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## **Elemente einer polykontextural-semiotischen Handlungstheorie**

1. Es ist eine eigentümliche Tatsache, dass das Zeichen als Handlungsschema, dessen Geschichte zwar immer noch ungeschrieben ist, letztlich aber wie die Geschichte des Zeichens als Repräsentationsschema bis auf Aristoteles zurückgeht (vgl. Trabant 1989, S. 79 ff.), in der Theoretischen Semiotik bei Bense überhaupt keine Rolle spielt. So gab Bense etwa den folgenden Katalog von Zeichen-Definitionen: Das Zeichen als Repräsentationsschema, als Relation, als geordnete Primzeichen-Folge, als fundamentalkategoriales Tripel, als Repräsentations-Modell, als System der Realitätsbegriffe, als System von Semiosen, als System der Autoreproduktion, als universales Kurationsprinzip, und als Vermittlungsschema (1983, S. 25).

Es ist aber vielleicht kein Zufall, dass eine Definition des Zeichens als Handlungsschemas fehlt, obwohl etwa die Entwicklung der linguistischen Handlungstheorie (Sprechakttheorie) in die Anfänge der Entwicklung der Theoretischen Semiotik fällt und daher doch auch in der aufstrebenden Semiotik, die ja auch bei Bense immer die Linguistik mitberücksichtigte, hätte rezipiert werden müssen. Aber das Zeichen ist im Rahmen der Semiotik eben deshalb primär kein Handlungsschema, weil unter Handeln in der allgemeinsten Definition das "Verändern eines Weltzustandes" (Heinrichs 1980, S. 22) verstanden wird. Weltzustände aber gehören in der Terminologie von Bense (1975, S. 65) zum "ontologischen Raum" der vorthetischen Objekte, nicht aber zum "semiotischen Raum" der thetischen Zeichen. Mit anderen Worten: Im Peirce-Benseschen triadischen Zeichenbegriff, der auf der monokontexturalen Trennung von Zeichen und Objekten basiert und in dem also Objekte nur als Objektbezüge aufscheinen, können Zeichen keine Weltzustände verändern, da auch die letzteren nur als Zeichen wahrgenommen werden. Nach der Auffassung der Theoretischen Semiotik können daher Zeichen bestenfalls Zeichen verändern, und um solche Veränderungen darzustellen, genügt es, die oben in Benses 10er-Katalog erwähnte Theorie der Semiosen zur Hilfe zu nehmen. In der klassischen monokontexturalen Semiotik ersetzt also die Theorie der Semiosen eine semiotische Handlungstheorie deshalb, weil Zeichen ihre transzendenten Objekte niemals erreichen und daher auch keine ontologischen, sondern höchstens semiotische Weltzustände verändern können.

Nun ist es aber eine Tatsache, die zumindest ausserhalb der klassischen Semiotik wohlbekannt ist, dass Zeichen sehr wohl aus ihrem semiotischen Raum in den ontologischen Raum der Objekte, Ereignisse, Abläufe, Zustände usw. hineinwirken können. So kann etwa ein Befehl einen Krieg auslösen. Aber auch der umgekehrte Prozess, also die Veränderung von Zeichen durch Objekte, ist wohlbekannt. So hat etwa die bessere Kenntnis der Hochenergiephysik mehrmals bestehende Atommodelle verändert. Wenn man also eine semiotische Handlungstheorie konstruieren möchte, die nicht nur eine linguistische, also selbst auf Zeichen, nämlich sprachlichen, basierte Pseudo-Handlungstheorie ist, sondern wenn man ein semiotisches Modell erzeugen möchte, das mächtig genug ist, um die Beeinflussung von Zeichen durch Realität und umgekehrt darzustellen, ist es nötig, die Diskontexturalität von Zeichen und Objekt aufzuheben, d.h. die bisherigen monokontexturalen Semiotiken durch eine polykontexturale Semiotik abzulösen.

2. Ein solches Modell einer polykontexturalen Semiotik wurde in Toth (2008b, c) unter dem Namen “Präsemiotik” präsentiert, weil das ihr zugrunde liegende tetradische Zeichenmodell

$$PZR = (3.a\ 2.b\ 1.c\ 0.d)$$

das durch ein künstliches oder natürliches Zeichen repräsentierte Objekt als kategoriales Objekt (0.d) enthält und damit einen Schritt vor einer thetischen Semiose, nämlich im Zwischenbereich zwischen ontologischem und semiotischem Raum angesiedelt ist.

Nun wurde in Toth (2008b, S. 177 ff.) gezeigt, dass jede triadische Zeichenklasse 6 Permutationen besitzt, die semiotisch gedeutet werden können, d.h. nicht nur rein mathematisch gerechtfertigt sind. Entsprechend besitzt jede tetradische Zeichenklasse 24 Permutationen. In Toth (2008d, S. 220 ff.) wurde zudem gezeigt, dass diese 24 Permutationen als semiotische Handlungsschemata eingeführt werden können. Weil jede tetradische Zeichenklasse eine duale Realitätsthematik besitzt, bekommen wir also bei 15 präsemiotischen Dualsystemen zunächst  $15 \cdot 2 \cdot 24 = 720$  tetradische semiotische Handlungsschemata. Nun wurde aber in Toth (2008e) gezeigt, dass eine tetradische Zeichenklasse (anders als eine tetradische logische Relation) genau die folgenden  $4 + 15 + 24 + 24 = 67$  Partialrelationen hat.

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

dyadische Partialrelationen: (0.1), (0.2), (0.3), (1.0), (2.0), (3.0), (1.1), (1.2), (1.3), (2.1), (2.2), (2.3), (3.1), (3.2), (3.3).

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 Diskontexturalität zwischen Zeichen und Objekt qua kategoriales Objekt innerhalb der präsemiotischen tetradischen Zeichenrelation polykontextural sind.

3. In Toth (2008e) 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)	≡	Drittheit (Interpretantenbezug, I)
objektives Objekt (oO)	≡	Zweitheit (Objektbezug, O)
subjektives Objekt (sO)	≡	Erstheit (Mittelbezug, M)
objektives Subjekt (oS)	≡	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))
(2.b 0.d 3.a)	×	(a.3 d.0 b.2)	→	(oO), (sO), (sS))	×	((sS), (oS), (oO))
(3.a 2.b 0.d)	×	(d.0 b.2 a.3)	→	((sS), (oO), (sO))	×	((oS), (oO), (sS))
(3.a 0.d 2.b)	×	(b.2 d.0 a.3)	→	((sS), (sO), (oO))	×	((oO), (oS), (sS))
(0.d 3.a 1.c)	×	(c.1 a.3 d.0)	→	((sO), (sS), (oS))	×	((sO), (sS), (oS))
(0.d 1.c 3.a)	×	(a.3 c.1 d.0)	→	((sO), (oS), (sS))	×	((sS), (sO), (oS))
(1.c 3.a 0.d)	×	(d.0 a.3 c.1)	→	((oS), (sS), (sO))	×	((oS), (sS), (sO))
(1.c 0.d 3.a)	×	(a.3 d.0 c.1)	→	((oS), (sO), (sS))	×	((sS), (oS), (sO))
(3.a 1.c 0.d)	×	(d.0 c.1 a.3)	→	((sS), (oS), (sO))	×	((oS), (sO), (sS))
(3.a 0.d 1.c)	×	(c.1 d.0 a.3)	→	((sS), (sO), (oS))	×	((sO), (oS), (sS))

Tetradisch semiotisch-logische Partialrelationen:

((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))

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

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

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

4. Nach Heinrichs (1980) kann Handeln unter dem Gesichtspunkt einer “Reflexionssemiotik” in die folgenden 4 grossen Gruppen eingeteilt werden:

1. Objektives Handeln
2. Innersubjektives Handeln
3. Soziales Handeln
4. Ausdruckshandeln (mediales Handeln)

In einer dem chemischen Periodensystem entlehnten Klassifikation erweitert Heinrichs diese 4 Gruppen zu total  $4^4 = 256$  Handlungstypen. Wie man also erkennt, stehen diesen 256 logischen Handlungstypen 2'010 semiotisch-logische Handlungstypen gegenüber, also fast 8 mal mehr. Allerdings ist zu bedenken, dass die Semiotik ja ein Fundierungssystem ist und als solches tiefer liegt als die phänotypischen Klassifikationen der Logik, der Linguistik, der Soziologie, usw. Daraus folgt also, dass selbst das Heinrichssche Typensystem, obwohl es das bisher umfangreichste war, notwendig unvollständig ist.

Allerdings ist das Heinrichssche System für unsere Zwecke insofern bereits vorbereitet, als sich in den 4 Gruppen eine semiotisch-kategoriale Klassifikation erkennen lässt. So entspricht das “objektive Handeln” dem semiotischen Objektbezug und das “Ausdruckshandeln”, das von Heinrichs selbst auch als “mediales Handeln” bezeichnet wird, dem semiotischen Mittelbezug. Allerdings entsprechen sowohl das “innersubjektive” als auch das “soziale” Handeln dem semiotischen Interpretantenbezug, das weder eine triadische noch eine tetradische Semiotik imstande ist, den logischen Unterschied zwischen “Ich” und “Wir” zu erfassen, worauf Günther (1976) öfter hingewiesen hatte. Die beiden “gemischten” Erkenntnisrelationen, die sich in einer tetradischen Semiotik vom Typ der Präsemiotik finden, sind das objektive Subjekt (oS) und das subjektive Subjekt (sS), die also den logischen Relationen des “Du” und des “Ich” entsprechen. Somit bedürfte es mindestens einer pentadischen, möglicherweise aber einer noch höherwertigen Semiotik, um eine semiotische Kategorie einzuführen, die dem logischen “Wir” korrespondiert. Da die tetradische Semiotik aber insofern vollständig ist, da sie alle 4 logischen Kombinationen von Subjekt und Objekt und ihren “gemischten” Relationen enthält, sehen wir in dieser Arbeit vom semiotisch-logischen Problem des “Wir” ab. Unsere semiotische Handlungstheorie unterscheidet also einerseits zwischen “Ich” und “Du”, was die Heinrichssche nicht tun kann, andererseits aber im Gegensatz zur Heinrichsschen nicht wie “Ich” und “Du” einerseits und “Wir” andererseits. Somit fehlt also im Heinrichsschen Handlungstypen-System die Kreation der präsemiotischen Qualität bzw. der Erkenntnisrelation des subjektiven Objekts. Diese sehr typisch

polykontexturale Relation, die also dem “unveränderlichen” Objekt subjektive Züge attestiert, finden wir jedoch bei “magischen” Schöpfungsakten wie etwa in Joh. 1, 1, wo gesagt wird, dass Gottes Wort alle Dinge geschaffen hätte. Es handelt sich also um die semiotische Schöpfung von Realität im Sinne der Aufhebung der Zeichen-Objekt-Dichotomie der monokontexturalen Logiken: das geschaffene Objekt ist eben insofern subjektiv, als es durch ein kreierendes Subjekt geschaffen wird, also kurz: subjektives Objekt. Wir erhalten demnach ein Grobraster semiotischer Handlungstypen nach dem “Output” der Handlungen:

1. Qualitatives Handeln ( $Q = (sO)$ )
2. Mediales Handeln ( $M = (oS)$ )
3. Objekttales 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).

