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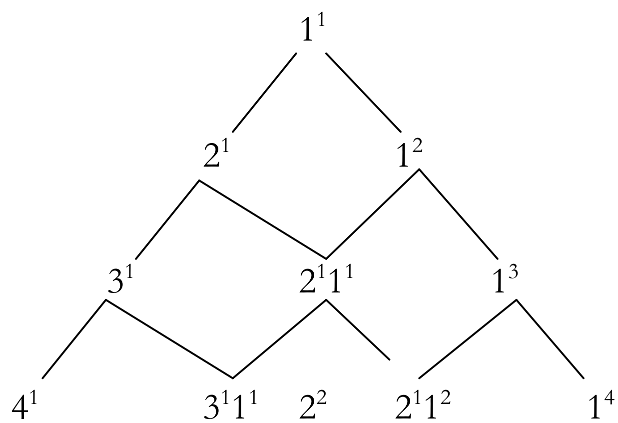
Model of a 3-adic 3-contextural Deutero-Semiotics

1. In Toth (2009) and several other publications, 3-adic 3- and 4-contextural trito-semiotics has been introduced. However, in any polycontextural system, it is necessary to consider also the respective proto- and deutero-structures.

In a deutero-structure, each kenogram can be iterated, so that pair-set notation is not sufficient anymore. A deutero-sequence and its corresponding number are unambiguously determined by the number of partitions m^n, where m is the length of the iteration and n the number of different kenograms per length of iteration. This definition as well as the following figure are taken from Günther (1978, p. 258); vgl. Toth (2003, p. 16):



2. In semiotics, triadic-trichotomic values, can be written in a notation which resembles to power functions (cf. Toth 2007, p. 215; Toth 2003, pp. 36 ss.) which has been called frequency notation because the basis indicates the triadic value and the exponent the frequency of the trichotomic value. Hence, although semiotic frequency notation and logical deutero-notation are of course not the same, we get exactly the same kind of tree model for deutero-signs as for deutero-numbers. We can therefore note that system of the 10 Peircean sign classes and their dual reality thematics as basis-system of deutero-semiotics:

$(3^1{}_3\ 2^1{}_1\ 1^1{}_{1,3}) \times (1^1{}_{3,1}\ 1^2{}_1\ 1^3{}_3)$

$(3^1{}_3\ 2^1{}_1\ 1^2{}_1) \times (2^1{}_1\ 1^2{}_1\ 1^3{}_3)$

$(3^1{}_3\ 2^1{}_1\ 1^3{}_3) \times (3^1{}_3\ 1^2{}_1\ 1^3{}_3)$

$(3^1{}_3\ 2^2{}_{1,2}\ 1^2{}_1) \times 2^1{}_1\ 2^2{}_{2,1}\ 1^3{}_3)$

$(3^1{}_3\ 2^2{}_{1,2}\ 1^3{}_3) \times (3^1{}_3\ 2^2{}_{2,1}\ 1^3{}_3)$

$(3^1{}_3\ 2^3{}_2\ 1^3{}_3) \times (3^1{}_3\ 3^2{}_2\ 1^3{}_3)$

$(3^2{}_2\ 2^2{}_{1,2}\ 1^2{}_1) \times (2^1{}_1\ 2^2{}_{2,1}\ 2^3{}_2)$

$(3^2{}_2\ 2^2{}_{1,2}\ 1^3{}_3) \times (3^1{}_3\ 2^2{}_{2,1}\ 2^3{}_2)$

$(3^2{}_2\ 2^3{}_2\ 1^3{}_3) \times (3^1{}_3\ 3^2{}_2\ 2^3{}_2)$

$(3^3{}_{2,3}\ 2^3{}_2\ 1^3{}_3) \times (3^1{}_3\ 3^1{}_2\ 3^3{}_{3,2})$

Note that a further simplification $(1^1{}_{3,1}\ 1^2{}_1\ 1^3{}_3) \neq 1^6$ is impossible because of the different contextures involved.

Bibliography

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Toth Alfred, Grundleung einer mathematischen Semiotik. Klagenurt 2009
Toth, Alfred, New elements of theoretical semiotics (NETS), based on the work of Rudolf Kaehr. In: Electronic Journal for Mathematical Semiotics, http://www.mathematical-semiotics.com/pdf/NETS1.pdf (2009a

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