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## **How many contextur-borders has a sign?**

1. The present article refers only in its title to a former work (Toth 2008b). Our main concern here is to determine how many conextures can be assigned to a sign relation. As it is known from polycontextural theory, there is an indefinite number of two-valued, disseminated systems, according to the number of subjects to be used in the corresponding logical relations. A special problem for the sign is that its number of subjects cannot be determined. The first reason is that from a logical standpoint, the triadic sign relation consists of 3 subjects, but no object. The second reason is that the interpretant relation has a portemanteau function for all possible subjects: the sender, the receiver, the interpreter; subjective and objective subject, and many more.

2. The only contexture border accepted up to now in semiotics, is the border between the sign and its designated object (cf. e.g., Kronthaler 1992). It says that a sign can never turn into its referring object and vice-versa. This contexture border is also the most widespread in several mystical beliefs, f. ex. in the collection of photos, hair-curls, relics, etc. which are originally supposed to enable the physical presence of the person represented by these kinds of signs.

3. If we remember that according to Bense (1975, pp. 45 s., 65 ss.) there is a pre-semiotic space between the space of the object and the space of the sign, then we are aware that an object is not directly selected as a relational media, but mediated by “disposable” media. Hence, there is another contexture border between the media of the sign relation and the material quality of the object, out of which this sign-carrier has been selected. While in the case of “artificial” signs the relationship between the sign carrier and the meaning and sense of the sign is widely arbitrary, in the case of “natural” signs, the relational media which is chosen out of an object, stands to this object in a pars-pro-toto-relation. However, also in this case, there is a contexture border between the object as thing and the object as sign carrier, caused by the interpretation of this object as a sign.

4. A third, rather trivial, but also omitted contexture border lies between the real person as a sender or receiver/intepreter and the interpretant-relation, which is per definitionem part of the sign relation. The absence of an

interpretant in the Saussurean sign relation goes back to Durckheim's statement that the interpreter stays always out of the sign relation. Hence, the confusion between interpreter and interpretant and the non-recognition of the contexture border between them is the reason that the Saussurean sign is not triadic, but dyadic.

5. These three contexture-borders are borders between the inner categories of a sign relation and its outer counterparts, so they cross themselves a contextual border. However, the three fundamental categories of the sign are also separated by contexture borders inside the sign relation.

6. First ( $M \rightarrow O$ ), the contextual border between the media relation and the relation of the designated object. Since in the case of artificial signs, the media can be chosen arbitrarily for substituting an object, it follows, that also the relation between the media and the object relation are widely arbitrary. But even in the case where there is similarity between the media relation and the object relation, f. ex. in pictograms and related systems of "international" communication in airports, etc., media and object relation do not coincide and are thus separated by contextual border.

7. Next, we have ( $O \rightarrow I$ ), another important contexture border, for which we find plenty of examples, e.g., in E.T.A. Hoffmann's novel "Klein Zaches, genannt Zinnober". If O is an epistemological "Thou" and I is an epistemological (subjective) subject, then we can explain the strange effect of Zaches. Wherever Zaches appears, the speeches and the deeds of his "Thou's" are ascribed to him, i.e. to his "Ego". On the other side, all of his own speeches and deeds are ascribed to his environment. Since in reality he as an incapable knows to surround him with several capable persons, by this crossing relation between subjective and objective subject, he gets everything he wants.

8. The last contexture border of the triadic sign relation lies in ( $M \rightarrow I$ ). If we assume that M is a portrait, this would, e.g., mean that the painter as interpretant would get identical with his picture. If we apply this process to the end of Oscar Wilde's famous novel "The Picture of Dorian Gray", it would follow, that in that moment, when Dorian "stabs" the picture, non he (since he is object), but a the painter of the picture, Basil Hallward, dies.

9. As one can see, the opening of contextual borders is a first-rate source for fantasy, mythology, religion and horror.

10. We have abolished totally 6 inner and outer contextual borders of the sign, which we may illustrate like follows.



The often occurring confusion between media and media relation, object and object relation, interpreter and interpretant are thus mistakes caused by non-acknowledgement of the outer contextual borders between sign and object.