Ad 1.: Magische Handlungen (durch Zeichen/Zahlen, Alchemie, soziale magische Handlungen durch Rituale, etc.) (Seligmann 1983)

Ad 2.: Hier liegt “Zeichen-Handeln” (durch Objekte; durch Bewegung; durch Regelverhalten oder durch Metazeichen (Winken; Blinken im Verkehr) im Sinne von Heinrichs (1980) vor.

Ad 3.: Heinrichs (1980) spricht hier von gegenständlich-physischem Handeln (Ortsbewegung; Körperbewegung; interpersonale Annäherung und Entfernung; “Sinnenausrichtung”), fern von Arbeit und vom Handeln mit Wertobjekten

ad 4.: Soziales Handeln (auf objektbezogene Interessen des Anderen: materielle Interessen; auf subjektbezogene Interessen des Anderen: soziale Einstufung; auf soziales Handeln des Anderen: gesellschaftliche Tätigkeit; auf Ausdruckshandeln des Anderen: soziale Äußerung); strategisches; kommunikatives; normbezogenes Handeln (Heinrichs 1980)

Nun sind aber innerhalb von semiotischen und präsemiotischen Kreationsschemata (vgl. Toth 2008d, S. 92 ff., S. 195 ff.) neben den Outputs auch die Inputs eindeutig bestimmbar. Bei den triadischen Kreationsschemata sind semiotische Handlungsschemata mit Output und Input eindeutig bestimmt. Bei präsemiotischen Kreationsschemata können mit diesem Bestimmungspaar, wie zeigen sein wird, als Varianten lediglich die spiegelverkehrten Handlungsschemata zusätzlich aufscheinen, weshalb diese also quasi-eindeutig bestimmt sind.

5. 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 und geben abschliessend einige Hinweise für Beispiele.

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

1. Präsemiotisches Dualsystem (3.1 2.1 1.1 0.1) × (1.0 1.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$\left( \begin{array}{c} (2.1) \\ \wedge \gg (0.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{c} (1.1) \\ \wedge \gg (1.0) \\ (1.2) \end{array} \right)$	}	Input: M = oS
$\left( \begin{array}{c} (3.1) \\ \wedge \gg (0.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{c} (1.1) \\ \wedge \gg (1.0) \\ (1.3) \end{array} \right)$		
$\left( \begin{array}{c} (1.1) \\ \wedge \gg (0.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{c} (1.2) \\ \wedge \gg (1.0) \\ (1.1) \end{array} \right)$	}	Input: O = oO
$\left( \begin{array}{c} (3.1) \\ \wedge \gg (0.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{c} (1.2) \\ \wedge \gg (1.0) \\ (1.3) \end{array} \right)$		

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.1) \\ \lambda \gg (0.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.0) \\ (1.1) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.0) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.1) \\ (0.1) \end{array} \right) \times \left( \begin{array}{l} (1.0) \\ \lambda \gg (1.1) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.1) \\ (0.1) \end{array} \right) \times \left( \begin{array}{l} (1.0) \\ \lambda \gg (1.1) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.1) \\ \lambda \gg (1.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.1) \\ (1.0) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.1) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.1) \\ \lambda \gg (1.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.1) \\ (1.0) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.1) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.1) \\ \lambda \gg (2.1) \\ (0.1) \end{array} \right) \times \left( \begin{array}{l} (1.0) \\ \lambda \gg (1.2) \\ (1.1) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (0.1) \end{array} \right) \times \left( \begin{array}{l} (1.0) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$



$$\left. \begin{array}{l}
\left( \begin{array}{l} (0.1) \\ \wedge \gg (2.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \wedge \gg (1.2) \\ (1.0) \end{array} \right) \\
\left( \begin{array}{l} (3.1) \\ \wedge \gg (2.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \wedge \gg (1.2) \\ (1.3) \end{array} \right)
\end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l}
\left( \begin{array}{l} (1.1) \\ \wedge \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \wedge \gg (1.2) \\ (1.1) \end{array} \right) \\
\left( \begin{array}{l} (0.1) \\ \wedge \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \wedge \gg (1.2) \\ (1.0) \end{array} \right)
\end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left( \begin{array}{l} (2.1) \\ \wedge \gg (3.1) \\ (0.1) \end{array} \right) \times \left( \begin{array}{l} (1.0) \\ \wedge \gg (1.3) \\ (1.2) \end{array} \right) \\
\left( \begin{array}{l} (1.1) \\ \wedge \gg (3.1) \\ (0.1) \end{array} \right) \times \left( \begin{array}{l} (1.0) \\ \wedge \gg (1.3) \\ (1.1) \end{array} \right)
\end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l}
\left( \begin{array}{l} (2.1) \\ \wedge \gg (3.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \wedge \gg (1.3) \\ (1.2) \end{array} \right) \\
\left( \begin{array}{l} (0.1) \\ \wedge \gg (3.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \wedge \gg (1.3) \\ (1.0) \end{array} \right)
\end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l}
\left( \begin{array}{l} (1.1) \\ \wedge \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \wedge \gg (1.3) \\ (1.1) \end{array} \right) \\
\left( \begin{array}{l} (0.1) \\ \wedge \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \wedge \gg (1.3) \\ (1.0) \end{array} \right)
\end{array} \right\} \text{Input: O = oO}$$

2. Präsemiotisches Dualsystem (3.1 2.1 1.1 0.2) × (2.0 1.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.2) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (2.0) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.2) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (2.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: M = oS}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.1) \\ \lambda \gg (0.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.0) \\ (1.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.1) \\ \lambda \gg (0.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.0) \\ (1.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.0) \\ (1.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (1.1) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (1.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.1) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.1) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.1) \\ (1.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.1) \\ \lambda \gg (2.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (1.2) \\ (1.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (2.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.2) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.1) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (1.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (2.0) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (1.1) \\ \lambda \gg (3.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (3.1) \\ (0.2) \end{array} \right) \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \lambda \gg (3.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.1) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (1.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

3. Präsemiotisches Dualsystem (3.1 2.1 1.1 0.3) × (3.0 1.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.3) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (3.0) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.1) \\ \lambda \gg (0.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.0) \\ (1.1) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.1) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (1.1) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.1) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.1) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.1) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.1) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.1) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.1) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.1) \\ \lambda \gg (2.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.2) \\ (1.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (1.1) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (1.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (3.0) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: Q = sO} \\
 \\
 \text{Input: M = oS} \\
 \\
 \text{Input: I = sS}
 \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.1) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (1.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: Q = sO} \\
 \\
 \text{Input: M = oS}
 \end{array}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.1) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (1.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

4. Präsemiotisches Dualsystem (3.1 2.1 1.2 0.2) × (2.0 2.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.0) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.0) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.0) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.0) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (1.2) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$



$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \wedge \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \wedge \gg (1.2) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \wedge \gg (1.2) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \wedge \gg (3.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \wedge \gg (1.3) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (1.2) \\ \wedge \gg (3.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \wedge \gg (1.3) \\ (2.1) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \wedge \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (1.3) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (1.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \wedge \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \wedge \gg (1.3) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \wedge \gg (1.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

5. Präsemiotisches Dualsystem (3.1 2.1 1.2 0.3) × (3.0 2.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.3) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.0) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (1.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.2) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (2.1) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

6. Präsemiotisches Dualsystem (3.1 2.1 1.3 0.3) × (3.0 3.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (1.2) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (1.2) \\ (3.0) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } Q = sO \\
 \\
 \text{Input: } M = oS \\
 \\
 \text{Input: } I = sS
 \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (1.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } Q = sO \\
 \\
 \text{Input: } M = oS
 \end{array}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

7. Präsemiotisches Dualsystem  $(3.1 \ 2.2 \ 1.2 \ 0.2) \times (2.0 \ 2.1 \ 2.2 \ 1.3)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.0) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.0) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.0) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.0) \\ (2.2) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (2.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$



$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \wedge \gg (2.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \wedge \gg (2.2) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (2.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \wedge \gg (2.2) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \wedge \gg (3.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \wedge \gg (1.3) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (1.2) \\ \wedge \gg (3.1) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \wedge \gg (1.3) \\ (2.1) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \wedge \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (1.3) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (1.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \wedge \gg (3.1) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \wedge \gg (1.3) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (3.1) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \wedge \gg (1.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

8. Präsemiotisches Dualsystem (3.1 2.2 1.2 0.3) × (3.0 2.1 2.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (2.1) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.3) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

9. Präsemiotisches Dualsystem (3.1 2.2 1.3 0.3) × (3.0 3.1 2.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: Q = sO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } Q = sO \\
 \\
 \text{Input: } M = oS \\
 \\
 \text{Input: } I = sS
 \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } Q = sO \\
 \\
 \text{Input: } M = oS
 \end{array}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

10. Präsemiotisches Dualsystem  $(3.1 \ 2.3 \ 1.3 \ 0.3) \times (3.0 \ 3.1 \ 3.2 \ 1.3)$

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.3) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (3.2) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (3.1) \\ \lambda \gg (0.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.0) \\ (1.3) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (2.3) \\ \lambda \gg (0.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.0) \\ (3.2) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (3.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (3.2) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } Q = sO \\
 \\
 \text{Input: } O = oO \\
 \\
 \text{Input: } I = sS
 \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.2) \\ (1.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.2) \\ (1.3) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: } Q = sO \\
 \\
 \text{Input: } M = oS
 \end{array}$$



$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.2) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.3) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.2) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (3.2) \end{array} \right) \\ \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (3.2) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.1) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.3) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.1) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

11. Präsemiotisches Dualsystem (3.2 2.2 1.2 0.2) × (2.0 2.1 2.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.0) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.0) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: M = oS}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.0) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.0) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\ \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\ \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.2) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (2.0) \end{array} \right) \\ \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \lambda \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.2) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.3) \\ (2.1) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (3.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.3) \\ (2.0) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.3) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.2) \\ \lambda \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.3) \\ (2.0) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

12. Präsemiotisches Dualsystem (3.2 2.2 1.2 0.3) × (3.0 2.1 2.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.3) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (3.0) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.3) \\ (2.1) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.3) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.3) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \lambda \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.3) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

13. Präsemiotisches Dualsystem (3.2 2.2 1.3 0.3) × (3.0 3.1 2.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (2.3) \end{array} \right) \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.0) \\ (2.3) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (2.2) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (2.2) \end{array} \right) \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (2.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.3) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.1) \\ (2.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \lambda \gg (1.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.1) \\ (2.2) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: Q = sO} \\
 \text{Input: O = oO} \\
 \text{Input: I = sS}
 \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: Q = sO} \\
 \text{Input: M = oS}
 \end{array}$$



$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.2) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.2) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.3) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.3) \\ (3.1) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \lambda \gg (3.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.3) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.3) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

14. Präsemiotisches Dualsystem (3.2 2.3 1.3 0.3) × (3.0 3.1 3.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (3.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (2.3) \end{array} \right) \\
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.0) \\ (2.3) \end{array} \right) \\
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (3.2) \end{array} \right)
 \end{array} \right\}
 \begin{array}{l}
 \text{Input: M = oS} \\
 \text{Input: O = oO} \\
 \text{Input: I = sS}
 \end{array}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (3.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (2.3) \end{array} \right)
 \end{array} \right\}
 \text{Input: Q = sO}$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (1.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.1) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (1.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.1) \\ (3.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.2) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: Q = sO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.2) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.2) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: M = oS}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.2) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.2) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.3) \\ (3.2) \end{array} \right) \\
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.2) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (2.3) \\ (3.1) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.3) \\ (3.2) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.2) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (2.3) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.2) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.3) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.2) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (2.3) \\ (3.0) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

