Prof. Dr. Alfred Toth

Types of semiotic reflexivity in polycontextural semiotics

1. The two basic forms of monocontextural semiotic reflexivity, according to Bense (1992), are

1.1. The eigenreal sign class $(3.1 \ 2.2 \ 1.3) \times (3.1 \ 2.2 \ 1.3)$ whose dual reality thematic is identical to its sign class. Moreover, as Bense also pointed out, this sign class is the only one to have an in-between-symmetry: $(3.1 \ 2\times 2 \ 1.3)$.

1.2. The class of the genuine categories $(3.3 \ 2.2 \ 1.1) \times (1.1 \ 2.2 \ 3.3)$. This sign relation is not considered a sign class because it is not built according to the semiotic inclusive order (3.a 2.b 1.c) with $a \le b \le c$, although it appears as main diagonal in the semiotic matrix and is thus "natural" and not constructed. Bense (1992, p. 40) speaks here about "eigenreality of weaker representation". The reason is possibly that there is an outer binnensymmetry (3.3 2.2 1.1 × 1.1 2.2 3.3) which parallels the inner binnensymmetry of (3.1 2×2 1.3).

1.3. However, as soon as inner semiotic environments are introduced (Kaehr 2008), these two types of reflexivity or eigenreality do not hold anymore, e.g.

$$(3.1_{3,4} 2.2_{1,2,4} 1.3_{3,4}); \times (3.1_3 2.2_{1,2,4} 1.3_3) = (3.1_{4,3} 2.2_{4,2,1} 1.3_{4,3}); (3.3_{2,3,4} 2.2_{1,2,4} 1.1_{1,3,4}); \times (3.3_{2,3,4} 2.2_{1,2,4} 1.1_{1,3,4}) = (3.3_{4,3,2} 2.2_{4,2,1} 1.1_{4,3,1})$$

2. Nevertheless, Kaehr (2009) has pointed out that a pair of dyads like $(a.b_{i,j})$ and $(a.b_{j,i})$ opens a space of reflexivity for each pair, insofar as the first dyad of the pair is considered a categorial morphism $((a \rightarrow b)_{i,j})$ and the second its complementary saltatorial hetero-morphism $((a \leftarrow b)_{j,i})$. For semiotics, this means that each of the 9 sub-signs of the matrix of the dyads generating sign classes has its hetero-morphismic complement in a (complementary) matrix of the dyads generating reality thematics. In other words: The dichotomic pair of sign class/reality thematic is substituted by a pair of morphismic sign relations and hetero-morphismic sign relations between which there are mediative sign relations generated by the permutations of the contextural indices and thus mediating between the original, monocontextural concepts of dual systems

consisting of sign classes and reality thematics. However, from this concept it follows that not only for the original sign classes and for the original reality thematics, but for each of the mediative sign relations there are separate semiotic matrices. Hence, a semiotic system which has more than 3 contextures requires mediative semiotic systems between their original sign classes and their original reality thematics, and only for 1 and 2 contextures, the original simple dichotomy holds, in which duality and complementarity fall together (or are not yet differentiated). So, a semiotic system with K = 3 contextures has (3! - 2) =4 medative semiotic systems, a semiotic system with K = 4 contextures has already (4! - 2) = 22 mediative contextures, and generally, a semiotic system with K = n contextures has of course (n! - 2) mediating semiotic systems. So, in the end we can state that eigenreality is a typical feature of monocontextural semiotics and guarantees reflexivity between the sub-signs and their semiotic processes, the morphisms. In polycontextural semiotics, eigenreality is abolished because of the possibility that a sub-sign can at the same time be located in more than one contexture and because each sub-sign has his complementary sub-sign in which not only the order of the prime-signs, but also the order of the contextures is inverted. However, the latter device is exactly how reflexivity enters polycontextural semiotics, thus, not via sub-signs and their semioses, but via contextures determining their inner semiotic environments.

