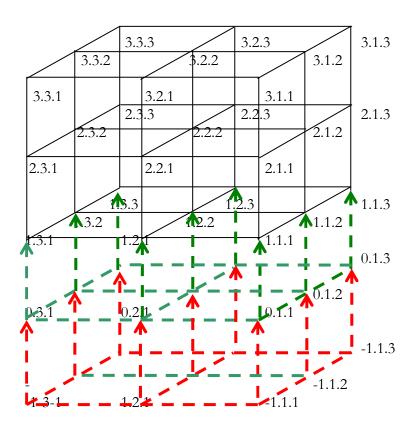
## Prof. Dr. Alfred Toth

## The complete semiotic space of Zeroness

1. In Toth (2008b), I have shown that there are no formal obstacles against prolonging the Sign Cube of Stiebing (1978) by basing it on the level of Zeroness - as suggested explicitly by Stiebing himself (1981, 1984). Furthermore, nothing stops us to also project the positive cube into negative semiotic dimensions that had been introduced into semiotics in Toth (2007, pp. 52 ss.):



As we see, by prolonging the Sign-Cube in the way shown, we let the dimensional number in the following sign relation become 0:

SR = ((a.3.b) (c.2.d) (e.1.f)), where a, c, e = dim. numbers and b, d, f = triadic values.

2. As I have shown extensively in "Semiotics and Pre-Semiotics" (Toth 2008a), and as Stiebing (1981, 1984) and most of all Bense himself (1975, pp. 45 s., 65 ss.) had been shown before me, one has to assume an intermediary level of presemiotics between the ontological level of the objects and the semiotic level of the signs. This intermediary level of pre-semiotics is the space of the "disposable" objects, i.e. those objects who have not yet been selected, but are already characterized in their three possible pre-semiotic characteristics, in their "elementary-material" (0.1), in their "intentional-phenomenal" (0.2), and/or in their "formal-intelligible" (0.3) "world aspect" (Bense 1986, .65). Götz (1982, pp. 4, 28) had suggested the terms "secancy" (0.1), "semancy" (0.2), and "selectancy" (0.3). As one sees, the phenomenological threefold features of objects that have not yet entered semiosis are so general or abstract that the assumption, that a (pre-semiotic) interpretant would impregnate them to the object - before having decided if they do or do not enter semiosis! - leads to nonsense. However, it is not enough to simply set Stiebing' Sign Cube deeper, since we have shown that in this way, we obtain 0-dimensional sub-signs, which have the form

(0.3.1, ..., 0.2.1, ..., 0.1.1 ...),

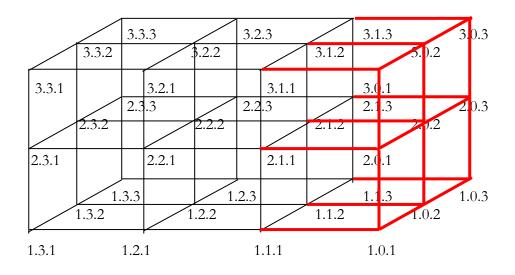
but not sub-signs which have the form

(0.3), (0.2), (0.1).

For the latter ones we thus must assume a triadic sub-sign-structure

(a.0.3), (a.0.2), (a.0.1),

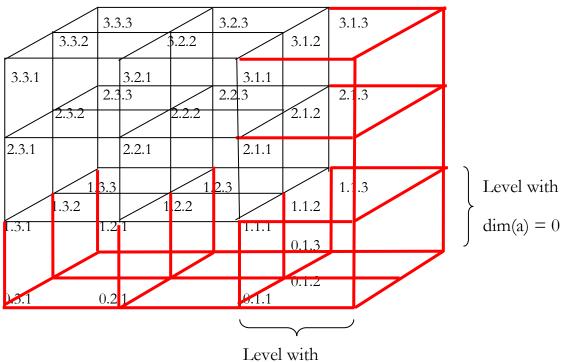
where a is dimensional number, and thus  $a \in \{1, 2, 3\}$  in the limits of Stiebing's Sign Cube. However, this means, that pre-semiotics does not build a semiotic dimension or "level" of its own, but participates on all the three (or more) semiotic levels already pre-given in the Stiebing-Cube:



We thus have as expected:

| dim(1): | (1.0.1), (1.0.2), (1.0.3) |
|---------|---------------------------|
| dim(2): | (2.0.1), (2.0.2), (2.0.3) |
| dim(3): | (3.0.1), (3.0.2), (3.0.3) |

When we now combine the two extended Sign Cubi, we obtain:



Triadic Value (a) = 0

In the above Stiebing Cube which has been twofold enlarged, the union of the right enlargement

 $A = \{a \mid dim(a) = \{1, 2, 3, 4\},\$ 

 $B = \{a \mid trich. val. (a) = \{0, 1, 2, 3\},\$ 

 $A \cup B$  = complete pre-semiotic space (CPS).