15. Präsemiotisches Dualsystem (3.3 2.3 1.3 0.3) × (3.0 3.1 3.2 3.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (3.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.3) \\ \lambda \gg (0.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.0) \\ (3.3) \end{array} \right)
 \end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \lambda \gg (0.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.0) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.3) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (3.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (0.3) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.0) \\ (3.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (3.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.3) \\ \lambda \gg (1.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.1) \\ (3.3) \end{array} \right)
 \end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (3.3) \\ \lambda \gg (1.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \lambda \gg (3.1) \\ (3.3) \end{array} \right)
 \end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (0.3) \\ \lambda \gg (1.3) \\ (3.3) \end{array} \right) \times \left( \begin{array}{l} (3.3) \\ \lambda \gg (3.1) \\ (3.0) \end{array} \right) \\
 \left( \begin{array}{l} (2.3) \\ \lambda \gg (1.3) \\ (3.3) \end{array} \right) \times \left( \begin{array}{l} (3.3) \\ \lambda \gg (3.1) \\ (3.2) \end{array} \right)
 \end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.2) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (3.3) \\ \lambda \gg (2.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.2) \\ (3.3) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.2) \\ (3.0) \end{array} \right) \\ \left( \begin{array}{l} (3.3) \\ \lambda \gg (2.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.2) \\ (3.3) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \lambda \gg (2.3) \\ (3.3) \end{array} \right) \times \left( \begin{array}{l} (3.3) \\ \lambda \gg (3.2) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (2.3) \\ (3.3) \end{array} \right) \times \left( \begin{array}{l} (3.3) \\ \lambda \gg (3.2) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.3) \\ (3.2) \end{array} \right) \\ \left( \begin{array}{l} (1.3) \\ \lambda \gg (3.3) \\ (0.3) \end{array} \right) \times \left( \begin{array}{l} (3.0) \\ \lambda \gg (3.3) \\ (3.1) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.3) \\ \lambda \gg (3.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.3) \\ (3.2) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \lambda \gg (3.3) \\ (1.3) \end{array} \right) \times \left( \begin{array}{l} (3.1) \\ \lambda \gg (3.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.3) \\ \wedge \gg (3.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \wedge \gg (3.3) \\ (3.1) \end{array} \right) \\ \left( \begin{array}{l} (0.3) \\ \wedge \gg (3.3) \\ (2.3) \end{array} \right) \times \left( \begin{array}{l} (3.2) \\ \wedge \gg (3.3) \\ (3.0) \end{array} \right) \end{array} \right\} \text{Input: } O = oO$$

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

### 1. Präsemiotisches Dualsystem (3.1 2.1 1.1 0.1) × (1.0 1.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left( \begin{array}{l} (3.1) \\ (1.1) \gg \Upsilon \succ (0.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ (1.0) \gg \Upsilon \succ (1.1) \\ (1.3) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ (1.1) \gg \Upsilon \succ (0.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ (1.0) \gg \Upsilon \succ (1.1) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Regulativ: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (3.1) \\ (2.1) \gg \Upsilon \succ (0.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ (1.0) \gg \Upsilon \succ (1.2) \\ (1.3) \end{array} \right) \\ \left( \begin{array}{l} (1.1) \\ (2.1) \gg \Upsilon \succ (0.1) \\ (3.1) \end{array} \right) \times \left( \begin{array}{l} (1.3) \\ (1.0) \gg \Upsilon \succ (1.2) \\ (1.1) \end{array} \right) \end{array} \right\} \text{Regulativ: } O = oO$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.1) \\ (3.1) \gg \Upsilon \succ (0.1) \\ (2.1) \end{array} \right) \times \left( \begin{array}{l} (1.2) \\ (1.0) \gg \Upsilon \succ (1.3) \\ (1.1) \end{array} \right) \\ \left( \begin{array}{l} (2.1) \\ (3.1) \gg \Upsilon \succ (0.1) \\ (1.1) \end{array} \right) \times \left( \begin{array}{l} (1.1) \\ (1.0) \gg \Upsilon \succ (1.3) \\ (1.2) \end{array} \right) \end{array} \right\} \text{Regulativ: } I = sS$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.1) \gg \begin{array}{c} (3.1) \\ \Upsilon \\ (2.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.2) \\ \Upsilon \\ (1.3) \end{array} \succ (1.0) \end{array} \right] \\
 \left[ \begin{array}{c} (0.1) \gg \begin{array}{c} (2.1) \\ \Upsilon \\ (3.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.3) \\ \Upsilon \\ (1.2) \end{array} \succ (1.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \gg \begin{array}{c} (0.1) \\ \Upsilon \\ (3.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.3) \\ \Upsilon \\ (1.0) \end{array} \succ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \gg \begin{array}{c} (3.1) \\ \Upsilon \\ (0.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.0) \\ \Upsilon \\ (1.3) \end{array} \succ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (0.1) \\ \Upsilon \\ (2.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.2) \\ \Upsilon \\ (1.0) \end{array} \succ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (2.1) \\ \Upsilon \\ (0.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.0) \\ \Upsilon \\ (1.2) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.1) \gg \begin{array}{c} (3.1) \\ \Upsilon \\ (1.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \gg \begin{array}{c} (1.1) \\ \Upsilon \\ (1.3) \end{array} \succ (1.0) \end{array} \right] \\
 \left[ \begin{array}{c} (0.1) \gg \begin{array}{c} (1.1) \\ \Upsilon \\ (3.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \gg \begin{array}{c} (1.3) \\ \Upsilon \\ (1.1) \end{array} \succ (1.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$



$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.1) \gg \begin{array}{l} (0.1) \\ \Upsilon \\ (3.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (1.0) \end{array} \succ (1.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.1) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (0.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (1.0) \\ \Upsilon \\ (1.3) \end{array} \succ (1.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (0.1) \\ \Upsilon \\ (1.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (1.1) \\ \Upsilon \\ (1.0) \end{array} \succ (1.3) \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (1.1) \\ \Upsilon \\ (0.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (1.0) \\ \Upsilon \\ (1.1) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.1) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (1.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.1) \\ \Upsilon \\ (1.2) \end{array} \succ (1.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.1) \gg \begin{array}{l} (1.1) \\ \Upsilon \\ (2.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (1.1) \end{array} \succ (1.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.1) \gg \begin{array}{l} (0.1) \\ \Upsilon \\ (2.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (1.0) \end{array} \succ (1.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.1) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (0.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.0) \\ \Upsilon \\ (1.2) \end{array} \succ (1.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (0.1) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (1.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.1) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (1.0) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.1) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (0.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.0) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (1.1) & \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

2. Präsemiotisches Dualsystem (3.1 2.1 1.1 0.2) × (2.0 1.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (3.1) & \\ (1.1) \gg & \Upsilon & \succ (0.2) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (2.0) \gg & \Upsilon & \succ (1.1) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (1.1) \gg & \Upsilon & \succ (0.2) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (2.0) \gg & \Upsilon & \succ (1.1) \\ & (1.2) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (3.1) & \\ (2.1) \gg & \Upsilon & \succ (0.2) \\ & (1.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.1) & \\ (2.0) \gg & \Upsilon & \succ (1.2) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.1) & \\ (2.1) \gg & \Upsilon & \succ (0.2) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (2.0) \gg & \Upsilon & \succ (1.2) \\ & (1.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.1) & \\ (3.1) \gg & \Upsilon & \succ (0.2) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (2.0) \gg & \Upsilon & \succ (1.3) \\ & (1.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (3.1) \gg & \Upsilon & \succ (0.2) \\ & (1.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.1) & \\ (2.0) \gg & \Upsilon & \succ (1.3) \\ & (1.2) & \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.2) \gg \Upsilon \succ (1.1) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (1.1) \gg \Upsilon \succ (2.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (0.2) \gg \Upsilon \succ (1.1) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (1.1) \gg \Upsilon \succ (2.0) \\ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (2.1) \gg \Upsilon \succ (1.1) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (1.1) \gg \Upsilon \succ (1.2) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (2.1) \gg \Upsilon \succ (1.1) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (1.1) \gg \Upsilon \succ (1.2) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (3.1) \gg \Upsilon \succ (1.1) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (1.1) \gg \Upsilon \succ (1.3) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (3.1) \gg \Upsilon \succ (1.1) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (1.1) \gg \Upsilon \succ (1.3) \\ (1.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.2) \gg \Upsilon \succ (2.1) \\ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \\ (1.2) \gg \Upsilon \succ (2.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.1) \\ (0.2) \gg \Upsilon \succ (2.1) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (1.2) \gg \Upsilon \succ (2.0) \\ (1.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.1) \gg \\ (0.2) \\ \Upsilon \succ (2.1) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (1.3) \\ \Upsilon \succ (1.1) \\ (2.0) \end{array} \right] \\
\left[ \begin{array}{l} (1.1) \gg \\ (3.1) \\ \Upsilon \succ (2.1) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (2.0) \\ \Upsilon \succ (1.1) \\ (1.3) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (3.1) \gg \\ (0.2) \\ \Upsilon \succ (2.1) \\ (1.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (1.1) \\ \Upsilon \succ (1.3) \\ (2.0) \end{array} \right] \\
\left[ \begin{array}{l} (3.1) \gg \\ (1.1) \\ \Upsilon \succ (2.1) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (2.0) \\ \Upsilon \succ (1.3) \\ (1.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (0.2) \gg \\ (2.1) \\ \Upsilon \succ (3.1) \\ (1.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.1) \\ \Upsilon \succ (2.0) \\ (1.2) \end{array} \right] \\
\left[ \begin{array}{l} (0.2) \gg \\ (1.1) \\ \Upsilon \succ (3.1) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.2) \\ \Upsilon \succ (2.0) \\ (1.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.1) \gg \\ (0.2) \\ \Upsilon \succ (3.1) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.2) \\ \Upsilon \succ (1.1) \\ (2.0) \end{array} \right] \\
\left[ \begin{array}{l} (1.1) \gg \\ (2.1) \\ \Upsilon \succ (3.1) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (2.0) \\ \Upsilon \succ (1.1) \\ (1.2) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (0.2) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (1.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.1) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (2.0) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.1) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (0.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.0) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (1.1) & \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

