

Prof. Dr. Alfred Toth

The transitions between sign and object from 4 contextures

1. In Toth (2009) I have presented a new model of semiosis, based on double semiotic inheritance systems between inheritance of pre-semiotic trichotomies on the one side and inheritance of kenogrammatic contextures on the other side. An older, monocontextural approach had been presented in Toth (2008a, pp. 166 ss.).

In the present work, we start with the 4-contextural 4-adic pre-semiotic sign relation

$$\text{PSR} = (3.a_{i,j,k} \ 2.b_{i,j,k} \ 1.c_{i,j,k} \ 0.d_{i,j,k}),$$

introduced in Toth (2008b), which is nothing else than the 4-contextural 3-adic Peircean sign relation plus the embedded “categorical object” (Bense 1975, pp. 45 s., 65 s.).

Therefore, what interests us in this article are the different forms of transitions whose abstract schema is

$$(3.a_{i,j,k} \ 2.b_{i,j,k} \ 1.c_{i,j,k}) \ \dashv\!\!\dashv \ (0.d_{i,j,k}),$$

whereby the sign $\dashv\!\!\dashv$ stands for transition of the contextural border between sign and object.

2. However, how many polycontextural sign classes based on PSR are there? For the sake of consistency between the 10 Peircean sign classes and the 15 sign classes to be scrutinized here, we will assume that the semiotic inclusive order required for the Peircean sign classes

$$(3.a \ 2.b \ 1.c) \text{ with } a \leq b \leq c \text{ and } a, b, c \in \{1, 2, 3\}$$

holds too for the 15 pre.-semiotic sign classes whose order is thus

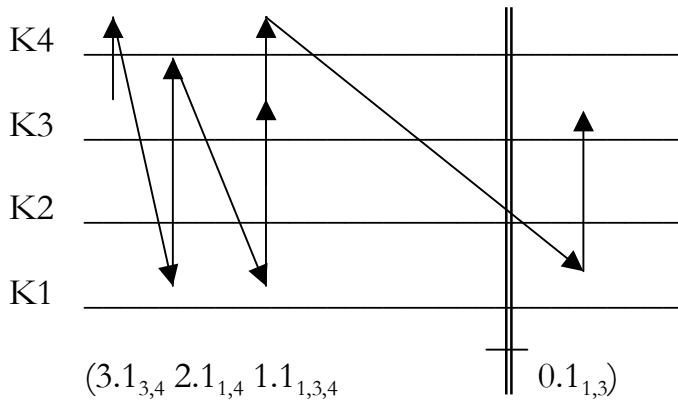
$$(3.a \ 2.b \ 1.c \ 0.d) \text{ with } a \leq b \leq c \leq d \text{ and } a, b, c, d \in \{1, 2, 3\}.$$

Then we have the following 15 pre-semiotic 4-contextural 4-adic 3-otomic sign classes:

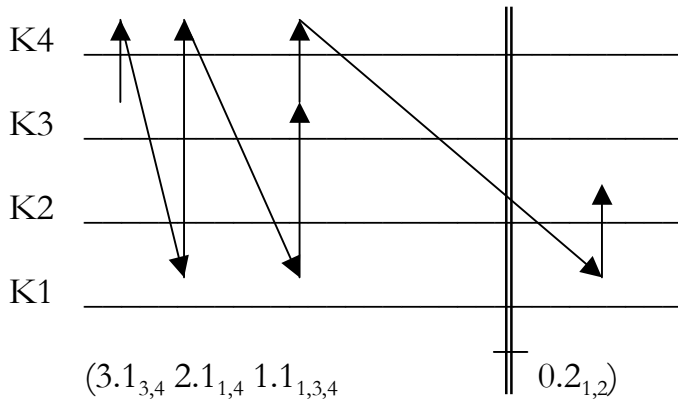
1	$(3.1_{3,4} 2.1_{1,4} 1.1_{1,3,4} 0.1_{1,3})$	×	$(1.0_{3,1} 1.1_{4,3,1} 1.2_{4,1} 1.3_{4,3})$
2	$(3.1_{3,4} 2.1_{1,4} 1.1_{1,3,4} 0.2_{1,2})$	×	$(2.0_{2,1} 1.1_{4,3,1} 1.2_{4,1} 1.3_{4,3})$
3	$(3.1_{3,4} 2.1_{1,4} 1.1_{1,3,4} 0.3_{2,3})$	×	$(3.0_{3,2} 1.1_{4,3,1} 1.2_{4,1} 1.3_{4,3})$
4	$(3.1_{3,4} 2.1_{1,4} 1.2_{1,4} 0.2_{1,2})$	×	$(2.0_{2,1} 2.1_{4,1} 1.2_{4,1} 1.3_{4,3})$
5	$(3.1_{3,4} 2.1_{1,4} 1.2_{1,4} 0.3_{2,3})$	×	$(3.0_{3,2} 2.1_{4,1} 1.2_{4,1} 1.3_{4,3})$
6	$(3.1_{3,4} 2.1_{1,4} 1.3_{3,4} 0.3_{2,3})$	×	$(3.0_{3,2} 3.1_{4,3} 1.2_{4,1} 1.3_{4,3})$
7	$(3.1_{3,4} 2.2_{1,2,4} 1.2_{1,4} 0.2_{1,2})$	×	$(2.0_{2,1} 2.1_{4,1} 2.2_{4,2,1} 1.3_{4,3})$
8	$(3.1_{3,4} 2.2_{1,2,4} 1.2_{1,4} 0.3_{2,3})$	×	$(3.0_{3,2} 2.1_{4,1} 2.2_{4,2,1} 1.3_{4,3})$
9	$(3.1_{3,4} 2.2_{1,2,4} 1.3_{3,4} 0.3_{2,3})$	×	$(3.0_{3,2} 3.1_{4,3} 2.2_{4,2,1} 1.3_{4,3})$
10	$(3.1_{3,4} 2.3_{2,4} 1.3_{3,4} 0.3_{2,3})$	×	$(3.0_{3,2} 3.1_{4,3} 3.2_{4,2} 1.3_{4,3})$
11	$(3.2_{2,4} 2.2_{1,2,4} 1.2_{1,4} 0.2_{1,2})$	×	$(2.0_{2,1} 2.1_{4,1} 2.2_{4,2,1} 2.3_{4,2})$
12	$(3.2_{2,4} 2.2_{1,2,4} 1.2_{1,4} 0.3_{2,3})$	×	$(3.0_{3,2} 2.1_{4,1} 2.2_{4,2,1} 2.3_{4,2})$
13	$(3.2_{2,4} 2.2_{1,2,4} 1.3_{3,4} 0.3_{2,3})$	×	$(3.0_{3,2} 3.1_{4,3} 2.2_{4,2,1} 2.3_{4,2})$
14	$(3.2_{2,4} 2.3_{2,4} 1.3_{3,4} 0.3_{2,3})$	×	$(3.0_{3,2} 3.1_{4,3} 3.2_{4,2} 2.3_{4,2})$
15	$(3.3_{2,3,4} 2.3_{2,4} 1.3_{3,4} 0.3_{2,3})$	×	$(3.0_{3,2} 3.1_{4,3} 3.2_{4,2} 3.3_{4,3,2})$

3. Now we will draw the corresponding diagrams (for the sign classes only).

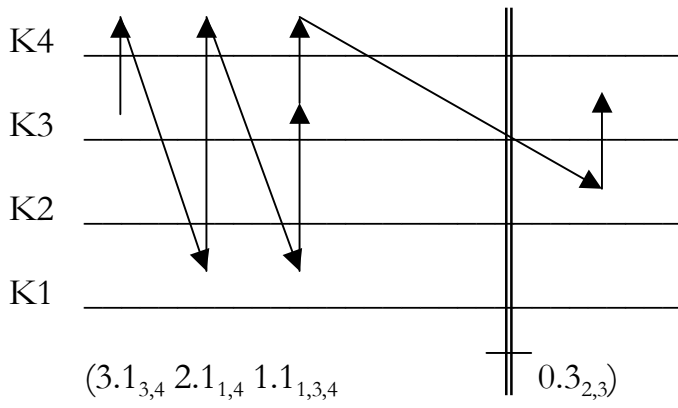
3.1. 1. PS (4-4-3)