A guarantees that all triadic sub-signs and their combinations to triadic sign relations appear in all 4 dimensions, thus also in the area of 0-dimension, which is the "ontological space" (cf. Bense 1975, pp. 45 s., 65 ss.). B guarantees that the "pre-semiotic trichotomy" (0.1), (0.2), (0.3) appears in all 4 dimensions, but not a "pre-semiotic triad" which is excluded by virtue of Bense's theorem that for objects per se their relational number is r > 0, i.e. that objects which have not yet been declared signs (not yet entered semiosis), are unable to combine themselves to relations.

3. Here, we have quickly to go back to a recent study (Toth 2009). For polycontextural signs, i.e. the mapping of sub-signs to contextures and their qualitative numbers, the *rightward enlargement* of the Stiebing Cube poses no problems, since the kenogrammtic structure of the qualitative numbers fulfills both the Stiebing Cube with and without right enlargement:

| 0                               | 1, 2, 3   | 1-dim semiotics   |
|---------------------------------|---|-------------------|
| 00<br>01                        | (1.1), (2.2), (3.3)<br>(1.2)/(2.1), (1.3)/(3.1),<br>(2.3/(3.2)  | } 2-dim semiotics |
| 000<br>001<br>010<br>011<br>012 | (1.1.1), (2.2.2), (3.3.3)<br>(1.1.2), (1.1.3), (2.2.1), (2.2.3), (3.3.1), (3.3.2)<br>(1.2.1), (1.3.1), (2.1.2), (2.3.2), (3.1.3), (3.2.3)<br>(1.2.2), (1.3.3), (2.1.1), (2.3.3), (3.1.1), (3.2.2)<br>(1.2.3), (1.3.2), (2.1.3), (2.3.1), (3.1.2), (3.2.1)<br><i>plus combinations with Zeroness</i> | 3-dim semiotics   |

However, as we recognize easily, C 1 contains as deepest fundamental category already Firstness, according to Peirce in a sign the relation to itself. But where in the kenogrammatic model would be the place or space for semiotic Zeroness

defined as the level of "disponibler ontischer Etwase mit der Relationszahl r > 0, aber der Kategorialahl k = 1 (Bense 1975, p. 66)? According to Bense, there is a pre-semiotic level of pre-signs, which have the formal characterisitcs

 $PrS^{r=0}_{k=1, k=1}$ 

which are "ausdifferenzierbar", i.e.

 $\begin{array}{c} O^{\circ} \rightarrow M_{k=1}^{\circ} \\ O^{\circ} \rightarrow M_{k=2}^{\circ} \\ O^{\circ} \rightarrow M_{k=3}^{\circ} \end{array}$ 

and which populate the intermediary-level between the ontological space and the semiotic space (Bense 1975, p. 45, 65): "Ein unabhängig von jeder Zeichenrelation existierendes, aber mögliches Mittel M<sup>o</sup> hat die Relationszahl r = 0" (Bense 1975, p. 65. According to the Ausdifferenzierungsschema, we thus have

 $(0.1) = \{x \mid x \in \Pr{S \land r(x)} = 0 \land k(x) = 1\}$  $(0.2) = \{x \mid x \in \Pr{S \land r(x)} = 0 \land k(x) = 2\}$  $(0.3) = \{x \mid x \in \Pr{S \land r(x)} = 0 \land k(x) = 3\}$ 

This threefold Ausdifferenzierung of the level of zeroness has no space of "representation" in kenogrammatics, since kenogrammatics starts with the "representation" of firstness – in accordance with the unwritten magic theorem of semiotics, cited in the beginning, that it is impossible to go deeper downstairs on the ladder between world and consciousness.

{(0.1), (0.2), (0.3)} must thus be on a still deeper level than kenogrammatics, constituting what I have called the "pre-semiotic space" between ontological and semiotic space and coinciding with Bense level of "disposable" media ( $M_1^{\circ}$ ,  $M_2^{\circ}$ ,  $M_3^{\circ}$ ). Also note that unlike (1.1), (2.2), (3.3), (1.1.1), (2.2.2), (3.3.3), ..., there is not genuine sub-signs or identitive morphism \*(0.0), since the existence of this monster would violate Bense's theorem that for relational numbers, we always have r > 0. Or differently put: Before 0 could enter a relation with itself, it would have to be r = 1. Or again differently: The notion of "sign of sign ..." is meaningful, but the notion of "object of object ..." is not. An object is a category, not a relation, before it does not enter semiosis.

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