### 3. Präsemiotisches Dualsystem (3.1 2.1 1.1 0.3) × (3.0 1.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (3.1) & \\ (1.1) \gg & \Upsilon & \succ (0.3) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (3.0) \gg & \Upsilon & \succ (1.1) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (1.1) \gg & \Upsilon & \succ (0.3) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (3.0) \gg & \Upsilon & \succ (1.1) \\ & (1.2) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (3.1) & \\ (2.1) \gg & \Upsilon & \succ (0.3) \\ & (1.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.1) & \\ (3.0) \gg & \Upsilon & \succ (1.2) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.1) & \\ (2.1) \gg & \Upsilon & \succ (0.3) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (3.0) \gg & \Upsilon & \succ (1.2) \\ & (1.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.1) & \\ (3.1) \gg & \Upsilon & \succ (0.3) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (3.0) \gg & \Upsilon & \succ (1.3) \\ & (1.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (3.1) \gg & \Upsilon & \succ (0.3) \\ & (1.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.1) & \\ (3.0) \gg & \Upsilon & \succ (1.3) \\ & (1.2) & \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \text{Regulativ:} \\ O = oO \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (3.1) \\ \Upsilon \\ (2.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.2) \\ \Upsilon \\ (1.3) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (2.1) \\ \Upsilon \\ (3.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.3) \\ \Upsilon \\ (1.2) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \gg \begin{array}{c} (0.3) \\ \Upsilon \\ (3.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.3) \\ \Upsilon \\ (3.0) \end{array} \succ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \gg \begin{array}{c} (3.1) \\ \Upsilon \\ (0.3) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (3.0) \\ \Upsilon \\ (1.3) \end{array} \succ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (0.3) \\ \Upsilon \\ (2.1) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (1.2) \\ \Upsilon \\ (3.0) \end{array} \succ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (2.1) \\ \Upsilon \\ (0.3) \end{array} \succ (1.1) \end{array} \right] \times \left[ \begin{array}{c} (1.1) \gg \begin{array}{c} (3.0) \\ \Upsilon \\ (1.2) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (3.1) \\ \Upsilon \\ (1.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \gg \begin{array}{c} (1.1) \\ \Upsilon \\ (1.3) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (1.1) \\ \Upsilon \\ (3.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \gg \begin{array}{c} (1.3) \\ \Upsilon \\ (1.1) \end{array} \succ (3.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.1) \gg \\ (0.3) \end{array} \begin{array}{l} \Upsilon \\ \succ \end{array} \begin{array}{l} (2.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (3.0) \end{array} \begin{array}{l} \Upsilon \\ \succ \end{array} \begin{array}{l} (1.1) \\ \end{array} \right] \\
 \left[ \begin{array}{l} (1.1) \gg \\ (0.3) \end{array} \begin{array}{l} (3.1) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (2.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (1.3) \end{array} \begin{array}{l} (3.0) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (1.1) \\ \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.1) \gg \\ (1.1) \end{array} \begin{array}{l} (0.3) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (2.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (3.0) \end{array} \begin{array}{l} (1.1) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (1.3) \\ \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \\ (0.3) \end{array} \begin{array}{l} (1.1) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (2.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (1.1) \end{array} \begin{array}{l} (3.0) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (1.3) \\ \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \gg \\ (1.1) \end{array} \begin{array}{l} (2.1) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (3.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.2) \end{array} \begin{array}{l} (1.1) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (3.0) \\ \end{array} \right] \\
 \left[ \begin{array}{l} (0.3) \gg \\ (2.1) \end{array} \begin{array}{l} (1.1) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (3.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.1) \end{array} \begin{array}{l} (1.2) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (3.0) \\ \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.1) \gg \\ (2.1) \end{array} \begin{array}{l} (0.3) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (3.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (3.0) \end{array} \begin{array}{l} (1.2) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (1.1) \\ \end{array} \right] \\
 \left[ \begin{array}{l} (1.1) \gg \\ (0.3) \end{array} \begin{array}{l} (2.1) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (3.1) \\ \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.2) \end{array} \begin{array}{l} (3.0) \\ \Upsilon \\ \succ \end{array} \begin{array}{l} (1.1) \\ \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (0.3) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (1.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.1) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (3.0) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.1) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (0.3) & \end{array} \right] \times \left[ \begin{array}{ccc} & (3.0) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (1.1) & \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

#### 4. Präsemiotisches Dualsystem (3.1 2.1 1.2 0.2) × (2.0 2.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (3.1) & \\ (1.2) \gg & \Upsilon & \succ (0.2) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (2.0) \gg & \Upsilon & \succ (2.1) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (1.2) \gg & \Upsilon & \succ (0.2) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (2.0) \gg & \Upsilon & \succ (2.1) \\ & (1.2) & \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS}$$

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (3.1) & \\ (2.1) \gg & \Upsilon & \succ (0.2) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.1) & \\ (2.0) \gg & \Upsilon & \succ (1.2) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.2) & \\ (2.1) \gg & \Upsilon & \succ (0.2) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (2.0) \gg & \Upsilon & \succ (1.2) \\ & (2.1) & \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (1.2) & \\ (3.1) \gg & \Upsilon & \succ (0.2) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (2.0) \gg & \Upsilon & \succ (1.3) \\ & (2.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (3.1) \gg & \Upsilon & \succ (0.2) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.1) & \\ (2.0) \gg & \Upsilon & \succ (1.3) \\ & (1.2) & \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{I} = \text{sS}$$



Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (1.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.2) \gg \Upsilon \succ (2.1) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (1.2) \gg \Upsilon \succ (2.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (0.2) \gg \Upsilon \succ (2.1) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (1.2) \gg \Upsilon \succ (2.0) \\ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (3.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.0) \end{array} \succ (2.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (0.2) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (1.3) \end{array} \succ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (1.2) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (2.0) \end{array} \succ (1.3) \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (0.2) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (2.1) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (1.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (1.2) \end{array} \succ (2.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.2) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.1) \end{array} \succ (2.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (2.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.0) \end{array} \succ (2.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (0.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (1.2) \end{array} \succ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (0.2) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.1) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (2.0) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.2) & \\ (2.1) \gg & \Upsilon & \succ (3.1) \\ & (0.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.0) & \\ (1.3) \gg & \Upsilon & \succ (1.2) \\ & (2.1) & \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

5. Präsemiotisches Dualsystem (3.1 2.1 1.2 0.3) × (3.0 2.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (3.1) & \\ (1.2) \gg & \Upsilon & \succ (0.3) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (3.0) \gg & \Upsilon & \succ (2.1) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (1.2) \gg & \Upsilon & \succ (0.3) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (3.0) \gg & \Upsilon & \succ (2.1) \\ & (1.2) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (3.1) & \\ (2.1) \gg & \Upsilon & \succ (0.3) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.1) & \\ (3.0) \gg & \Upsilon & \succ (1.2) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.2) & \\ (2.1) \gg & \Upsilon & \succ (0.3) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (3.0) \gg & \Upsilon & \succ (1.2) \\ & (2.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.2) & \\ (3.1) \gg & \Upsilon & \succ (0.3) \\ & (2.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.2) & \\ (3.0) \gg & \Upsilon & \succ (1.3) \\ & (2.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.1) & \\ (3.1) \gg & \Upsilon & \succ (0.3) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.1) & \\ (3.0) \gg & \Upsilon & \succ (1.3) \\ & (1.2) & \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (1.2) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (2.1) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (0.3) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (3.0) \\ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.1) \gg \Upsilon \succ (1.2) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (1.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (2.1) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (1.2) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (0.3) \gg \Upsilon \succ (2.1) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (1.2) \gg \Upsilon \succ (3.0) \\ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (3.1) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (3.0) \end{array} \succ (2.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (0.3) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (1.3) \end{array} \succ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (1.2) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (3.0) \end{array} \succ (1.2) \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (0.3) \end{array} \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.1) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (1.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (1.2) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.1) \end{array} \succ (3.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (2.1) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (3.0) \end{array} \succ (2.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (0.3) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (1.2) \end{array} \succ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.1) \gg \Upsilon \succ (3.1) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (1.3) \gg \Upsilon \succ (1.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.1) \gg \Upsilon \succ (3.1) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (1.3) \gg \Upsilon \succ (1.2) \\ (2.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

6. Präsemiotisches Dualsystem (3.1 2.1 1.3 0.3) × (3.0 3.1 1.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.1) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.1) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (1.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.1) \\ (2.1) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (1.2) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (0.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.0) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (0.3) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (3.0) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.1) \\ (3.1) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (1.3) \\ (1.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (1.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (2.1) \end{array} \right] \times \left[ \begin{array}{c} (1.2) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.1) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (1.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (2.1) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (1.2) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.3) \\ (0.3) \gg \Upsilon \succ (2.1) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (1.2) \gg \Upsilon \succ (3.0) \\ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.3) \gg \\ (3.1) \end{array} \begin{array}{l} (0.3) \\ \Upsilon \\ \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (3.0) \end{array} \begin{array}{l} (1.3) \\ \Upsilon \\ \succ (3.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.3) \gg \\ (0.3) \end{array} \begin{array}{l} (3.1) \\ \Upsilon \\ \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (1.3) \end{array} \begin{array}{l} (3.0) \\ \Upsilon \\ \succ (3.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (3.1) \gg \\ (1.3) \end{array} \begin{array}{l} (0.3) \\ \Upsilon \\ \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (oO) \end{array} \begin{array}{l} (sS) \\ \Upsilon \\ \succ (1.3) \end{array} \right] \\
\left[ \begin{array}{l} (3.1) \gg \\ (0.3) \end{array} \begin{array}{l} (1.3) \\ \Upsilon \\ \succ (2.1) \end{array} \right] \times \left[ \begin{array}{l} (1.2) \gg \\ (3.1) \end{array} \begin{array}{l} (3.0) \\ \Upsilon \\ \succ (1.3) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (0.3) \gg \\ (1.3) \end{array} \begin{array}{l} (2.1) \\ \Upsilon \\ \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.2) \end{array} \begin{array}{l} (3.1) \\ \Upsilon \\ \succ (3.0) \end{array} \right] \\
\left[ \begin{array}{l} (0.3) \gg \\ (2.1) \end{array} \begin{array}{l} (1.3) \\ \Upsilon \\ \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (3.1) \end{array} \begin{array}{l} (1.2) \\ \Upsilon \\ \succ (3.0) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.3) \gg \\ (2.1) \end{array} \begin{array}{l} (0.3) \\ \Upsilon \\ \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (3.0) \end{array} \begin{array}{l} (1.2) \\ \Upsilon \\ \succ (3.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.3) \gg \\ (0.3) \end{array} \begin{array}{l} (2.1) \\ \Upsilon \\ \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \\ (1.2) \end{array} \begin{array}{l} (3.0) \\ \Upsilon \\ \succ (3.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$



$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.1) \gg \Upsilon \succ (3.1) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (1.3) \gg \Upsilon \succ (1.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (3.1) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (1.3) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

7. Präsemiotisches Dualsystem (3.1 2.2 1.2 0.2) × (2.0 2.1 2.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.1) \\ (1.2) \gg \Upsilon \succ (0.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.0) \gg \Upsilon \succ (2.1) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (1.2) \gg \Upsilon \succ (0.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.0) \gg \Upsilon \succ (2.1) \\ (2.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.1) \\ (2.2) \gg \Upsilon \succ (0.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.0) \gg \Upsilon \succ (2.2) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (0.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.0) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (3.1) \gg \Upsilon \succ (0.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.0) \gg \Upsilon \succ (1.3) \\ (2.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (3.1) \gg \Upsilon \succ (0.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.0) \gg \Upsilon \succ (1.3) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (3.1) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (1.3) \\ (2.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.2) \gg \Upsilon \succ (2.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.2) \gg \Upsilon \succ (2.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (0.2) \gg \Upsilon \succ (2.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.2) \gg \Upsilon \succ (2.0) \\ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (3.1) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.0) \end{array} \succ (2.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (0.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (1.3) \end{array} \succ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (1.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (2.0) \end{array} \succ (1.3) \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (0.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (2.1) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.2) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (1.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (2.2) \end{array} \succ (2.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.2) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (2.1) \end{array} \succ (2.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (2.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (2.0) \end{array} \succ (2.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (0.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (2.2) \end{array} \succ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (0.2) & \\ (2.2) \gg & \Upsilon & \succ (3.1) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (oO) & \\ (oS) \gg & \Upsilon & \succ (sO) \\ & (sS) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.2) & \\ (2.2) \gg & \Upsilon & \succ (3.1) \\ & (0.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.0) & \\ (1.3) \gg & \Upsilon & \succ (2.2) \\ & (2.1) & \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

