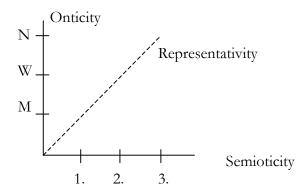
Prof. Dr. Alfred Toth

The sign as a "disjunction between world and consciousness"

1. Max Bense stated, "that semiotics, in contrast to logic, which as such can only constitute an ontological thematic of being (Seinsthematik), is, beyond that, also able to thematize the epistemological difference, the disjunction between world and consciousness in the principle question for the recognizability of the things or facts" (1975, p. 16). Hence, the sign as the basic element of semiotics does neither belong to the world nor to the consciousness, but to the sphere between them: "Comparable to the sign, information is not an object of nature science, either. As such, neither signs nor information occur in nature, i.e. in physical reality. However, neither are they mere facts of human consciousness. Obviously, we have do deal here with events exactly in the border zone between consciousness and external world. It seems as if one would have to explicate what one calls today 'world of signs' or also 'sphere of information' as a zone of contact between physical reality and phenomenological consciousness. If one presupposes these reflections, it becomes clear that Norbert Wiener and Gotthard Günther understand information [....] as a third kind of being besides matter and consciousness" (Bense 1962, p. 17).

Therefore, for a Peircean semiotics, "an absolutely complete diversity of 'worlds' and 'pieces of worlds', of 'be' (Sein) and 'being' (Seiendem) can principally [...] not be realized by a consciousness that works over triadic sign relations" (Bense 1979, p. 59). Nevertheless, consciousness is understood as a "two-valued functor of being (Seinsfunktor) which generates the subject-object relation" (Bense 1976, p. 27), because Peirce "keeps up the difference between the epistemological object and subject in connecting both poles by their representedness" (Walther 1989, p. 76). More precisely, "the representational connection of the sign class indicates also the epistemological subject, the representational connection of the reality thematic also the epistemological object" (Gfesser 1990, p. 133). "In doing so, we presuppose a non-transcendental notion of recognition whose essential process is based on the differentiation between (recognizable) 'world' and (recognizing) 'consciousness', but also in establishing a real triadic relation between them" (Bense 1976, p. 91).

Since a thematic of being (Seinsthematik) "cannot be motivated and legitimated other than by a sign thematics" (Bense 1971, p. 16), it follows, "that notions of objects are relevant only in view of a sign class and have a reality thematic only in relation to this sign class which can be discussed and judged as its connection of reality" (Bense 1976, p. 109). Therefore, sign thematic and reality thematic "behave not like 'platonic' and 'realistic' concepts of being, but only like the most extreme cases or the most extreme entities of the one and only thematic of being" (Bense 1976, p. 85). Thus, to the sign relation and its reality thematic there also belongs "the differentiation between 'onticity' and 'semioticity', which rules the relationship of our experience of the world" (Bense 1979, p. 19). This relationship is formulated by the "Theorem about Onticity and Semioticity": "With increasing semioticity also the onticity of representation increases" (Bense 1976, p. 60):



Therefore, the triadic sign relation determines "the moments of the process of representation between World and Consciousness" (Gfesser 1990, p. 131).

2. Hence, we can assign to each sub-relation of the triadic sign relation a parametric set $[\pm S, \pm O]$:

 $SR = [[\pm S, \pm O], [\pm S, \pm O], [\pm S, \pm O]]$

The general sign structure is thus

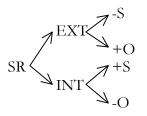
 $SR = (\pm a.\pm b \pm c.\pm d \pm e.\pm f)$

Since the construction principle for sign relations a, b, c, d, e, $f \in \{1, 2, 3\}$ with $b \le d \le f$ applies to all possible cases, we get the following four types of basic sign classes. As an example we show the sign class (3.1 2.1 1.3) and its parametric variations:

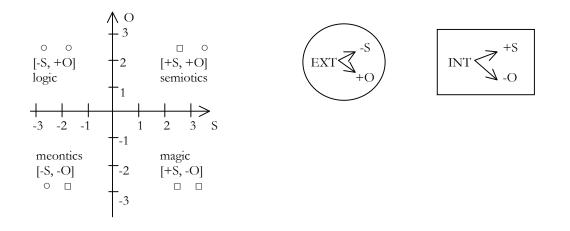
[+S, +O]:	(a.b c.d e.f)	(3.1 2.1 1.3)
[+S, –O]:	(ab cd ef)	(31 21 13)
[-S, +O]:	(-a.b –c.d –e.f)	(-3.1 –2.1 –1.3)
[-S, –O]:	(-ab –cd –ef)	(-31 -21 -13)

Thus, [+S, +O] or the "regular" sign class with exclusively positive parameters is nothing but one of four special cases of parametric sign classes.

