeln (I = sS)

$$\left[ \begin{array}{c} (\square) \gg (\square) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\square^*) \\ (\blacktriangle) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square) \gg (\square) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \gamma \gamma (\square^*) \\ (\circ) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\circ) \\ (\square) \end{array}} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right]$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\square) \gg \begin{array}{c} (\square) \\ \Upsilon \\ (\blacktriangle) \end{array} \succ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\circ) \\ \Upsilon \\ (\square^*) \end{array} \succ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\square) \end{array} \succ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\square^*) \\ \Upsilon \\ (\circ) \end{array} \succ (\blacktriangle) \end{array} \right)
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

7. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \sqcup) \times (\sqcup^* \square \blacksquare \blacktriangle)$

Qualitatives Handeln ( $Q = sO$ )

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \succ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacktriangle) \end{array} \succ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\blacktriangle) \gg \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\circ) \end{array} \succ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\blacksquare) \end{array} \succ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \succ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \begin{array}{c} (\square) \\ \Upsilon \\ (\blacktriangle) \end{array} \succ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \succ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\square) \end{array} \succ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\blacksquare) \end{array} \succ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacktriangle) \end{array} \succ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \begin{array}{c} (\square) \\ \Upsilon \\ (\blacksquare) \end{array} \succ (\blacktriangle) \end{array} \right)
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\sqcup) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\sqcup) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\sqcup) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\sqcup^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\sqcup) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\sqcup^*) \end{array} \Upsilon (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\sqcup) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\sqcup) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\sqcup^*) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\blacksquare) \end{array} \right]$$

$$\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\sqcup) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\sqcup^*) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\sqcup) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\sqcup) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\sqcup^*) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\sqcup) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\sqcup) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\blacksquare) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\sqcup) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\square) \end{array} \Upsilon (\sqcup^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \\ \gamma \gamma (\square) \\ (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\sqcup^*) \\ \gamma \gamma (\square) \\ (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right]} \right\} \text{M = oS} \\
\left[ \begin{array}{c} (\circ) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square) \\ \gamma \gamma (\blacktriangle) \\ (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\blacktriangle) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\sqcup^*) \\ \gamma \gamma (\blacktriangle) \\ (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right]} \right\} \text{I = sS}$$

Interpretatives Handeln (I = sS)

$$\left[ \begin{array}{c} (\sqcup) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\sqcup^*) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\sqcup) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\sqcup) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\sqcup^*) \\ (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\sqcup) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right]} \right\} \text{Q = sO} \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\square) \\ (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\sqcup^*) \\ \gamma \gamma (\square) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\sqcup) \end{array} \right]} \right\} \text{M = oS}$$



$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \Upsilon (\circ) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circ\circ) \\ \Upsilon \Upsilon (s\circ) \\ (sS) \end{array} \right) \\
 \left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \Upsilon (\circ) \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \\ \Upsilon \Upsilon (\blacksquare) \\ (\square) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{O} = \circ\text{O}$$

8. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \square) \times (\square^* \square \blacksquare \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\square) \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \Upsilon \Upsilon (\blacksquare) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\blacktriangle) \\ \Upsilon \Upsilon (\blacksquare) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\blacksquare) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square) \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacksquare) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{M} = \circ\text{S} \\
 \text{O} = \circ\text{O} \\
 \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\blacksquare) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right] \\
 \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (\circ) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\blacksquare) \end{array} \succ (\square^*) \end{array} \right] \\
 \left[ \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \succ (\blacksquare) \end{array} \right] \\
 \left[ \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\blacksquare) \end{array} \right] \\
 \left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square^*) \end{array} \succ (\blacktriangle) \end{array} \right] \\
 \left[ \begin{array}{c} (\circ) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square) \end{array} \succ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\blacksquare) \end{array} \succ (\blacktriangle) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\circ) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} \succ (\square^*) \end{array} \right] \\
 \left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\circ) \end{array} \succ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} \succ (\square^*) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \\ \gamma \gamma (\square) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \\ \gamma \gamma (\square) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \\ \gamma \gamma (\blacktriangle) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \\ \gamma \gamma (\blacktriangle) \\ (\square) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\square) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \\ \gamma \gamma (\square^*) \\ (\blacksquare) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \\ \gamma \gamma (\square^*) \\ (\square) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \\ \gamma \gamma (\square) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \\ \gamma \gamma (\square) \\ (\blacksquare) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ M = oS \end{array}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon (\blacksquare) \\ (\square^*) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\circ) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon (\blacksquare) \\ (\square) \end{array} \right)
 \end{array} \right\} \text{Regulativ: } O = oO$$

9. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \square) \times (\square^* \circ \blacksquare \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon (\circ) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon (\circ) \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon (\blacksquare) \\ (\blacktriangle) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\square) \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon (\blacksquare) \\ (\circ) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacksquare) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon (\blacktriangle) \\ (\circ) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon (\blacktriangle) \\ (\blacksquare) \end{array} \right)
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\circ) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square^*) \end{array} \gamma (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\circ) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\circ) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square^*) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right]$$

$$\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square^*) \end{array} \gamma (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square^*) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\circ) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\circ) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\circ) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\circ) \\ \gamma \gamma (\blacktriangle) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\circ) \gg (\blacktriangle) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square^*) \\ \gamma \gamma (\blacktriangle S) \\ (\circ) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{c} (\square) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\square^*) \\ (\blacksquare) \end{array} \right] \\
\left[ \begin{array}{c} (\square) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\square^*) \\ (\circ) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ M = oS \end{array}$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \begin{array}{c} (\square) \\ \Upsilon \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\square^*) \end{array} \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\blacktriangle) \end{array}} \right\} \text{Regulativ:} \\
 \left[ \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\square) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\circ) \end{array} \begin{array}{c} (\square^*) \\ \Upsilon \\ (\blacksquare) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\square^*) \end{array}} \right\} \text{O} = \text{oO}$$

10. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \square) \times (\square^* \circ \bullet \blacktriangle)$

Qualitatives Handeln (Q = sO)

$$\left[ \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\circ) \\ \Upsilon \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \begin{array}{c} (\bullet) \\ \Upsilon \\ (\circ) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\blacktriangle) \end{array}} \right\} \text{Regulativ:} \\
 \left[ \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\circ) \end{array} \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\bullet) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\circ) \end{array}} \right\} \text{M} = \text{oS} \\
 \left[ \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \begin{array}{c} (\circ) \\ \Upsilon \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \begin{array}{c} (\circ) \\ \Upsilon \\ (\bullet) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\blacktriangle) \end{array}} \right\} \text{Regulativ:} \\
 \left[ \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\circ) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\circ) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\bullet) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\circ) \end{array}} \right\} \text{O} = \text{oO} \\
 \left[ \begin{array}{c} (\circ) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\circ) \end{array} \begin{array}{c} (\bullet) \\ \Upsilon \\ (\blacktriangle) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\circ) \end{array}} \right\} \text{Regulativ:} \\
 \left[ \begin{array}{c} (\circ) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array}} \right\} \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\bullet) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\bullet) \end{array} \Upsilon (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\square^*) \end{array} \Upsilon (\bullet) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\square) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square^*) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\bullet) \end{array} \right]$$

$$\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\bullet) \\ \Upsilon \\ (\square^*) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square) \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\square) \end{array} \Upsilon (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\square^*) \\ \Upsilon \\ (\bullet) \end{array} \Upsilon (\blacktriangle) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\blacksquare) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\square^*) \end{array} \right]$$



$$\left. \begin{array}{l}
\left[ \begin{array}{l} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \\
\left[ \begin{array}{l} (\circ) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\circ) \\ \gamma \gamma (\blacktriangle) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\circ) \gg (\blacktriangle) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\square^*) \\ \gamma \gamma (\blacktriangle) \\ (\circ) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \\ \\ \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (\square) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{l} (\blacktriangle) \gg (\circ) \\ \gamma \gamma (\square^*) \\ (\bullet) \end{array} \right] \\
\left[ \begin{array}{l} (\square) \gg (\blacktriangle) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{l} (\blacktriangle) \gg (\bullet) \\ \gamma \gamma (\square^*) \\ (\circ) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{l} (\blacktriangle) \gg (\bullet) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\blacktriangle) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\bullet) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \\ \\ \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \\ \blacktriangle \end{array} \begin{array}{c} (\square) \\ \Upsilon \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \\ (\square^*) \end{array} \begin{array}{c} (\circ) \\ \Upsilon \\ (\bullet) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \\ (\square) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \\ (\circ) \end{array} \begin{array}{c} (\square^*) \\ \Upsilon \\ (\bullet) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{O} = \text{oO}$$