8. Präsemiotisches Dualsystem (3.1 2.2 1.2 0.3) × (3.0 2.1 2.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{ccc} & (3.1) & \\ (1.2) \gg & \Upsilon & \succ (0.3) \\ & (2.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.2) & \\ (3.0) \gg & \Upsilon & \succ (2.1) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.2) & \\ (1.2) \gg & \Upsilon & \succ (0.3) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (3.0) \gg & \Upsilon & \succ (2.1) \\ & (2.2) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (3.1) & \\ (2.2) \gg & \Upsilon & \succ (0.3) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.1) & \\ (3.0) \gg & \Upsilon & \succ (2.2) \\ & (1.3) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.2) & \\ (2.2) \gg & \Upsilon & \succ (0.3) \\ & (3.1) & \end{array} \right] \times \left[ \begin{array}{ccc} & (1.3) & \\ (3.0) \gg & \Upsilon & \succ (2.2) \\ & (2.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (1.2) & \\ (3.1) \gg & \Upsilon & \succ (0.3) \\ & (2.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.2) & \\ (3.0) \gg & \Upsilon & \succ (1.3) \\ & (2.1) & \end{array} \right] \\ \left[ \begin{array}{ccc} & (2.2) & \\ (3.1) \gg & \Upsilon & \succ (0.3) \\ & (1.2) & \end{array} \right] \times \left[ \begin{array}{ccc} & (2.1) & \\ (3.0) \gg & \Upsilon & \succ (1.3) \\ & (2.2) & \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (2.2) \end{array} \succ (1.2) \end{array} \right] \times \left[ \begin{array}{l} (2.1) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (1.3) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (3.1) \end{array} \succ (1.2) \end{array} \right] \times \left[ \begin{array}{l} (2.1) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.2) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (3.1) \end{array} \succ (1.2) \end{array} \right] \times \left[ \begin{array}{l} (2.1) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (3.0) \end{array} \succ (2.2) \end{array} \right] \\
 \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (0.3) \end{array} \succ (1.2) \end{array} \right] \times \left[ \begin{array}{l} (2.1) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (1.3) \end{array} \succ (2.2) \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (2.2) \end{array} \succ (1.2) \end{array} \right] \times \left[ \begin{array}{l} (2.1) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (3.0) \end{array} \succ (1.3) \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (0.3) \end{array} \succ (1.2) \end{array} \right] \times \left[ \begin{array}{l} (2.1) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.2) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (1.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (1.3) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (3.1) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.1) \end{array} \succ (3.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.3) \\ (1.2) \gg \Upsilon \succ (2.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.2) \gg \Upsilon \succ (2.1) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (1.2) \gg \Upsilon \succ (2.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.2) \gg \Upsilon \succ (2.1) \\ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.3) \\ (3.1) \gg \Upsilon \succ (2.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.2) \gg \Upsilon \succ (1.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (3.1) \gg \Upsilon \succ (2.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.2) \gg \Upsilon \succ (1.3) \\ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (2.2) \\ (0.3) \gg \Upsilon \succ (3.1) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (1.3) \gg \Upsilon \succ (3.0) \\ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (0.3) \gg \Upsilon \succ (3.1) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (1.3) \gg \Upsilon \succ (3.0) \\ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.3) \\ (1.2) \gg \Upsilon \succ (3.1) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (1.3) \gg \Upsilon \succ (2.1) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (1.2) \gg \Upsilon \succ (3.1) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (1.3) \gg \Upsilon \succ (2.1) \\ (2.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.2) \gg \Upsilon \succ (3.1) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (1.3) \gg \Upsilon \succ (2.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (3.1) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (1.3) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

9. Präsemiotisches Dualsystem (3.1 2.2 1.3 0.3) × (3.0 3.1 2.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.1) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (2.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.1) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (0.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.0) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (3.1) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (1.3) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (2.2) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (2.2) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (2.2) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (2.2) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (2.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (2.2) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (2.2) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.3) \\ (0.3) \gg \Upsilon \succ (2.2) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (2.2) \gg \Upsilon \succ (3.0) \\ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$



$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (3.1) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (0.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (1.3) \end{array} \succ (3.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (1.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (3.0) \end{array} \succ (1.3) \end{array} \right] \\
\left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (0.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (3.1) \end{array} \succ (1.3\text{S}) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (1.3) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (2.2) \end{array} \succ (3.0) \end{array} \right] \\
\left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (3.1) \end{array} \succ (3.0) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (2.2) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (0.3) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.2) \end{array} \succ (3.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.2) \gg \Upsilon \succ (3.1) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (1.3) \gg \Upsilon \succ (2.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.2) \gg \Upsilon \succ (3.1) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (1.3) \gg \Upsilon \succ (2.2) \\ (3.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

10. Präsemiotisches Dualsystem (3.1 2.3 1.3 0.3) × (3.0 3.1 3.2 1.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.1) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.3) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (3.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.1) \\ (2.3) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (3.2) \\ (1.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.3) \gg \Upsilon \succ (0.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.0) \gg \Upsilon \succ (3.2) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (0.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.0) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (3.1) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (1.3) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.3) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (3.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (2.3) \gg \Upsilon \succ (1.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.1) \gg \Upsilon \succ (3.2) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.1) \\ (2.3) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (3.2) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.3) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (1.3) \\ (3.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.1) \\ (0.3) \gg \Upsilon \succ (2.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.2) \gg \Upsilon \succ (3.0) \\ (1.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.3) \\ (0.3) \gg \Upsilon \succ (2.3) \\ (3.1) \end{array} \right] \times \left[ \begin{array}{c} (1.3) \\ (3.2) \gg \Upsilon \succ (3.0) \\ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (3.1) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (0.3) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (1.3) \end{array} \succ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (1.3) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (3.0) \end{array} \succ (1.3) \end{array} \right] \\
 \left[ \begin{array}{l} (3.1) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (0.3) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (3.1) \end{array} \succ (1.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (1.3) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (3.2) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.3) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (3.1) \end{array} \succ (3.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (2.3) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (0.3) \end{array} \succ (3.1) \end{array} \right] \times \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (3.2) \end{array} \succ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.3) \gg \Upsilon \succ (3.1) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (1.3) \gg \Upsilon \succ (3.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.3) \gg \Upsilon \succ (3.1) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (1.3) \gg \Upsilon \succ (3.2) \\ (3.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

11. Präsemiotisches Dualsystem (3.2 2.2 1.2 0.2) × (2.0 2.1 2.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.2) \\ (1.2) \gg \Upsilon \succ (0.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.0) \gg \Upsilon \succ (2.1) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (1.2) \gg \Upsilon \succ (0.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.0) \gg \Upsilon \succ (2.1) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (0.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.0) \gg \Upsilon \succ (2.2) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (0.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.0) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (1.2) \\ (3.2) \gg \Upsilon \succ (0.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.0) \gg \Upsilon \succ (2.3) \\ (2.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (0.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.0) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.2) \\ (3.2) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (2.3) \\ (2.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (0.2) \gg \Upsilon \succ (2.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.2) \gg \Upsilon \succ (2.0) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (0.2) \gg \Upsilon \succ (2.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.2) \gg \Upsilon \succ (2.0) \\ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (3.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (2.0) \end{array} \succ (2.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (0.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (2.3) \end{array} \succ (2.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (1.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (2.0) \end{array} \succ (2.3) \end{array} \right] \\
\left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (0.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (2.1) \end{array} \succ (2.3) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (0.2) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (1.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (2.2) \end{array} \succ (2.0) \end{array} \right] \\
\left[ \begin{array}{l} (0.2) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (2.1) \end{array} \succ (2.0) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.2) \\ \Upsilon \\ (2.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (2.0) \end{array} \succ (2.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (0.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.0) \\ \Upsilon \\ (2.2) \end{array} \succ (2.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.2) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (2.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \end{array} \right\} \text{Regulativ: } O = oO$$

12. Präsemiotisches Dualsystem (3.2 2.2 1.2 0.3) × (3.0 2.1 2.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.2) \\ (1.2) \gg \Upsilon \succ (0.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.0) \gg \Upsilon \succ (2.1) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (1.2) \gg \Upsilon \succ (0.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.0) \gg \Upsilon \succ (2.1) \\ (2.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (2.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ: } M = oS$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \end{array} \right\} \text{Regulativ: } O = oO$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (1.2) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (2.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ: } I = sS$$



Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (0.3) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (3.0) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (0.3) \gg \Upsilon \succ (1.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.1) \gg \Upsilon \succ (3.0) \\ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (3.2) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (2.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (1.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.1) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (0.3) \gg \Upsilon \succ (2.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.2) \gg \Upsilon \succ (3.0) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (0.3) \gg \Upsilon \succ (2.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.2) \gg \Upsilon \succ (3.0) \\ (2.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (3.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (3.0) \end{array} \succ (2.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (0.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.3) \end{array} \succ (2.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (1.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (3.0) \end{array} \succ (2.3) \end{array} \right] \\
\left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (0.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.1) \end{array} \succ (2.3) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (1.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.1) \\ \Upsilon \\ (2.2) \end{array} \succ (3.0) \end{array} \right] \\
\left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (1.2) \\ \Upsilon \\ (2.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (2.1) \end{array} \succ (3.0) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (2.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (3.0) \end{array} \succ (2.1) \end{array} \right] \\
\left[ \begin{array}{l} (1.2) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (0.3) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.2) \end{array} \succ (2.1) \end{array} \right]
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

13. Präsemiotisches Dualsystem (3.2 2.2 1.3 0.3) × (3.0 3.1 2.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.2) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (2.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (\text{oO}) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (\text{oS}) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.2) \gg \Upsilon \succ (0.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.0) \gg \Upsilon \succ (2.2) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (3.2) \\ \Upsilon \\ (2.2) \end{array} \succ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (oS) \\ \Upsilon \\ (sO) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (2.2) \\ \Upsilon \\ (3.2) \end{array} \succ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (2.3) \\ \Upsilon \\ (2.2) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \gg \begin{array}{c} (0.3) \\ \Upsilon \\ (3.2) \end{array} \succ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (2.3) \\ \Upsilon \\ (3.0) \end{array} \succ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \gg \begin{array}{c} (3.2) \\ \Upsilon \\ (0.3) \end{array} \succ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (3.0) \\ \Upsilon \\ (2.3) \end{array} \succ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (3.2) \gg \begin{array}{c} (0.3) \\ \Upsilon \\ (2.2) \end{array} \succ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (2.2) \\ \Upsilon \\ (3.0) \end{array} \succ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (3.2) \gg \begin{array}{c} (2.2) \\ \Upsilon \\ (0.3) \end{array} \succ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \gg \begin{array}{c} (3.0) \\ \Upsilon \\ (2.2) \end{array} \succ (2.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (3.2) \\ \Upsilon \\ (1.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \gg \begin{array}{c} (3.1) \\ \Upsilon \\ (2.3) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \gg \begin{array}{c} (1.3) \\ \Upsilon \\ (3.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \gg \begin{array}{c} (2.3) \\ \Upsilon \\ (3.1) \end{array} \succ (3.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (3.2) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (0.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.3) \end{array} \succ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (1.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (3.0) \end{array} \succ (2.3) \end{array} \right] \\
 \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (0.3) \end{array} \succ (2.2) \end{array} \right] \times \left[ \begin{array}{l} (2.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (3.1) \end{array} \succ (2.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (1.3) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (2.2) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (3.1) \end{array} \succ (3.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (2.2) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.2) \\ \Upsilon \\ (0.3) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.2) \end{array} \succ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (3.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