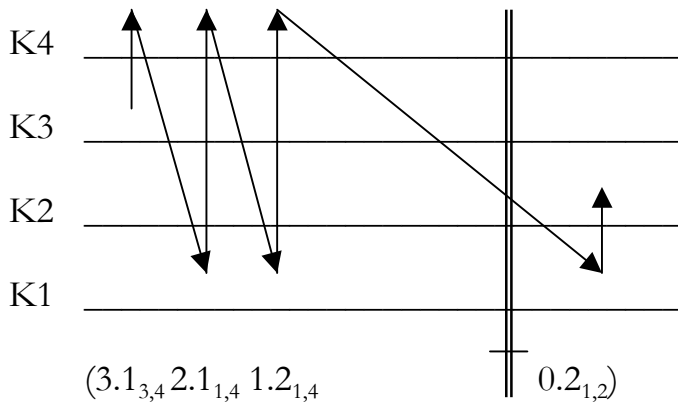
3.2. 2. PS (4-4-3)



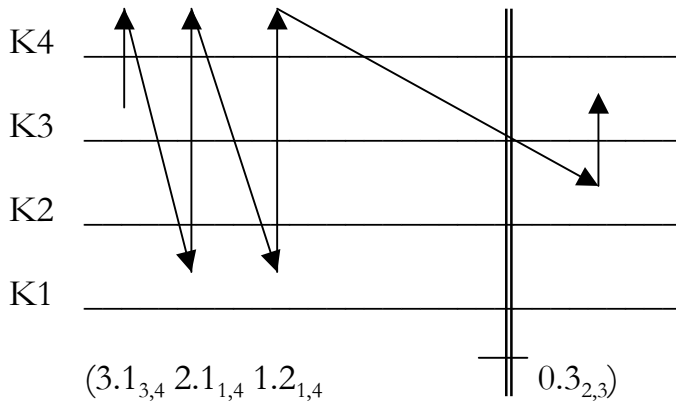
3.3. 3. PS (4-4-3)



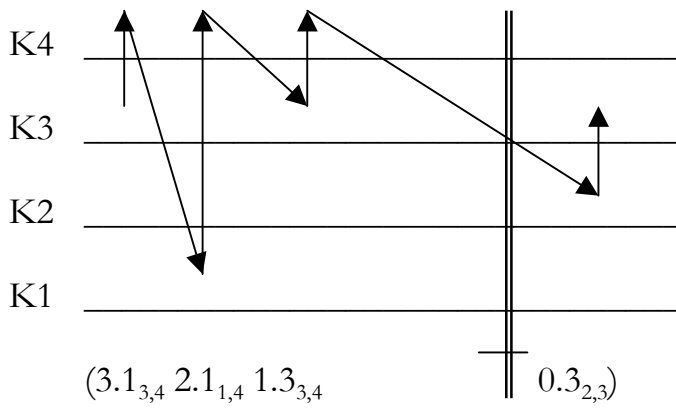
3.4. 4. PS (4-4-3)



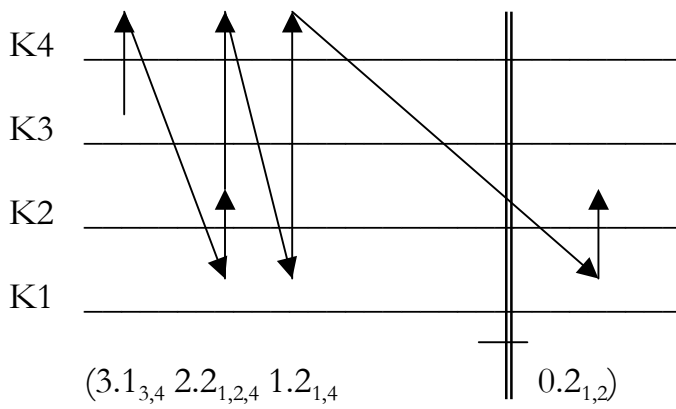
3.5. 5. PS (4-4-3)