11. Präsemiotisches Dualsystem  $(\bullet \blacksquare \blacktriangle \sqcup) \times (\sqcup^* \square \blacksquare \blacksquare)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\bullet) \\ \Upsilon \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\square) \\ \Upsilon \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \\ (\bullet) \end{array} \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\square) \end{array} \right) \\
 \left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \begin{array}{c} (\bullet) \\ \Upsilon \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\square) \\ \Upsilon \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\bullet) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\square) \end{array} \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\bullet) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\square) \end{array} \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\bullet) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\sqcup) \end{array} \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \begin{array}{c} (\square) \\ \Upsilon \\ (\blacksquare) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{M} = \text{oS} \\
 \text{O} = \text{oO} \\
 \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\bullet) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\blacksquare) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\bullet) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\blacksquare) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\blacksquare) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\sqcup^*) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\blacksquare) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\blacksquare) \\ \gamma \\ (\sqcup^*) \end{array} \gamma (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\blacksquare) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = oO \end{array}$$

$$\left[ \begin{array}{ccc} (\blacksquare) & \gg & \begin{array}{c} (\bullet) \\ \gamma \\ (\sqcup) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup^*) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacksquare) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\bullet) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\blacksquare) \\ \gamma \\ (\sqcup^*) \end{array} \gamma (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\bullet) & \gg & \begin{array}{c} (\sqcup) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{ccc} (\bullet) & \gg & \begin{array}{c} (\blacksquare) \\ \gamma \\ (\sqcup) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\square) & \gg & \begin{array}{c} (\sqcup^*) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacksquare) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\bullet) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacksquare) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\bullet) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{ccc} (\sqcup) & \gg & \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{ccc} (\blacksquare) & \gg & \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square) \end{array} \gamma (\sqcup^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\triangle) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\blacksquare) \\ \gamma \gamma (\square) \\ (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\triangle) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\triangle) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\sqcup^*) \\ \gamma \gamma (\square) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\triangle) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right]} \right\} \text{M = oS} \\
\left[ \begin{array}{c} (\circ) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\triangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg (\sqcup) \\ \gamma \gamma (\blacksquare) \\ (\triangle) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\circ) \gg (\triangle) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\sqcup^*) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\circ) \gg (\triangle) \\ \gamma \gamma (\blacksquare) \\ (\sqcup) \end{array} \right]} \right\} \text{I = sS}$$

Interpretatives Handeln (I = sS)

$$\left[ \begin{array}{c} (\sqcup) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\triangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square) \\ \gamma \gamma (\sqcup^*) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\sqcup) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\triangle) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\sqcup) \gg (\triangle) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\blacksquare) \\ \gamma \gamma (\sqcup^*) \\ (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\sqcup) \gg (\triangle) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right]} \right\} \text{Q = sO} \\
\left[ \begin{array}{c} (\triangle) \gg (\sqcup) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\blacksquare) \\ \gamma \gamma (\square) \\ (\sqcup^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\triangle) \gg (\sqcup) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right]} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\triangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\sqcup) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\sqcup^*) \\ \gamma \gamma (\square) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\triangle) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\sqcup) \end{array} \right]} \right\} \text{M = oS}$$

$$\left. \begin{array}{l}
\left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\circ) \right) \times \left( \begin{array}{c} (\square) \gg \\ \Upsilon \\ (\sqcup^*) \end{array} \Upsilon (\blacksquare) \right) \\
\left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\sqcup) \end{array} \Upsilon (\circ) \right) \times \left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\square) \end{array} \Upsilon (\blacksquare) \right)
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

12. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \sqcup) \times (\sqcup^* \square \blacksquare \blacksquare)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
\left( \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\square) \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\square) \right) \\
\left( \begin{array}{c} (\blacktriangle) \gg \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\square) \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\square) \right) \\
\left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\square) \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacksquare) \right) \\
\left( \begin{array}{c} (\blacksquare) \gg \\ \Upsilon \\ (\circ) \end{array} \Upsilon (\square) \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\square) \end{array} \Upsilon (\blacksquare) \right) \\
\left( \begin{array}{c} (\circ) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\square) \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\square) \end{array} \Upsilon (\blacksquare) \right) \\
\left( \begin{array}{c} (\circ) \gg \\ \Upsilon \\ (\blacktriangle) \end{array} \Upsilon (\square) \right) \times \left( \begin{array}{c} (\sqcup^*) \gg \\ \Upsilon \\ (\blacksquare) \end{array} \Upsilon (\blacksquare) \right)
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\bullet) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\bullet) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square^*) \end{array} \gamma (\square) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\bullet) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\square^*) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\square) \end{array} \right]$$

$$\left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square^*) \end{array} \gamma (\blacksquare) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\square^*) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacksquare) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\bullet) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\bullet) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg \\ \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \vee \vee (\blacksquare) \\ (\bullet) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\blacksquare) \\ \vee \vee (\square) \\ (\square^*) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg (\square) \\ \vee \vee (\blacksquare) \\ (\bullet) \end{array}} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\bullet) \\ \vee \vee (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square^*) \\ \vee \vee (\square) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg (\bullet) \\ \vee \vee (\blacksquare) \\ (\square) \end{array}} \right\} \text{M = oS} \\
\left[ \begin{array}{c} (\bullet) \gg (\square) \\ \vee \vee (\blacksquare) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square) \\ \vee \vee (\blacksquare) \\ (\square^*) \end{array} \right] \left. \vphantom{\begin{array}{c} (\bullet) \gg (\square) \\ \vee \vee (\blacksquare) \\ (\blacktriangle) \end{array}} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\bullet) \gg (\blacktriangle) \\ \vee \vee (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square^*) \\ \vee \vee (\blacksquare) \\ (\square) \end{array} \right] \left. \vphantom{\begin{array}{c} (\bullet) \gg (\blacktriangle) \\ \vee \vee (\blacksquare) \\ (\square) \end{array}} \right\} \text{I = sS}$$

Interpretatives Handeln (I = sS)

$$\left[ \begin{array}{c} (\square) \gg (\blacksquare) \\ \vee \vee (\bullet) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square) \\ \vee \vee (\square^*) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square) \gg (\blacksquare) \\ \vee \vee (\bullet) \\ (\blacktriangle) \end{array}} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\square) \gg (\blacktriangle) \\ \vee \vee (\bullet) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\blacksquare) \\ \vee \vee (\square^*) \\ (\square) \end{array} \right] \left. \vphantom{\begin{array}{c} (\square) \gg (\blacktriangle) \\ \vee \vee (\bullet) \\ (\blacksquare) \end{array}} \right\} \text{Q = sO} \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\square) \\ \vee \vee (\bullet) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\blacksquare) \\ \vee \vee (\square) \\ (\square^*) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg (\square) \\ \vee \vee (\bullet) \\ (\blacksquare) \end{array}} \right\} \text{Regulativ:} \\
\left[ \begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \vee \vee (\bullet) \\ (\square) \end{array} \right] \times \left[ \begin{array}{c} (\blacksquare) \gg (\square^*) \\ \vee \vee (\square) \\ (\blacksquare) \end{array} \right] \left. \vphantom{\begin{array}{c} (\blacktriangle) \gg (\blacksquare) \\ \vee \vee (\bullet) \\ (\square) \end{array}} \right\} \text{M = oS}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacksquare \gg \\ \begin{array}{c} (\square) \\ \Upsilon \\ (\blacktriangle) \end{array} \\ \Upsilon \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} \blacksquare \gg \\ \begin{array}{c} (\square) \\ \Upsilon \\ (\square^*) \end{array} \\ \Upsilon \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\square) \end{array} \\ \Upsilon \\ (\circ) \end{array} \right) \times \left( \begin{array}{c} \blacksquare \gg \\ \begin{array}{c} (\square^*) \\ \Upsilon \\ (\square) \end{array} \\ \Upsilon \\ (\blacksquare) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{O} = \text{oO}$$

13. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \square) \times (\square^* \circ \blacksquare \blacksquare)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacktriangle \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \\ \Upsilon \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacksquare) \end{array} \\ \Upsilon \\ (\circ) \end{array} \right) \\
 \left( \begin{array}{c} \blacktriangle \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\circ) \end{array} \\ \Upsilon \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacksquare) \end{array} \\ \Upsilon \\ (\circ) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacktriangle) \end{array} \\ \Upsilon \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \begin{array}{c} (\text{oO}) \\ \Upsilon \\ (\text{oS}) \end{array} \\ \Upsilon \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\circ) \end{array} \\ \Upsilon \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\circ) \end{array} \\ \Upsilon \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacktriangle) \\ \Upsilon \\ (\blacksquare) \end{array} \\ \Upsilon \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\circ) \end{array} \\ \Upsilon \\ (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \begin{array}{c} (\blacksquare) \\ \Upsilon \\ (\blacktriangle) \end{array} \\ \Upsilon \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \begin{array}{c} (\circ) \\ \Upsilon \\ (\blacksquare) \end{array} \\ \Upsilon \\ (\blacksquare) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{M} = \text{oS} \\
 \text{O} = \text{oO} \\
 \text{I} = \text{sS}$$



Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\bullet) & \gamma & (\blacktriangle) \\ \square & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (oS) & \gamma & (\square^*) \\ (sO) & & \end{array} \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\bullet) & \gamma & (\blacktriangle) \\ \square & & \end{array} \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\blacktriangle) \\ (\bullet) & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (\blacksquare) & \gamma & (\square^*) \\ (\square) & & \end{array} \end{array} \right]$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\blacktriangle) \\ (\bullet) & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (\blacksquare) & \gamma & (\square) \\ (\square^*) & & \end{array} \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\blacktriangle) \\ (\bullet) & & \end{array} \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\bullet) & \gamma & (\blacktriangle) \\ (\square) & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (\square^*) & \gamma & (\square) \\ (\blacksquare) & & \end{array} \end{array} \right]$$

$$\left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\blacktriangle) \\ (\square) & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\blacksquare) \\ (\square^*) & & \end{array} \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\blacktriangle) \\ (\square) & & \end{array} \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\bullet) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\blacktriangle) \\ (\square) & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (\square^*) & \gamma & (\blacksquare) \\ (\square) & & \end{array} \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\bullet) & \gamma & (\square) \\ (\blacktriangle) & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (\square) & \gamma & (\square^*) \\ (\blacksquare) & & \end{array} \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\bullet) & \gamma & (\square) \\ (\blacktriangle) & & \end{array} \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \\ \begin{array}{ccc} (\blacktriangle) & \gamma & (\square) \\ (\bullet) & & \end{array} \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \\ \begin{array}{ccc} (\blacksquare) & \gamma & (\square^*) \\ (o) & & \end{array} \end{array} \right]$$

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\bullet) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\bullet) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right] \\
\left[ \begin{array}{l} (\bullet) \gg (\square) \\ \gamma \gamma (\blacksquare) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\circ) \\ \gamma \gamma (\blacksquare) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\bullet) \gg (\blacktriangle) \\ \gamma \gamma (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\square^*) \\ \gamma \gamma (\blacksquare) \\ (\circ) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \\ \\ \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (\square) \gg (\blacksquare) \\ \gamma \gamma (\bullet) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\circ) \\ \gamma \gamma (\square^*) \\ (\blacksquare) \end{array} \right] \\
\left[ \begin{array}{l} (\square) \gg (\blacktriangle) \\ \gamma \gamma (\bullet) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\blacksquare) \\ \gamma \gamma (\square^*) \\ (\circ) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\square) \\ \gamma \gamma (\bullet) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\blacksquare) \\ \gamma \gamma (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\blacksquare) \\ \gamma \gamma (\bullet) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\square^*) \\ \gamma \gamma (\circ) \\ (\blacksquare) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \\ \\ \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\square) \\ (\blacktriangle) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\circ) \end{array} \right) \times \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\circ) \\ (\square^*) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\blacktriangle) \\ (\square) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\circ) \end{array} \right) \times \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\square^*) \\ (\circ) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{O} = \text{oO}$$