14. Präsemiotisches Dualsystem (3.2 2.3 1.3 0.3) × (3.0 3.1 3.2 2.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.2) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.3) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (3.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.2) \\ (2.3) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (3.2) \\ (2.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.3) \gg \Upsilon \succ (0.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.0) \gg \Upsilon \succ (3.2) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.3) \\ (3.2) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (2.3) \\ (3.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.3) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (3.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (2.3) \gg \Upsilon \succ (1.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.1) \gg \Upsilon \succ (3.2) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.2) \\ (2.3) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (3.2) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (3.2) \gg \Upsilon \succ (1.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.1) \gg \Upsilon \succ (2.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.3) \\ (3.2) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (2.3) \\ (3.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (0.3) \gg \Upsilon \succ (2.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.2) \gg \Upsilon \succ (3.0) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.3) \\ (0.3) \gg \Upsilon \succ (2.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.2) \gg \Upsilon \succ (3.0) \\ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (3.2) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (0.3) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (2.3) \end{array} \succ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (1.3) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (3.0) \end{array} \succ (2.3) \end{array} \right] \\
 \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (0.3) \end{array} \succ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (3.1) \end{array} \succ (2.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (1.3) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (3.1) \\ \Upsilon \\ (3.2) \end{array} \succ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (0.3) \gg \begin{array}{l} (1.3) \\ \Upsilon \\ (2.3) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (3.1) \end{array} \succ (3.0) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (0.3) \\ \Upsilon \\ (2.3) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (2.3) \gg \begin{array}{l} (3.2) \\ \Upsilon \\ (3.0) \end{array} \succ (3.1) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \gg \begin{array}{l} (2.3) \\ \Upsilon \\ (0.3) \end{array} \succ (3.2) \end{array} \right] \times \left[ \begin{array}{l} (\text{oO}) \gg \begin{array}{l} (3.0) \\ \Upsilon \\ (3.2) \end{array} \succ (\text{oS}) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$



$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.3) \\ (2.3) \gg \Upsilon \succ (3.2) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (2.3) \gg \Upsilon \succ (3.2) \\ (3.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.3) \gg \Upsilon \succ (3.2) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (2.3) \gg \Upsilon \succ (3.2) \\ (3.1) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{O} = \text{oO}$$

15. Präsemiotisches Dualsystem (3.3 2.3 1.3 0.3) × (3.0 3.1 3.2 3.3)

Qualitatives Handeln (Q = sO)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (3.3) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (3.3) \end{array} \right] \\ \left[ \begin{array}{c} (2.3) \\ (1.3) \gg \Upsilon \succ (0.3) \\ (3.3) \end{array} \right] \times \left[ \begin{array}{c} (3.3) \\ (3.0) \gg \Upsilon \succ (3.1) \\ (3.2) \end{array} \right] \\ \left[ \begin{array}{c} (3.3) \\ (2.3) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (3.2) \\ (3.3) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (2.3) \gg \Upsilon \succ (0.3) \\ (3.3) \end{array} \right] \times \left[ \begin{array}{c} (3.3) \\ (3.0) \gg \Upsilon \succ (3.2) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (1.3) \\ (3.3) \gg \Upsilon \succ (0.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.0) \gg \Upsilon \succ (3.3) \\ (3.1) \end{array} \right] \\ \left[ \begin{array}{c} (2.3) \\ (3.3) \gg \Upsilon \succ (0.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.0) \gg \Upsilon \succ (3.3) \\ (3.2) \end{array} \right] \end{array} \right\} \text{Regulativ:} \\ \text{M} = \text{oS} \\ \text{O} = \text{oO} \\ \text{I} = \text{sS}$$

Mediales Handeln (M = oS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.3) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (3.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.3) \\ (0.3) \gg \Upsilon \succ (1.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.1) \gg \Upsilon \succ (3.0) \\ (3.2) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (2.3) \gg \Upsilon \succ (1.3) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (3.1) \gg \Upsilon \succ (3.2) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (3.3) \\ (2.3) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (3.2) \\ (3.3) \end{array} \right] \\
 \left[ \begin{array}{c} (0.3) \\ (3.3) \gg \Upsilon \succ (1.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{c} (3.2) \\ (3.1) \gg \Upsilon \succ (3.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{c} (2.3) \\ (3.3) \gg \Upsilon \succ (1.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{c} (3.0) \\ (3.1) \gg \Upsilon \succ (3.3) \\ (3.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO)

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.3) \\ (0.3) \gg \Upsilon \succ (2.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{c} (3.1) \\ (3.2) \gg \Upsilon \succ (3.0) \\ (3.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.3) \\ (0.3) \gg \Upsilon \succ (2.3) \\ (3.3) \end{array} \right] \times \left[ \begin{array}{c} (3.3) \\ (3.2) \gg \Upsilon \succ (3.0) \\ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \\ (1.3) \gg \Upsilon \succ (2.3) \\ (3.3) \end{array} \right] \times \left[ \begin{array}{l} (3.3) \\ (3.2) \gg \Upsilon \succ (3.1) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (3.3) \\ (1.3) \gg \Upsilon \succ (2.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{l} (3.0) \\ (3.2) \gg \Upsilon \succ (3.1) \\ (3.3) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \\ (3.3) \gg \Upsilon \succ (2.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{l} (3.1) \\ (3.2) \gg \Upsilon \succ (3.3) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \\ (3.3) \gg \Upsilon \succ (2.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{l} (3.0) \\ (3.2) \gg \Upsilon \succ (3.3) \\ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = \text{sS} \end{array}$$

Interpretatives Handeln (I = sS)

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (2.3) \\ (0.3) \gg \Upsilon \succ (3.3) \\ (1.3) \end{array} \right] \times \left[ \begin{array}{l} (3.1) \\ (3.3) \gg \Upsilon \succ (3.0) \\ (3.2) \end{array} \right] \\
 \left[ \begin{array}{l} (1.3) \\ (0.3) \gg \Upsilon \succ (3.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \\ (3.3) \gg \Upsilon \succ (3.0) \\ (3.1) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = \text{sO} \end{array}$$
  

$$\left. \begin{array}{l}
 \left[ \begin{array}{l} (0.3) \\ (1.3) \gg \Upsilon \succ (3.3) \\ (2.3) \end{array} \right] \times \left[ \begin{array}{l} (3.2) \\ (3.3) \gg \Upsilon \succ (3.1) \\ (3.0) \end{array} \right] \\
 \left[ \begin{array}{l} (2.3) \\ (1.3) \gg \Upsilon \succ (3.3) \\ (0.3) \end{array} \right] \times \left[ \begin{array}{l} (3.0) \\ (3.3) \gg \Upsilon \succ (3.1) \\ (3.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = \text{oS} \end{array}$$

$$\left. \begin{array}{l} \left( \begin{array}{ccc} & (0.3) & \\ (2.3) \gg & \Upsilon & \succ (3.3) \\ & (1.3) & \end{array} \right) \times \left( \begin{array}{ccc} & (3.1) & \\ (3.3) \gg & \Upsilon & \succ (3.2) \\ & (3.0) & \end{array} \right) \\ \left( \begin{array}{ccc} & (1.3) & \\ (2.3) \gg & \Upsilon & \succ (3.3) \\ & (0.3) & \end{array} \right) \times \left( \begin{array}{ccc} & (3.0) & \\ (3.3) \gg & \Upsilon & \succ (3.2) \\ & (3.1) & \end{array} \right) \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$

6. Wie man aus dem letzten Kapitel erkennt, besteht folgender formaler Zusammenhang zwischen den triadischen semiotischen Handlungsschemata:

$$\left( \begin{array}{ccc} (c.d) & & \\ \wedge \gg (e.f) & & \\ (a.b) & & \end{array} \right) \times \left( \begin{array}{ccc} (b.a) & & \\ \wedge \gg (f.e) & & \\ (d.c) & & \end{array} \right)$$

und folgender formaler Zusammenhang zwischen den tetradischen semiotischen Handlungsschemata:

$$\left( \begin{array}{ccc} & (c.d) & \\ (a.b) \gg & \Upsilon & \succ (g.h) \\ & (e.f) & \end{array} \right) \times \left( \begin{array}{ccc} & (f.e) & \\ (h.g) \gg & \Upsilon & \succ (b.a) \\ & (d.c) & \end{array} \right)$$

Jedes semiotische Handlungsschema involviert also ein vorthetisches Objekt qua kategoriales Objekt (0.d), und dieses kann in allen 3 Positionen des triadischen und in allen 4 Positionen des tetradischen Handlungsschemas auftauchen, also an der Stelle von (a.b), (c.d), (e.f) oder (g.h) und an den korrespondierenden Stellen der dualen semiotischen Handlungsschemata stehen. Demzufolge kann also auch die Kontexturgrenze ( $\parallel$ ,  $\equiv$ ) zwischen Objekt und Zeichen an allen diesen Positionen aufscheinen, d.h.

$$\left( \begin{array}{ccc} (c.d) & & \\ \equiv \gg (e.f) & & \\ (0.d) & & \end{array} \right), \left( \begin{array}{ccc} (0.d) & & \\ \equiv \gg (f.e) & & \\ (d.c) & & \end{array} \right), \left( \begin{array}{ccc} (c.d) & & \\ \wedge \parallel (0.d) & & \\ (d.c) & & \end{array} \right)$$

$$\left( \begin{array}{ccc} & (c.d) & \\ (0.d) \parallel & \Upsilon & \succ (g.h) \\ & (e.f) & \end{array} \right), \left( \begin{array}{ccc} & (0.d) & \\ (h.g) \gg & \equiv & \succ (b.a) \\ & (d.c) & \end{array} \right)$$

$$\left( \begin{array}{ccc} & (c.d) & \\ (a.b) \gg & = & > (g.h) \\ & (0.d) & \end{array} \right), \quad \left( \begin{array}{ccc} & (f.e) & \\ (h.g) \gg & \vee & \parallel (0.d) \\ & (d.c) & \end{array} \right)$$

Da ferner sämtliche 6 Permutationen der triadischen semiotischen Handlungsschemata und sämtliche 24 Permutationen der tetradischen semiotischen Handlungsschemata zugelassen sind, können also Kontexturgrenzen zwischen allen 9 bzw. 12 Subzeichen aus der kategorialen Erstheit, Zweitheit und Drittheit einerseits und allen 3 kategorialen Objekten der kategorialen Nullheit auftreten. Dies bedeutet, dass nicht nur, wie in der klassischen Semiotik (Bense 1979, S. 89), ein hyperthetischer Interpretant unter Benutzung eines hypotypotischen Mittels einen hypothetischen Objektbezug kreiert, sondern dass alle 9 bzw. 12 Zeichenbezüge einander erzeugen können. Somit basiert also unsere semiotische Handlungstheorie auf einem ebenso autoreproduktiven wie **autoproduktiven** polykontexturalen Zeichenbegriff.