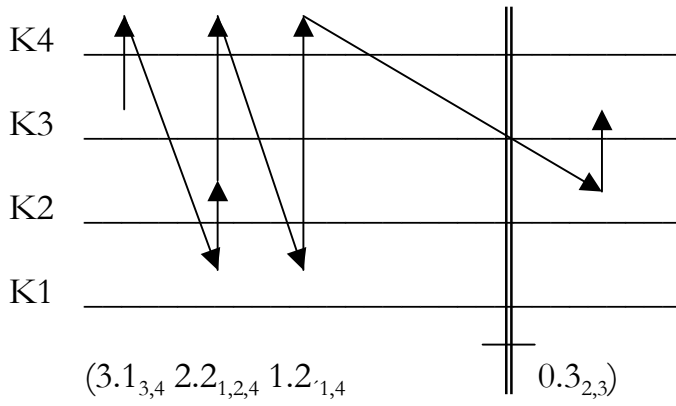
3.6. 6. PS (4-4-3)



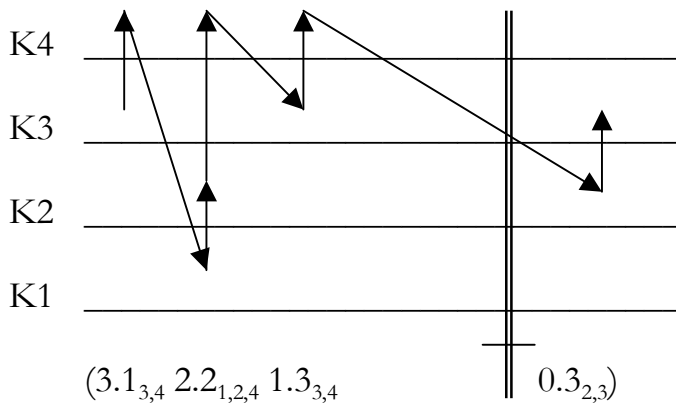
3.7. 7. PS (4-4-3)



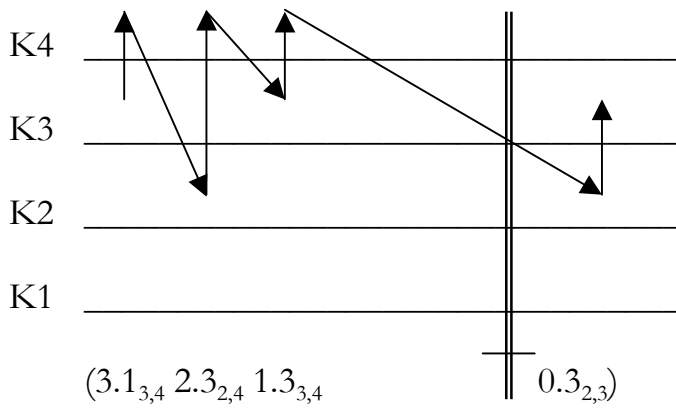
3.8. 8. PS (4-4-3)



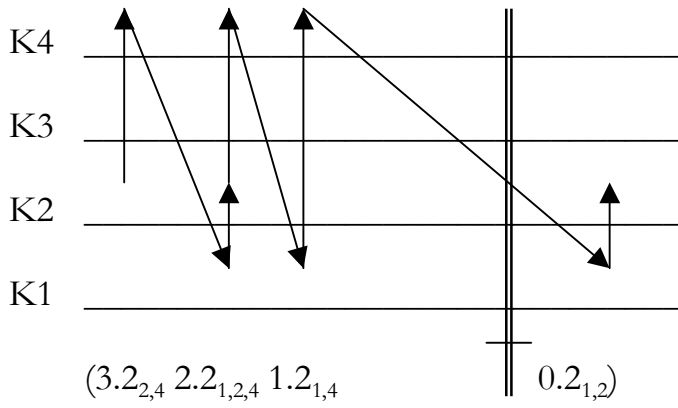
3.9. 9. PS (4-4-3)



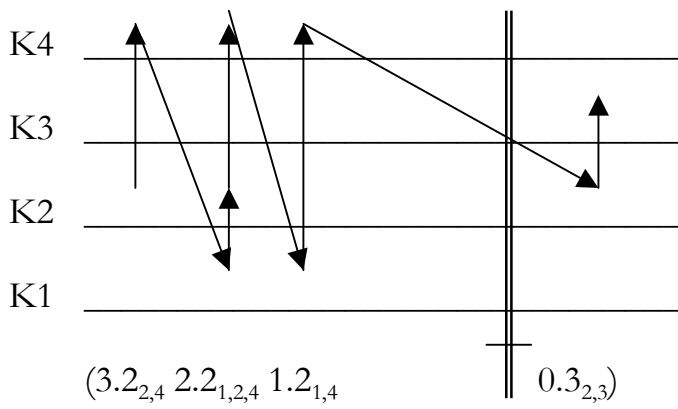
3.10. 10. PS (4-4-3)