3. Therefore, for each dyadic sub-sign, in polycontextural semiotics, we find

3.1. Reflexivity qua contextures alone

 $(a.b_{i,j})$ vs. $(a.b_{j,i})$

3.2. Reflexivity qua sub-signs alone

 $(a.b_{i,i})$ vs. $(b.a_{i,i})$

3.3. Reflexivity qua contextures and sub-signs

 $(a.b_{i,j})$ vs. $(b.a_{j,i})$

However, the problem is, that these three types of reflexivity are restricted to dyads; there is no way to save monocontextural reflexivity or to introduce polycontextural reflexivity in triadic sign relations. We will show that at the hand of the above examples of monocontextural eigenreality.

3.4. Let us try to re-introduce eigenreality into the 4-contextural sign class

$$(3.1_{3,4} 2.2_{1,2,4} 1.3_{3,4}).$$

We start with $(1.3_{3,4}) \rightarrow (1.3_{4,3})$, i.e. through reflexivity by contextures alone:

$$(3.1_{3,4} 2.2_{1,2,4} 1.3_{4,3}).$$

The only possibility to construct artificially eigenreality is not the introduction of a second index, whereby it must be hetero-morphismic:

$$(3.1_{3,4} 2.2_{1,2,4} 2.2_{4,2,1} 1.3_{4,3}).$$

In this way, we have regained the monocontextural in-between-symmetry

 $(3.1_{3,4} 2.2_{1,2,4} \times 2.2_{4,2,1} 1.3_{4,3})$

as well as the eigenreality between "sign class" and "reality thematic":

$$(3.1_{3,4} 2.2_{1,2,4} 2.2_{4,2,1} 1.3_{4,3}) \times (3.1_{3,4} 2.2_{1,2,4} \times 2.2_{4,2,1} 1.3_{4,3}).$$

By doubling the object relation of the sign, we have changed a 3-adic into a 4adic sign relation, but not adjusted the contextural indices from a 3-adic to a 4adic sign relation. So, besides the question which epistemological status the second index has, this solution is most probably questionable or impossible.

3.5. Let us now try our luck by re-introducing "weaker eigenreality" into the 4-contextural sign class

 $(3.3_{2,3,4} 2.2_{1,2,4} 1.1_{1,3,4}).$

As we quickly see, here, because of lacking binnensymmetry, we cannot apply tricks by substituting dyads by their heteromorphismic complements. But we can drop each of the three dyads and replace them by another dyad in its heteromorphismic form, until structures start to emerge:

 $\begin{array}{c}(3.3_{2,3,4}\ 2.2_{1,2,4}\ 3.3_{4,3,2}).\\(1.1_{1,3,4}\ 2.2_{1,2,4}\ 1.1_{4,3,1})\end{array}$

Now, we proceed like in 3.4., i.e., in both cases, we must double the object relation by inserting its heteromorphismic form:

 $\begin{array}{c}(3.3_{2,3,4}\ 2.2_{1,2,4}\ 2.2_{4,2,1}\ 3.3_{4,3,2})\\(1.1_{1,3,4}\ 2.2_{1,2,4}\ 2.2_{4,2,1}\ 1.1_{4,3,1})\end{array}$

Now we have even two eigenreal sign relations, which have even won binnensymmetry by our construction. However, besides the lack of explication of the two object relations, it stays to explain why the first sign relation has no medium relation and the second no interpretant relation. In short: However one tries to save such artificial and in the end pathological sign relations, it is a fact, that in monocontextural semiotic systems eigenreality sticks to the subsigns and their semioses, because each sign and its constituents cannot belong to more than one contexture. In polycontextural semiotic systems, however, reflexivity cannot embody reality – and thus eigenreality -, because it stays fully relational, namely bound on the order of contextures and thus depending alone of the inner semiotic environments. Reflexivity needs space to turn to itself – and there an environment. With the abolishment of the logical law of identity, eigenreality must be sacrificed, and reflexivity is moved from the static or dynamic semiotic entities to the purely relational indices of environments. Where there is no identity anymore, there can be no Eigen anymore either.

Bibliography

Bense, Max, Die Eigenrealität der Zeichen. Baden-Baden 1992 Kaehr, Rudolf, Diamond Semiotics. <u>http://www.thinkartlab.com/pkl/lola/Diamond%20Semiotics/Diamond%</u> <u>20Semiotics.pdf</u> (2008) Kaehr, Rudolf, The category of glue. <u>http://www.thinkartlab.com/pkl/lola/Category%20Glue/Category%20Glue.pdf</u> (2009) (2009)

5.4.2009