14. Präsemiotisches Dualsystem  $(\circ \blacksquare \blacktriangle \square) \times (\square^* \circ \circ \blacksquare)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\circ) \\ (\blacksquare) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\circ) \\ (\blacksquare) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\circ) \end{array} \right) \\
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\blacksquare) \\ (\circ) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\blacksquare) \\ (\circ) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\circ) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\circ) \\ (\blacktriangle) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\circ) \\ (\blacksquare) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\circ) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\blacktriangle) \\ (\circ) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\blacksquare) \\ (\circ) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\circ) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\blacktriangle) \\ (\blacksquare) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\circ) \\ (\circ) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\blacksquare) \end{array} \right) \\
 \left( \begin{array}{c} (\circ) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\blacksquare) \\ (\blacktriangle) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \gg \\ \Upsilon \Upsilon \end{array} \begin{array}{c} (\circ) \\ (\circ) \end{array} \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \begin{array}{c} (\blacksquare) \end{array} \right)
 \end{array} \right\} \text{Regulativ:} \\
 \text{M} = \text{oS} \\
 \text{O} = \text{oO} \\
 \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} \square \gg \begin{array}{c} \circ \\ \gamma \\ \blacksquare \end{array} \gamma \blacktriangle \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \circ \\ \gamma \\ \blacksquare \end{array} \gamma \square^* \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} \square \gg \begin{array}{c} \circ \\ \gamma \\ \blacksquare \end{array} \gamma \blacktriangle \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} \square \gg \begin{array}{c} \blacksquare \\ \gamma \\ \circ \end{array} \gamma \blacktriangle \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \blacksquare \\ \gamma \\ \circ \end{array} \gamma \square^* \end{array} \right]$$

$$\left[ \begin{array}{c} \blacksquare \gg \begin{array}{c} \square \\ \gamma \\ \circ \end{array} \gamma \blacktriangle \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \blacksquare \\ \gamma \\ \square^* \end{array} \gamma \circ \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} \blacksquare \gg \begin{array}{c} \square \\ \gamma \\ \circ \end{array} \gamma \blacktriangle \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} \blacksquare \gg \begin{array}{c} \circ \\ \gamma \\ \square \end{array} \gamma \blacktriangle \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \square^* \\ \gamma \\ \blacksquare \end{array} \gamma \circ \end{array} \right]$$

$$\left[ \begin{array}{c} \circ \gg \begin{array}{c} \square \\ \gamma \\ \blacksquare \end{array} \gamma \blacktriangle \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \circ \\ \gamma \\ \square^* \end{array} \gamma \blacksquare \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} \circ \gg \begin{array}{c} \square \\ \gamma \\ \blacksquare \end{array} \gamma \blacktriangle \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} \circ \gg \begin{array}{c} \blacksquare \\ \gamma \\ \square \end{array} \gamma \blacktriangle \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \square^* \\ \gamma \\ \circ \end{array} \gamma \blacksquare \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} \square \gg \begin{array}{c} \circ \\ \gamma \\ \blacktriangle \end{array} \gamma \blacksquare \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \circ \\ \gamma \\ \blacksquare \end{array} \gamma \square^* \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} \square \gg \begin{array}{c} \circ \\ \gamma \\ \blacktriangle \end{array} \gamma \blacksquare \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} \square \gg \begin{array}{c} \blacktriangle \\ \gamma \\ \circ \end{array} \gamma \blacksquare \end{array} \right] \times \left[ \begin{array}{c} \circ \gg \begin{array}{c} \blacksquare \\ \gamma \\ \circ \end{array} \gamma \square^* \end{array} \right]$$