Wenn wir das Beispiel eines Verkehrszeichen nehmen, z.B. eine Ampel, dann würde diese semiotisch im Mittelbezug durch ein Sinzeichen (1.2) repräsentiert, weil die Ampel auf einem singulären Gebrauch der Farbqualitäten "grün" und "rot" (und in manchen Ländern zusätzlich "orange") basiert. Und weil diese Farbqualitäten die Verkehrssituation in mindestens zwei distinkte Teilsituationen, nämlich rollender vs. stehender Verkehr, differenziert, muss der Interpretantenbezug dicentisch (3.2) sein, denn die singulären Farbqualitäten sind Appelle (oder Befehle) an die Verkehrsteilnehmer, weiterzufahren bzw. anzufahren oder vor der Ampel anzuhalten. Wegen (3.2) und (1.2) ist dann der indexikalische Objektbezug (2.2) eindeutig bestimmt, und wir bekommen die monokontexturale triadische Zeichenklasse (3.2 2.2 1.2) für das Objekt Verkehrsampel. Nun ist es aber nicht nur so, dass die Autofahrer auf das Zeichen Ampel ebenfalls mit einem Zeichenverhalten reagieren, sondern ganz offensichtlich hat das Zeichen Ampel ja Einfluss auf die Objekte Auto und Autofahrer, d.h. das Zeichen beeinflusst hier das Objekt. Damit bekommen wir die polykontexturale Zeichenklasse (3.2 2.2 1.2 0.2). Ausserdem gibt es Ampeln, wo der umgekehrte Fall vorliegt, wo also die Objekte Auto bzw. Autofahrer das Zeichen, d.h. die Ampel beeinflussen, so dass diese beim Heranfahen von Auto von Rot auf Grün umstellt. Diese Dualität der Beeinflussung von Objekten durch Zeichen und umgekehrt wird nun erstmals handlungstheoretisch in unseren semiotischen Schemata durch die verdoppelte polykontextural-semiotische Repräsentation zweier dualer Handlungsschemata fassbar. Allein schon dem erwähnten simplen Beispiel einer Verkehrssituation, bestehend aus einer Ampel und einem Auto mit Fahrer, liegt dementsprechend eine präsemiotische Tiefenstruktur mit folgenden 2 mal 24 möglichen tetradischen semiotischen Handlungsschemata zu Grunde:

Präsemiotisches Dualsystem (3.2 2.2 1.2 0.2) × (2.0 2.1 2.2 2.3)  
 Beispiel: Elementare Verkehrssituation (Ampel, Auto, Autofahrer)

Qualitatives Handeln (Q = sO): Auto/Autofahrer beeinflussen das Zeichen Ampel

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (1.2) \gg \Upsilon \succ (0.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.0) \gg \Upsilon \succ (2.1) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (1.2) \gg \Upsilon \succ (0.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.0) \gg \Upsilon \succ (2.1) \\ (2.2) \end{array} \right] \\
 \left[ \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (0.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.0) \gg \Upsilon \succ (2.2) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (0.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.0) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \\
 \left[ \begin{array}{c} (1.2) \\ (3.2) \gg \Upsilon \succ (0.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.0) \gg \Upsilon \succ (2.3) \\ (2.1) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (0.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.0) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \\ \\ \text{Regulativ:} \\ O = oO \\ \\ \text{Regulativ:} \\ I = sS \end{array}$$

Mediales Handeln (M = oS): Zeichenhandeln bzw. Zeichenverhalten der Autofahrer

$$\left. \begin{array}{l}
 \left[ \begin{array}{c} (3.2) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (2.3) \end{array} \right] \\
 \left[ \begin{array}{c} (2.2) \\ (0.2) \gg \Upsilon \succ (1.2) \\ (3.2) \end{array} \right] \times \left[ \begin{array}{c} (2.3) \\ (2.1) \gg \Upsilon \succ (2.0) \\ (2.2) \end{array} \right]
 \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$

$$\left. \begin{array}{l}
\left( \begin{array}{c} (0.2) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{c} (2.3) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (2.0) \end{array} \right) \\
\left( \begin{array}{c} (3.2) \\ (2.2) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (2.2) \\ (2.3) \end{array} \right)
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ O = oO \end{array}$$
  

$$\left. \begin{array}{l}
\left( \begin{array}{c} (0.2) \\ (3.2) \gg \Upsilon \succ (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{c} (2.2) \\ (2.1) \gg \Upsilon \succ (2.3) \\ (2.0) \end{array} \right) \\
\left( \begin{array}{c} (2.2) \\ (3.2) \gg \Upsilon \succ (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{c} (2.0) \\ (2.1) \gg \Upsilon \succ (2.3) \\ (2.2) \end{array} \right)
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ I = sS \end{array}$$

Objektales Handeln (O = oO): Nach Heinrichs (1980) “interpersonale Annäherung und Entfernung”; “Sinnenausrichtung”, etc.)

$$\left. \begin{array}{l}
\left( \begin{array}{c} (3.2) \\ (0.2) \gg \Upsilon \succ (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{c} (2.1) \\ (2.2) \gg \Upsilon \succ (2.0) \\ (2.3) \end{array} \right) \\
\left( \begin{array}{c} (1.2) \\ (0.2) \gg \Upsilon \succ (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{c} (2.3) \\ (2.2) \gg \Upsilon \succ (2.0) \\ (2.1) \end{array} \right)
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ Q = sO \end{array}$$
  

$$\left. \begin{array}{l}
\left( \begin{array}{c} (0.2) \\ (1.2) \gg \Upsilon \succ (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{c} (2.3) \\ (2.2) \gg \Upsilon \succ (2.1) \\ (2.0) \end{array} \right) \\
\left( \begin{array}{c} (3.2) \\ (1.2) \gg \Upsilon \succ (2.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{c} (2.0) \\ (2.2) \gg \Upsilon \succ (2.1) \\ (2.3) \end{array} \right)
\end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ M = oS \end{array}$$

$$\left. \begin{array}{l} \left[ \begin{array}{c} (0.2) \\ (3.2) \gg \Upsilon \succ (2.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.2) \gg \Upsilon \succ (2.3) \\ (2.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (3.2) \gg \Upsilon \succ (2.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.2) \gg \Upsilon \succ (2.3) \\ (2.1) \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ \text{I = sS} \end{array}$$

Interpretatives Handeln (I = sS): Nach Heinrichs (1980) soziales Handeln (hier: im Strassenverkehr); strategisches; kommunikatives; normbezogenes Handeln (hier: Befolgung der Zeichenbefehle, kommuniziert durch die Ampel, etc.)

$$\left. \begin{array}{l} \left[ \begin{array}{c} (2.2) \\ (0.2) \gg \Upsilon \succ (3.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.3) \gg \Upsilon \succ (2.0) \\ (2.2) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (0.2) \gg \Upsilon \succ (3.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.3) \gg \Upsilon \succ (2.0) \\ (2.1) \end{array} \right] \\ \left[ \begin{array}{c} (0.2) \\ (1.2) \gg \Upsilon \succ (3.2) \\ (2.2) \end{array} \right] \times \left[ \begin{array}{c} (2.2) \\ (2.3) \gg \Upsilon \succ (2.1) \\ (2.0) \end{array} \right] \\ \left[ \begin{array}{c} (2.2) \\ (1.2) \gg \Upsilon \succ (3.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.3) \gg \Upsilon \succ (2.1) \\ (2.2) \end{array} \right] \\ \left[ \begin{array}{c} (0.2) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (1.2) \end{array} \right] \times \left[ \begin{array}{c} (2.1) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (2.0) \end{array} \right] \\ \left[ \begin{array}{c} (1.2) \\ (2.2) \gg \Upsilon \succ (3.2) \\ (0.2) \end{array} \right] \times \left[ \begin{array}{c} (2.0) \\ (2.3) \gg \Upsilon \succ (2.2) \\ (2.1) \end{array} \right] \end{array} \right\} \begin{array}{l} \text{Regulativ:} \\ \text{Q = sO} \\ \\ \text{Regulativ:} \\ \text{M = oS} \\ \\ \text{Regulativ:} \\ \text{O = oO} \end{array}$$



Ebenfalls 2 mal 24 mögliche triadische semiotische Handlungsschemata liegen der Verkehrssituation zu Grunde. Bei den folgenden Handlungsschemata “fehlt” jeweils eine der prä-semiotischen Kategorien ((3.a), (2.b), (1.c) oder (0.d)). Falls (0.d) fehlt, haben wir also nichts anderes als die der polykontextural-semiotischen Zeichenklasse (3.2 2.2 1.2 0.2) entsprechende monokontextural-semiotische Zeichenklasse (3.2 2.2 1.2), so dass hier also die polykontexturale Faserung entfernt ist (vgl. Toth 2008b, Bd. 2, S. 202 ff.). Damit handelt es sich in den übrigen Fällen (wo also entweder die kategoriale Erst-, Zweit- oder Drittheit fehlt) um semiotische Fragmente polykontexturaler Zeichenklassen, denen keine monokontexturale Zeichenklasse entspricht.

Qualitatives Handeln (Q = sO): Auto/Autofahrer beeinflussen das Zeichen Ampel

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (2.2) \\ \wedge \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (2.0) \\ (2.2) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \wedge \gg (0.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (2.0) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: M = oS}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \wedge \gg (0.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \wedge \gg (2.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (3.2) \\ \wedge \gg (0.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \wedge \gg (2.0) \\ (2.3) \end{array} \right)
 \end{array} \right\} \text{Input: O = oO}$$
  

$$\left. \begin{array}{l}
 \left( \begin{array}{l} (1.2) \\ \wedge \gg (0.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \wedge \gg (2.0) \\ (2.1) \end{array} \right) \\
 \left( \begin{array}{l} (2.2) \\ \wedge \gg (0.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \wedge \gg (2.0) \\ (2.2) \end{array} \right)
 \end{array} \right\} \text{Input: I = sS}$$

Mediales Handeln (M = oS): Zeichenhandeln bzw. Zeichenverhalten der Autofahrer

$$\left. \begin{array}{l}
\left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right) \\
\left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right)
\end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
\left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\
\left( \begin{array}{l} (3.2) \\ \lambda \gg (1.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (23.2) \\ \lambda \gg (2.1) \\ (2.3) \end{array} \right)
\end{array} \right\} \text{Input: } O = oO$$

$$\left. \begin{array}{l}
\left( \begin{array}{l} (0.2) \\ \lambda \gg (1.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.1) \\ (2.0) \end{array} \right) \\
\left( \begin{array}{l} (2.2) \\ \lambda \gg (1.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \lambda \gg (2.1) \\ (2.2) \end{array} \right)
\end{array} \right\} \text{Input: } I = sS$$

Objektales Handeln (O = oO): Nach Heinrichs (1980) “interpersonale Annäherung und Entfernung”; “Sinnenausrichtung”, etc.)

