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## Additive Association

1. Additive association as a semiotic operation was mentioned in the whole semiotic writings of the Stuttgart School just one time. When Bense was showing how the eigenreal sign class (3.1 2.2 1.3) comes to appear as the side diagonal of a transposition of his semiotic 3×3 matrix

|    |     |     |     |
|----|-----|-----|-----|
|    | 3.  | 2.  | 1.  |
| .1 | 3.1 |     |     |
| .2 |     | 2.2 |     |
| .3 |     |     | 1.3 |

he used the following scheme of combination of the retrosemiotic and the semiotic order of the prime-signs which he called additive association (Bense 1981, p. 204):

|    |    |    |
|----|----|----|
| 3. | 2. | 1. |
| .1 | .2 | .3 |

2. However, Bense did not know that every sign class can appear in 6 permutations (Toth 2008, pp. 177 ss.), so that all other types, like, e.g.,

|    |    |    |
|----|----|----|
| 1. | 2. | 3. |
| .1 | .2 | .3 |

|    |    |    |    |    |          |
|----|----|----|----|----|----------|
| 1. | 2. | 3. | 1. | .3 | .2       |
| .1 | .3 | .2 | .1 | .3 | .2, etc. |

|    |    |    |
|----|----|----|
| 1. | 2. | 3. |
| .2 | .3 | .1 |

|    |    |    |
|----|----|----|
| 1. | 2. | 3. |
| .2 | .1 | .3 |

1.    2.    3.  
       .3    .2    .1

1.    2.    3.  
       .3    .1    .2,

totally 21 types of associative additions have remained unknown to him. As it can be shown easily, these are the “incorrect” sign classes that have never been accepted by Bense because they violate the semiotic inclusion, which sets for every sign class

SCI = (3.a 2.b 1.c)

an order

( $a \leq b \leq c$ ).

Now, the semiotic 3×3 matrix already contains as main diagonal the Genuine Category Class (3.3 2.2 1.1) which is built according to ( $a > b > c$ ). Moreover, there are no formal obstacles against the elimination of this restriction and thus to proceed from the system of the 10 to a system of 27 ( $= 3^3$ ) sign classes:

|               |               |               |
|---------------|---------------|---------------|
| (3.1 2.1 1.1) | (3.1 2.2 1.1) | (3.1 2.3 1.1) |
| (3.1 2.1 1.2) | (3.1 2.2 1.2) | (3.1 2.3 1.2) |
| (3.1 2.1 1.3) | (3.1 2.2 1.3) | (3.1 2.3 1.3) |

|               |               |               |
|---------------|---------------|---------------|
| (3.2 2.1 1.1) | (3.2 2.2 1.1) | (3.2 2.3 1.1) |
| (3.2 2.1 1.2) | (3.2 2.2 1.2) | (3.2 2.3 1.2) |
| (3.2 2.1 1.3) | (3.2 2.2 1.3) | (3.2 2.3 1.3) |

|               |               |               |
|---------------|---------------|---------------|
| (3.3 2.1 1.1) | (3.3 2.2 1.1) | (3.3 2.3 1.1) |
| (3.3 2.1 1.2) | (3.3 2.2 1.2) | (3.3 2.3 1.2) |
| (3.3 2.1 1.3) | (3.3 2.2 1.3) | (3.3 2.3 1.3) |

Thus, additive addition, that had only been used by Bense to show the construction of (3.1 2.2 1.3) and (3.3 2.2 1.1) in connection with the semiotic 3×3 matrix and their two diagonals, it can now be pointed out as The device of overcoming the senseless inclusion order and to proceed the system of the 27 sign classes whose part-set the 10 Peircean sign classes are.

## **Bibliography**

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