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## First draft of a polycontextural pre-semiotic matrix

1. Pre-Semiotics has been extensively analyzed and described in two volumes (Toth 2008). The point de départ was that the designated object as categorial object is embedded in the triadic Peircean sign relation, therefore leading to a tetradic pre-semiotic sign relation (PSR)

$$\text{PSR} = (3.a \ 2.b \ 1.c \ 0.d)$$

The idea of integrating the object of the sign into the sign relation itself goes back directly to Bense (1975, pp. 45 s., 65 ss.). Bense differentiated between the semiotic space of signs and the ontological space of object and assumed a transitory space between them, in which the “disposable” media mediate between the categorial object on the one side and the relational media on the other side. However, unlike the triadic relation (3.a 2.b 1.c) that consists of a monadic, a dyadic and a triadic relation, the categorial object (0.d) is a zero-relation and does behaving differently from the three other fundamental categories. According to Götz (1982, pp. 4, 28) who had picked up Bense idea, we assumed a trichotomic splitting of the categorial object into (0.1) or secandy, (0.2) or semancy, and (0.3) or selectancy. However, (0.d) as Zeroness has no triadic splitting, i.e. \*(0.0), \*(1.0), \*(2.0), (\*3.0), because these sub-signs would contradict Bense’s theory of relational and categorial numbers (1975, pp. 65 s.) and would neither fit to the normal understanding, according to which a relation of a relation is meaningful, but an object of an object is not.

Therefore, the pre-semiotic is tetradic, but trichotomic, lacking the Cartesian products marked by asterisk:

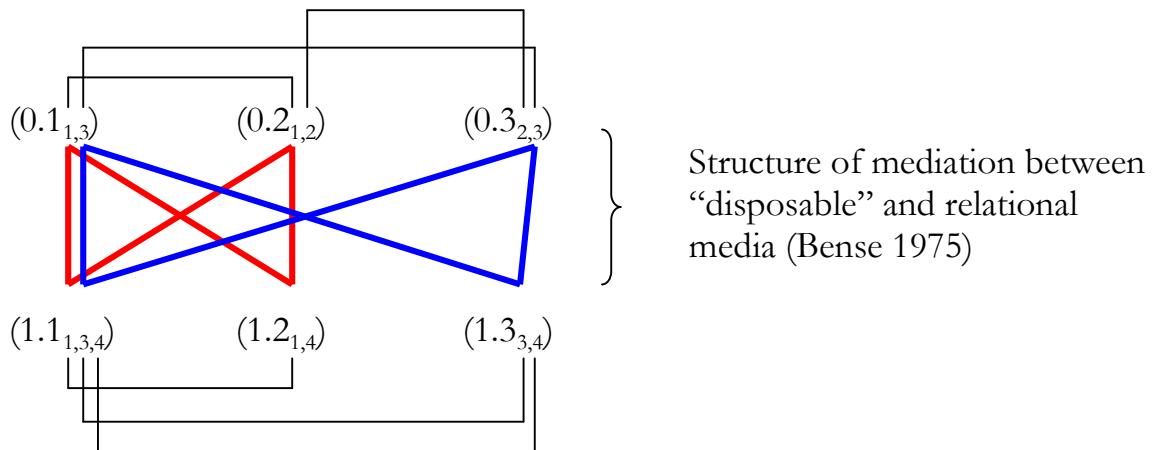
	1	2	3
0	0.1	0.2	0.3
1	1.1	1.2	1.3
2	2.1	2.2	2.3
3	3.1	3.2	3.3