$$\left. \begin{array}{l}
\left( \begin{array}{l} (1.2) \\ \lambda \gg (2.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.2) \\ (2.1) \end{array} \right) \\
\left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right)
\end{array} \right\} \text{Input: } Q = sO$$

$$\left. \begin{array}{l}
\left( \begin{array}{l} (0.2) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (2.0) \end{array} \right) \\
\left( \begin{array}{l} (3.2) \\ \lambda \gg (2.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \lambda \gg (2.2) \\ (2.3) \end{array} \right)
\end{array} \right\} \text{Input: } M = oS$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \wedge \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \wedge \gg (2.2) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (2.2) \\ (3.2) \end{array} \right) \times \left( \begin{array}{l} (2.3) \\ \wedge \gg (2.2) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: I = sS}$$

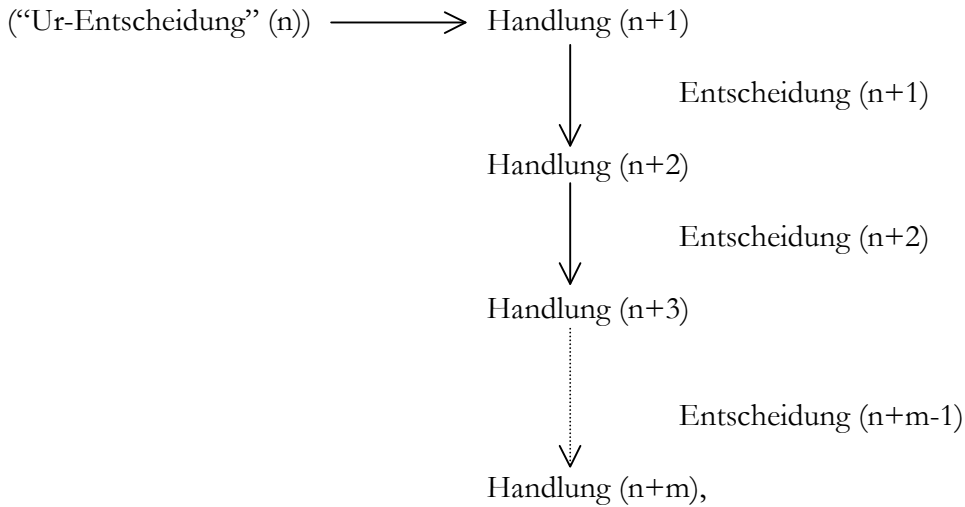
Interpretatives Handeln (I = sS): Nach Heinrichs (1980) soziales Handeln (hier: im Strassenverkehr); strategisches; kommunikatives; normbezogenes Handeln (hier: Befolgung der Zeichenbefehle, kommuniziert durch die Ampel, etc.)

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \wedge \gg (3.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \wedge \gg (2.3) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (1.2) \\ \wedge \gg (3.2) \\ (0.2) \end{array} \right) \times \left( \begin{array}{l} (2.0) \\ \wedge \gg (2.3) \\ (2.1) \end{array} \right) \end{array} \right\} \text{Input: Q = sO}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (2.2) \\ \wedge \gg (3.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (2.3) \\ (2.2) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (3.2) \\ (1.2) \end{array} \right) \times \left( \begin{array}{l} (2.1) \\ \wedge \gg (2.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: M = oS}$$

$$\left. \begin{array}{l} \left( \begin{array}{l} (1.2) \\ \wedge \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \wedge \gg (2.3) \\ (2.1) \end{array} \right) \\ \left( \begin{array}{l} (0.2) \\ \wedge \gg (3.2) \\ (2.2) \end{array} \right) \times \left( \begin{array}{l} (2.2) \\ \wedge \gg (2.3) \\ (2.0) \end{array} \right) \end{array} \right\} \text{Input: O = oO}$$

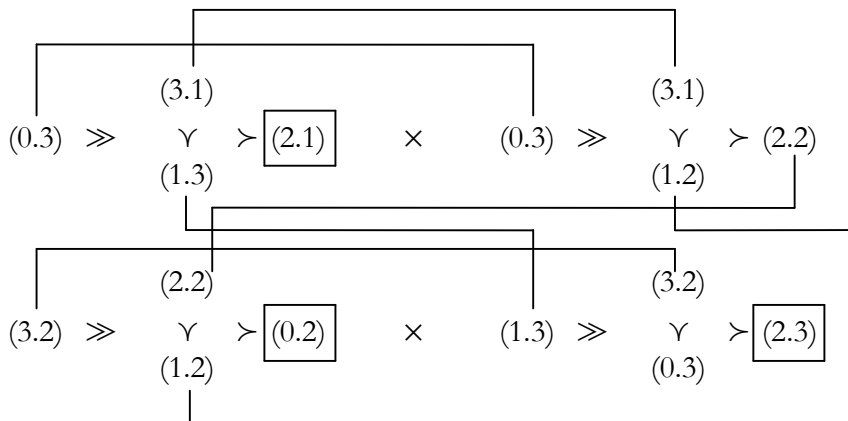
Einer Handlung geht immer eine Entscheidung voraus, aber das Umgekehrte ist nicht notwendig der Fall. Es gibt also eine letzte Handlung, aber nicht unbedingt eine letzte Entscheidung. Ferner gibt es eine erste Entscheidung, der nicht unbedingt eine Handlung vorhergehen muss:



so dass wir haben

$$\text{Entscheidung (x)} = (\text{Handlung (x+1)} - \text{Handlung (x-1)}).$$

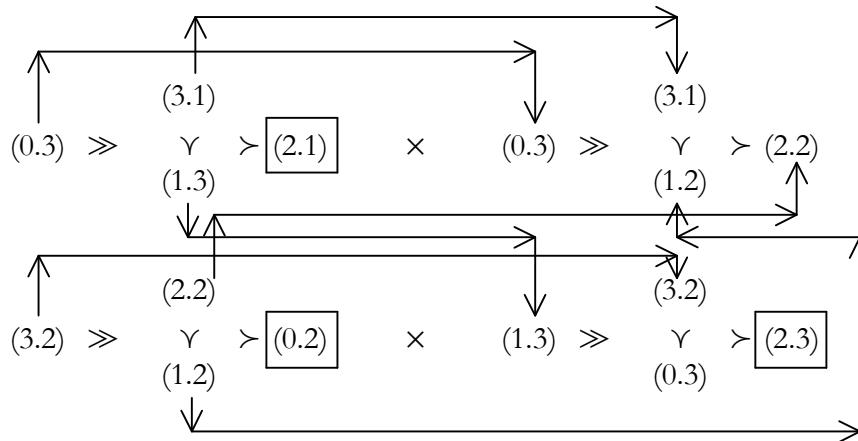
Wenn wir nun als Beispiel vier beliebige präsemiotische Handlungsschemata nehmen:



dann erkennen wir in diesem speziellen Fall, dass es nur 3 Positionen gibt, an denen völlig “freier Wille” bzw. wirkliche “Entscheidungsfreiheit” herrscht: bei (2.1), (0.2) und (2.3). Alle übrigen Subzeichen der vier Handlungsschemata sind miteinander durch Linien verbunden, welche semiotisch Zeichen-Zusammenhänge und metaphysisch Entscheidungen repräsentieren. Anders ausgedrückt: Völlige Entscheidungsfreiheit herrscht also nur dort, wo die Handlungsschemata durch keine Linien verbunden sind, d.h. aber, sie herrscht gerade dort, wo es keine Entscheidungen gibt! Man erinnert sich an Nietzsches Aphorismus: “Ich lache eures freien Willens und auch eures unfreien: Wahn ist mir das, was ihr Willen heisst, es giebt keinen Willen” (Zarathustras heilige Gelächter, 1883). Eine andere Frage ist es, ob das, was wir oben provisorisch als “Ur-Entscheidung” bezeichneten, überhaupt semiotisch repräsentierbar ist. Wir hatten ja Entscheidungen als die Menge von Zeichenzusammenhängen

zwischen semiotischen Handlungsschemata definiert. Es kann demnach keine Zeichenzusammenhänge ausserhalb von Paaren von semiotischen Handlungsschemata geben.

Ferner impliziert der Begriff der Entscheidung eine Wahl zwischen alternativen potentiellen Handlungen. Zwischen den obigen vier semiotischen Handlungsschemata gibt es 6 Zeichenverbindungen und damit  $6! = 720$  potentielle Kombinationen von Entscheidungen, von denen einige in dem folgenden erweiterten Diagramm durch Pfeile angedeutet sind:



Man kann sich leicht vorstellen, wie schnell die Anzahl potentieller Entscheidungen zwischen mehr als 4 semiotischen Handlungsschemata ansteigt. Wie bereits in Toth (2008a, S. 94 ff.) vermutet, fungiert dabei die semiotische Zeichenklasse (3.1 2.2 1.3) bzw. das triadische präsemiotische Fragment (3.1 2.2 1.3) als Äquilibriums-Funktion, da jede der 10 semiotischen und jede der 15 präsemiotischen Zeichenklassen und Realitätsthematiken in mindestens einem Subzeichen mit dieser die Eigenrealität repräsentierenden Zeichenklasse zusammenhängen (Toth 2008d, S. 231 ff.). Daher gibt es im Verband der 15 präsemiotischen Zeichenklassen mindestens 15 Zeichenverbindungen, die damit also bereits das semiotische Minimum von  $15! = 1'307'674'368'000$  potentiellen Entscheidungen ermöglichen. Es ist leicht zu sehen, dass die Anzahl potentieller Entscheidungen also bei Handlungsschemata mit mehr als einem gemeinsamen Subzeichen ebenfalls schnell astronomisch ansteigt.

Wir haben hier nur einige erste und wohl vorläufige Hinweise zur Entwicklung einer semiotischen Entscheidungstheorie gebracht und damit einmal mehr semiotisches Neuland betreten. Eine semiotische Entscheidungstheorie wird eine Entscheidungstheorie fern der Statistik und unter Berücksichtigung nicht nur von quantitativen, sondern auch von qualitativen Parametern sein. Ferner arbeitet sie explizit zwischen allen vier präsemiotischen Kategorien der Qualität, des Mittel-, Objekt- und Interpretantenbezugs und also zwischen allen Bezeichnungs-, Bedeutungs- und Gebrauchsfunktionen von Zeichen. Eine semiotische Entscheidungstheorie macht also expliziten Gebrauch von Sinn-, Bedeutungs- und Nutzen-Alternativen bei der Entscheidungsfindung. Ferner sollte man sich bewusst sein, dass nicht alle Handlungen durch logische Entscheidungen verknüpft sind, aber qua eigenrealer Zeichenklasse (3.1 2.2 1.3) bzw. präsemiotischem triadischem Fragment (3.1 2.2 1.3) sind alle Handlungen durch semiotische Entscheidungen miteinander verbunden, und an dieser

homöostatisch fungierenden Zeichenklasse orientiert sich auch der Begriff der “optimalen” oder “idealen” Entscheidung. Da diese Zeichenklasse mit allen übrigen semiotischen und präsemiotischen Zeichenklassen verbunden ist, stellt sich die “optimale” bzw. “ideale” Entscheidung als strategisches Fragment zur Auffindung von semiotischen Handlungsschemata dar, welche in möglichst vielen Subzeichen, d.h. also “gebundenen Freiheiten”, mit der eigenrealen Zeichenklassen zusammenhängen; es handelt sich hier also um die Auffindung von möglichst vielen durch die Subzeichen der eigenrealen Zeichenklassen prädeterminierten semiotischen Handlungsschemata.

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