11. In order to formalize our results, we have now basically two possibilities. First, we introduce 3 more categories and embed them in the triadic Peircean sign relation in order to get a 6-adic transcendental sign relation, as we had embedded the categorial object into the Peircean sign relation in order to get a 4-adic transcendental sign relation (cf. Toth 2008a). Since all contextual borders are eliminated in such a sign relation, we will call it a complete non-transcendental sign relation (CNTSR):

$$\text{CNTSR} = (3.a \ 2.b \ 1.c \ 0.d \ \odot.e \ \odot.f).$$

Now, to this hexadic sign relation, some consideration is necessary. As Bense (1975, pp. 65 ss.) had pointed out, an object can be assigned a categorial number, but no relational number. The reason is trivial: An object cannot enter a relationship with another object, unless it has been thetically introduced as a sign). An expression like “I have seen the stone of all stones” is senseless, while an expression like “I have watched the movie of all movies” is not. However, if an object has only a categorial number, but no relational number, this means semiotically, that it has only trichotomic, but no triadic values. Concretely: The categorial object (0.d) can assume the trichotomic values  $d \in \{1, 2, 3\}$ , but the 0 is constant. Hence, there are no sub-signs like (0.0), (1.0), (2.0) and (3.0), since  $\{0, \dots, 3\}$  are here relational number, so we would have a contradiction to Bense’s theorem. And the same is valid for ( $\odot.e$ ) and ( $\odot.f$ ), i.e. also these sub-signs can only take three trichotomic values, but no triadic ones. Therefore, it follows that CNTSR is a hexadic-trichotomic sign relation.

12. A second possibility is to let the contextual indices of the regular Peircean sign class refer to the 3 transcendental categories. For that, we need at least 3 indices and thus a 4-contextural sign relation:

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

Therefore, we can define that  $i \rightarrow$  transcendence of I,  $j \rightarrow$  transcendence of O, and  $k \rightarrow$  transcendence of M. The inner contextual borders are differentiated in this solution “automatically”. Moreover, the three indices per sub-sign enable the possibility to indicate the interrelationships between the four contextures, f. ex. between the material object out of which (1.c) is selected, an the material object which is transformed by thetical introduction into a meta-object (2.b), cf. Bense (1967, p. 9). The latter possibility we do not have in the hexadic-trichotomic sign model. However, in the present solution, problems will arise then, when contextures have to be assigned to more then one function. There are the epistemological functions (subjective subject, objective subject, subjective object, objective object), there are time-contextures, the contextures of quantity and quality, etc. What we thus do, when we define 4-PSR, is basically that:

$$4\text{-PSR} = (3.a_{(3.a,2.b,1.c)*} \ 2.b_{(3.a,2.b,1.c)*} \ 1.c_{(3.a,2.b,1.c)*}),$$

whereby the asterisk indicates the purely categorial “relations” between transcendental objects and subjects, namely the corresponding transcendental objects and subjects of I, O, M which are separated from them, in a monocontextural logic, by a contextual abyss.

(13. The theoretically possible third solution, the combination of 11. and 12. to

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

would solve the problem of ascribing the contextures to different functions, but is over-characterized in respect to rendering transcendental categories non-transcendental, since the basic function of the contextual indices is the bridging of the abysses between the fundamental categories and their transcendental objects.)

14. Thus, we can answer the question in the title of this study: A sign has 6 contextural borders, amongst them 3 outer and 3 inner ones. However, in order to take care of bridging the contextual abysses, a 4-contextural 3-adic sign

relation with transcendental categories (i.e. the regular fundamental categories) is sufficient:

4-3-PSR = (3.a<sub>i,j,k</sub> 2.b<sub>i,j,k</sub> 1.c<sub>i,j,k</sub>) with  $i, j, k \in \{1, 2, 3, 4\}$ .

Therefore, the construction of higher n-contextural 3-adic semiotic matrices ( $n > 4$ ) is questionable for its semiotic use.

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