2. However, when we now go ahead and transform the monocontextural pre-semiotic matrix into a polycontextural matrix, we stand before the question if the pre-semiotic is not already a polycontextural matrix, since exactly to this behalf the categorial object had been embedded into the Peircean sign relation. This is subject that has been discussed already a couple of times. Kaehr (2008) is right when he encounters that any semiotic system in which the logical law of identity is still valid, is monocontextural. On the other side, I am right, too, that any sign relation, in which the contextual border between sign and object is abolished, is polycontextural. However, we solve this problem quickly by following Kaehr's way in determining for every sub-sign of the pre-semiotic matrix its inner semiotic environment. This is an n-tuple of contexts for each sub-sign. As it shows up very early, namely in sign relations, which lie in 3 contexts, sub-signs can lie in 2, 3 ... n contexts, and it is clear that by this innocent little trick the menacing law of identity is already checkmated. However, it is not quite easy to create a non-quadratic  $4 \times 3$  matrix between the quadratic  $3 \times 3$  and  $4 \times 4$  matrices retaining the inner-matrix-symmetry of the contextual indices of pairs of converse sub-signs (e.g.,  $(1.2_{1,4})^\circ = (2.1_{1,4})$ , gen.  $(a.b_{i,j})^\circ = (b.a)_{1,4}$ ), especially because the pre-semiotic level of Zeroness (Stiebing) must be ascribed to the 1., and the semiotic levels of First-, Second- and Thirdness must be ascribed to the 2.-4. contexts. However, in this first draft, I suggest the following polycontextural pre-semiotic matrix:

	0	1	2	3
0	$(0.0)$	$(0.1)_{1,3}$	$(0.2)_{1,2}$	$(0.3)_{2,3}$
1	$(1.0)$	$(1.1)_{1,3,4}$	$(1.2)_{1,4}$	$(1.3)_{3,4}$
2	$(2.0)$	$(2.1)_{1,4}$	$(2.2)_{1,2,4}$	$(2.3)_{2,4}$
3	$(3.0)$	$(3.1)_{3,4}$	$(3.2)_{2,4}$	$(3.3)_{2,3,4}$

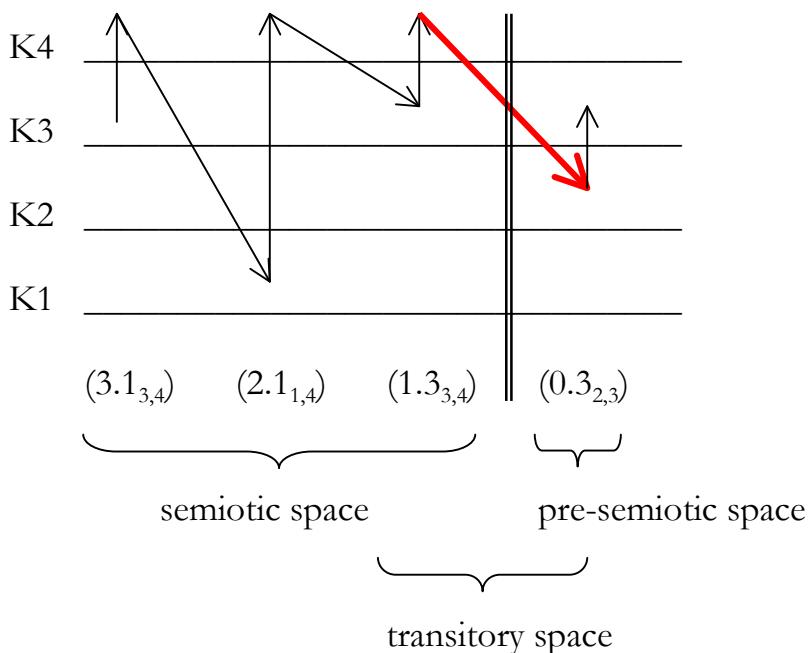
Therefore, the second occurrence of the contextual indices (1,3), (1,4), (3,4), to expect in a symmetric matrix, would have been assigned to \*(1.0), \*(2.0), \*(3.0), and the fully excluded pseudo-relation \*(0.0) would be (1,2,3).

3. Inheritance from the pre-semiotic trichotomy to the semiotic trichotomies, also extensively treated in Toth (2008), can now be formalized precisely by aid of both outer and inner semiotic connections:



Structure of mediation between  
“disposable” and relational  
media (Bense 1975)

4. Finally, what the transitory space between ontological and semiotic space concerns (Bense 1975), we can it visualize, f. ex., in the following simple schema, showing as example the pre-semiotic sign class ( $3.1_{3,4}$   $2.1_{1,4}$   $1.3_{3,4}$   $0.3_{2,3}$ ):



## Bibliography

Bense, Max, Semiotische Prozesse und Systeme. Baden-Baden 1975

Kaehr, Rudolf, Diamond, Semiotics.  
<http://www.thinkartlab.com/pkl/lola/Diamond%20Semiotics/Diamond%20Semiotics.pdf> (2008)

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