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\blacksquare) \\ (\bullet) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\blacksquare) \\ \Upsilon \Upsilon (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\bullet) \\ \Upsilon \Upsilon (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\square^*) \\ \Upsilon \Upsilon (\circ) \\ (\blacksquare) \end{array} \right] \\
\left[ \begin{array}{l} (\bullet) \gg (\square) \\ \Upsilon \Upsilon (\blacksquare) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\circ) \\ \Upsilon \Upsilon (\blacksquare) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\bullet) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\blacksquare) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\bullet) \gg (\square^*) \\ \Upsilon \Upsilon (\blacksquare) \\ (\circ) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \\ \\ \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (\square) \gg (\blacksquare) \\ \Upsilon \Upsilon (\bullet) \\ (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\circ) \\ \Upsilon \Upsilon (\square^*) \\ (\bullet) \end{array} \right] \\
\left[ \begin{array}{l} (\square) \gg (\blacktriangle) \\ \Upsilon \Upsilon (\bullet) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\bullet) \\ \Upsilon \Upsilon (\square^*) \\ (\circ) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\square) \\ \Upsilon \Upsilon (\bullet) \\ (\blacksquare) \end{array} \right] \times \left[ \begin{array}{l} (\blacksquare) \gg (\bullet) \\ \Upsilon \Upsilon (\circ) \\ (\square^*) \end{array} \right] \\
\left[ \begin{array}{l} (\blacktriangle) \gg (\blacksquare) \\ \Upsilon \Upsilon (\bullet) \\ (\square) \end{array} \right] \times \left[ \begin{array}{l} (\text{oO}) \gg (\square^*) \\ \Upsilon \Upsilon (\text{oS}) \\ (\bullet) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \\ \\ \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\circlearrowleft) \\ (\triangle) \end{array} \right) \times \left( \begin{array}{c} (\circlearrowleft) \\ \Upsilon \Upsilon (\circlearrowright) \\ (\square^*) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\circlearrowleft) \\ (\square) \end{array} \right) \times \left( \begin{array}{c} (\square^*) \\ \Upsilon \Upsilon (\circlearrowright) \\ (\circlearrowleft) \end{array} \right)
 \end{array} \right\} \text{Regulativ: } O = oO$$

15. Präsemiotisches Dualsystem  $(\bullet \blacksquare \blacktriangle \square) \times (\square^* \circ \circlearrowright \bullet)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\circlearrowright) \\ \Upsilon \Upsilon (\circlearrowleft) \\ (\bullet) \end{array} \right) \\
 \left( \begin{array}{c} \blacktriangle \gg \\ \Upsilon \Upsilon (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\bullet) \\ \Upsilon \Upsilon (\circlearrowleft) \\ (\circlearrowright) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circlearrowleft) \\ \Upsilon \Upsilon (\circlearrowright) \\ (\bullet) \end{array} \right) \\
 \left( \begin{array}{c} \blacksquare \gg \\ \Upsilon \Upsilon (\square) \\ (\bullet) \end{array} \right) \times \left( \begin{array}{c} (\bullet) \\ \Upsilon \Upsilon (\circlearrowright) \\ (\circlearrowleft) \end{array} \right) \\
 \left( \begin{array}{c} (\bullet) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circlearrowright) \\ \Upsilon \Upsilon (\bullet) \\ (\circlearrowleft) \end{array} \right) \\
 \left( \begin{array}{c} (\bullet) \gg \\ \Upsilon \Upsilon (\square) \\ (\blacktriangle) \end{array} \right) \times \left( \begin{array}{c} (\circlearrowleft) \\ \Upsilon \Upsilon (\bullet) \\ (\circlearrowright) \end{array} \right)
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\bullet) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (o) \\ \gamma \\ (\bullet) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\bullet) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (o) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (o) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\square) \\ \gamma \\ (o) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square^*) \end{array} \gamma (o) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\square) \\ \gamma \\ (o) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

$$\left[ \begin{array}{c} (\blacksquare) \gg \begin{array}{c} (\bullet) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (\bullet) \end{array} \gamma (o) \end{array} \right]$$

$$\left[ \begin{array}{c} (\bullet) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (o) \\ \gamma \\ (\square^*) \end{array} \gamma (\bullet) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\bullet) \gg \begin{array}{c} (\square) \\ \gamma \\ (\blacksquare) \end{array} \gamma (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

$$\left[ \begin{array}{c} (\bullet) \gg \begin{array}{c} (\blacksquare) \\ \gamma \\ (\square) \end{array} \gamma (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (\square^*) \\ \gamma \\ (o) \end{array} \gamma (\bullet) \end{array} \right]$$

