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Inner and outer semiotic environments in the system of the trichotomic triads

1. Walther (1982) had shown that the monocontextural eigenreal sign class (3.1 2.2 1.3) × (3.1 2.2 1.3) first hangs together with every other sign class and reality thematic of the 10 monocontextural dual systems of Peircean semiotics. Second, the 9 sign classes and reality thematics can be ordered as "trichotomic triads" in such a way that those two times three trichotomic triads are "determined" by the eigenreal sign class:



2. As it has been shown in a series of papers by Kaehr and by me, eigenreality has to be abolished when proceeding from monocontextural to polycontextural semiotic systems. The reason for this deplorable loss is that the inner environments of the sign classes involved are symmetric to those of their dual reality thematics and vice versa. Nevertheless, we will examine in the present little study if the loss of eigenreality really leads to the loss of Walther's "determinant-symmetric duality system", or not.

In the following table, the inner semiotic environments qua contural indices are dashed, and the outer semiotic environments qua shared sub-signs are straight.



Thus, we obtain a negative and positive result:

Neither the homogeneous morphismic 4-contextural sign class $(3.1_{3,4} 2.2_{1,2,4} 1.3_{3,4})$ nor the homogenous heteromorphismic 4-contextural sign class class $(3.1_{4,3} 2.2_{4,2,1} 1.3_{4,3})$ are sufficient to determine the system of the 4-contextural 9 Peircean sign classes and their symmetric "complementary" system of their reality thematics. However, what determines the symmetric system of the trichotomic triads, which continue to exist when proceeding from mono- to polycontextural systems, is a hitherto unknown typ of "double sign class" which has the fundamental-categorial structure

(I, M, O, O, I, M)

or possibly

 $(I \leftarrow M \rightarrow O \equiv O \rightarrow I \leftarrow M),$

which has never shown up in the history of semiotics up to now.

This "double sign class" is not only binnensymmetric (in the cut of $O \equiv O$), but, as one easily sees, itself "eigenreal":

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

However, what we have here, is now **polycontextural eigenreality**. Its general structure – at least what concern the "stronger" form of eigenreality (cf. Bense 1992, p. 40), is therefore

 $SR(4-ER) = (3.a_{i,j} \ 1.c_{i,j} \ 2.b_{i,j,k} \ 2.b_{k,j,i} \ 3.a_{j,i} \ 1.c_{j,j}).$

Therefore, it seems that we have saved eigenreality after a series a more or less hopeless attempts. Thus, there will be a lot of work to continue in order to elaborate a theory of polycontextural eigenreality comparable to Bense's standard work (1992). Another question, that arises is: How many and which "intertwined" sign relations like SR(4-ER) do exist, and what are their epistemological interpretations?

Bibliography

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