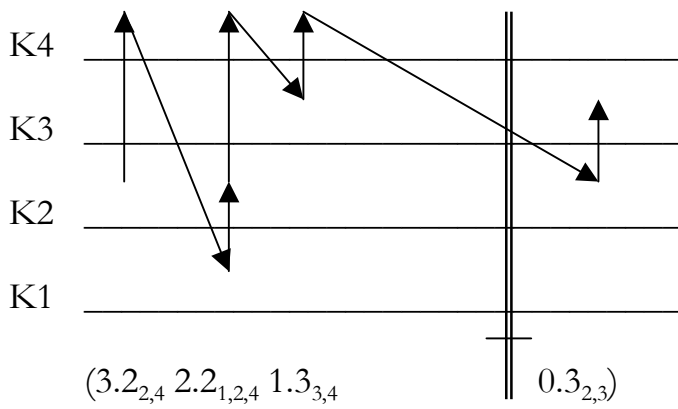
3.11. 11. PS (4-4-3)



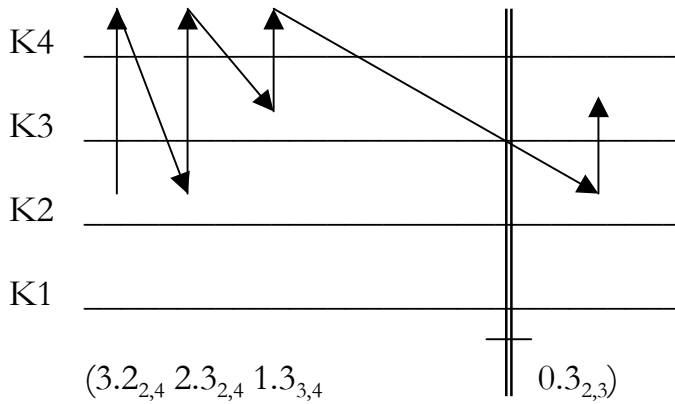
3.12. 12. PS (4-4-3)



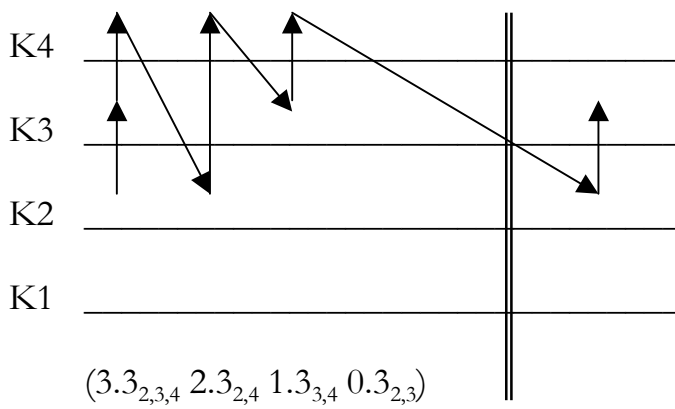
3.13. 13. PS (4-4-3)



3.14. 14. PS (4-4-3)



3.15. 15. PS (4-4-3)



From 4 contexts, there are thus the following 6 transitions between sign and object:

1. $[1.1_{1,3,4} \dashv\vdash 0.1_{1,3}]$
2. $[1.1_{1,3,4} \dashv\vdash 0.2_{1,2}]$
3. $[1.1_{1,3,4} \dashv\vdash 0.3_{2,3}]$
4. $[1.2_{1,4} \dashv\vdash 0.2_{1,2}]$
5. $[1.2_{1,4} \dashv\vdash 0.3_{2,3}]$
6. $[1.3_{3,4} \dashv\vdash 0.2_{2,3}]$

Bibliography

Bense, Max, Semiotische Prozesse und Systeme.

Toth, Alfred, Semiotische Strukturen und Prozesse. Klagenfurt 2008 (2008a)

Toth, Alfred, Semiotics and Pre-Semiotics. 2 vols. Klagenfurt 200 (2008b)

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