Objektales Handeln (O = oO)

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\bullet) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (o) \\ \gamma \\ (\bullet) \end{array} \gamma (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\bullet) \\ \gamma \\ (\blacktriangle) \end{array} \gamma (\blacksquare) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left[ \begin{array}{c} (\square) \gg \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\bullet) \end{array} \gamma (\blacksquare) \end{array} \right] \times \left[ \begin{array}{c} (o) \gg \begin{array}{c} (\bullet) \\ \gamma \\ (o) \end{array} \gamma (\square^*) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\blacktriangle) & \gg & (\square) \\ & & \gamma \quad \gamma \quad (\blacksquare) \\ & & (\bullet) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\bullet) \\ & & \gamma \quad \gamma \quad (\circ) \\ & & (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\blacktriangle) & \gg & (\square) \\ & & \gamma \quad \gamma \quad (\blacksquare) \\ & & (\bullet) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left[ \begin{array}{ccc} (\blacktriangle) & \gg & (\bullet) \\ & & \gamma \quad \gamma \quad (\blacksquare) \\ & & (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\square^*) \\ & & \gamma \quad \gamma \quad (\circ) \\ & & (\bullet) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\bullet) & \gg & (\square) \\ & & \gamma \quad \gamma \quad (\blacksquare) \\ & & (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\circ) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\bullet) & \gg & (\square) \\ & & \gamma \quad \gamma \quad (\blacksquare) \\ & & (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

$$\left[ \begin{array}{ccc} (\bullet) & \gg & (\blacktriangle) \\ & & \gamma \quad \gamma \quad (\blacksquare) \\ & & (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\square^*) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\circ) \end{array} \right]$$

Interpretatives Handeln (I = sS)

$$\left[ \begin{array}{ccc} (\square) & \gg & (\blacksquare) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\blacktriangle) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\circ) \\ & & \gamma \quad \gamma \quad (\square^*) \\ & & (\bullet) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\square) & \gg & (\blacksquare) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\blacktriangle) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$

$$\left[ \begin{array}{ccc} (\square) & \gg & (\blacktriangle) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\blacksquare) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\bullet) \\ & & \gamma \quad \gamma \quad (\square^*) \\ & & (\circ) \end{array} \right]$$

$$\left[ \begin{array}{ccc} (\blacktriangle) & \gg & (\square) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\blacksquare) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\bullet) \\ & & \gamma \quad \gamma \quad (\circ) \\ & & (\square^*) \end{array} \right] \left. \vphantom{\left[ \begin{array}{ccc} (\blacktriangle) & \gg & (\square) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\blacksquare) \end{array} \right]} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left[ \begin{array}{ccc} (\blacktriangle) & \gg & (\blacksquare) \\ & & \gamma \quad \gamma \quad (\bullet) \\ & & (\square) \end{array} \right] \times \left[ \begin{array}{ccc} (\bullet) & \gg & (\square^*) \\ & & \gamma \quad \gamma \quad (\circ) \\ & & (\bullet) \end{array} \right]$$



$$\left. \begin{array}{l}
 \left[ \begin{array}{ccc}
 (\blacksquare) & \gg & \begin{array}{c} (\square) \\ \gamma \\ (\blacktriangle) \end{array} > (\bullet) \end{array} \right] \times \left[ \begin{array}{ccc}
 (\bullet) & \gg & \begin{array}{c} (\circ) \\ \gamma \\ (\square^*) \end{array} > (\ominus) \end{array} \right] \\
 \left[ \begin{array}{ccc}
 (\blacksquare) & \gg & \begin{array}{c} (\blacktriangle) \\ \gamma \\ (\square) \end{array} > (\bullet) \end{array} \right] \times \left[ \begin{array}{ccc}
 (\bullet) & \gg & \begin{array}{c} (\square^*) \\ \gamma \\ (\circ) \end{array} > (\ominus) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

Hiermit liegt also eine vollständige qualitativ-semiotische kreative Grammatik vor. Jeder qualitative Objektbezug kann durch eine bestimmte Kombination der übrigen semiotischen Qualitäten im Rahmen der qualitativen semiotischen Handlungstheorie erzeugt werden.

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