For the sake of interpretation, we propose that [-S] means "hidden" subject, [-O] means "hidden" object, [+S] means "overt" subject and [+O] means "overt object". We will provide some examples later on while discussing the different possible types of parametric sign classes. In addition, we may say that hidden subjects and overt objects determine "exterior" semiotic sign relations, while overt subjects and hidden objects determine "interior" semiotic sign relations. As we will see below, the respective exterior and interior sign relations are to be found in the sub-relations of the medium, the object and the interpretant as well. The following graph may visualize the somewhat tricky connections between "overtness" and "hiddenness" of subject and object and their semiotic "exteriority" and "interiority":



3. We can now display the four basic types of sign classes in a Cartesian coordinate system. Moreover, we show the connections between overt/hidden subjects and objects and exterior/interior sign relations by combinations of circles and squares, respectively and recognize thereby that both from the differentiation between hiddenness/overtness and between exteriority/interiority, logic is not the total negation of the parametric set of semiotics. We also recognize, that the first and the third quadrant are characterized by combinations of exterior and interior semiotic features, while the second and the fourth quadrant show only features of either one:



Therefore, we further propose that the parametric combination [+S, +O] stands for **semiotics**, since by definition (cf. chapter 1), the sign relation bridges both epistemological poles, the subject and the object one.

According to the above quoted text by Bense (1975, p. 16), **logic** can only constitute an ontological thematic of being (Seinsthematik), and so it is characterized here by the parametric combination [-S, +O], i.e. with a hidden subject. In other words: "In Aristotelian logic, self-consciousness explicates itself as being and objective transcendence" (Günther 1976-80, vol. 1, p. 47).

The field of **meontics**, characterized above by the parametric set [-S, -O] and thus with hidden subject and hidden object, was introduced by Günther (cf. also Bense 1952, p. 115): "In these mental spaces which expand under the makeshift-name ,nothing' in deepest philosophical darkness, we met unmeasured relational landscapes [...]. In the nothing "there is nothing to look for, unless we do not decide to enter this nothing and to build there a world according to the laws of negativity. God has not yet created this world, and there is

neither a construction plan for it before our thinking has not described it in a negative language" (Günther 1976-80, vol. 3, p. 287 s.). Thus, meontics describes the place, "where in history of philosophy the problem of transclassical thinking has already settled. Keywords like number mystics, negative theology, and names like Isaac Luria and Jacob Böhme from the offside of world history are appearing here" (Günther 1976-80, vol. 2, p. xvi).

To the "counterpart" of logic, which is characterized by [+S, -O], we will assign, consistent to Günther's work, the "theory of magical series" (Günther 2000, p. 121): "What happens here, is fully incomprehensible for the logician. A number of mutually (causally) independent data of experience are collected and summed up under a higher point of view of determination or meaning. This summing up constitutes the series, and it is an eminently theoretical act. It assigns the single parts of the series a ,virtual meaning' which they do not have by themselves and which distanciates them from additional, in practical acts consumed primary meanings. By means of that, the parts of the series become able, as a whole, to furnish a category of understanding for the event that follows them" (Günther 2000, p. 122). "The idea of a [magical] series presupposes that the world responds only in a partial aspect, which is inessential for the thinking, to the rules of practical acting. This means that it is not an inanimated mechanism, but that there exist degrees of freedom in its process" (Günther 2000, p. 125). Therefore, the laws of thinking inherent to magical series, do not obey Aristotelian logic, because the latter, "the hitherto only non-magical system of thinking," simply does not allow any degrees of freedom, which is excluded by the Law of the Excluded Middle, since freedom would be the third instance between ,true' and ,false' " (Günther 2000, p. 130). While in Aristotelian logic, which is characterized in the above diagram by the parametric set [-S, +O], "freedom and truth are identified in the two-valued system" (Günther 2000, p. 131), in magic, understood as the theory of magical series, the category of logical freedom is guaranteed by the overt subject and the hidden object in the parametric set [+S, -O], which means, "that there may exist exact thinking of reality without the notion of causality and exact logical thinking without ,Principle of Sufficient Reason" (Günther 2000, p. 132).

Looking at the four parametric sets assigned to the four quadrants of the above semiotic coordinate system, we also recognize that they form a cycle from [+S +O] via [-S +O], [-S -O] and [+S -O] back to [+S +O], i.e. from semiotics via logic, meontics and magic back to semiotics.

4. If we look at the four basic types of sign classes, we recognize that they lie each in one of the quadrants of the semiotic coordinate system. We will call these quadrants "semiotic contextures", following Günther's terminus, since they have been assigned to four branches of thinking (semiotics, logic, meontics, magic) which are apparently all accessible by semiotics. Now, by combination of two or more of these basic or "homogeneous" sign classes, we get "heterogeneous" sign classes that lie in 2 or 3 semiotic contextures, f. ex.

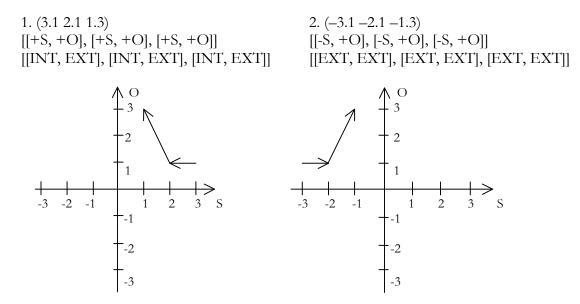
(3.1 - 2 1 - 1 3)	(3.1 - 2 1 1 3)
(-3.1 -2.1 1.3)	(3.1 - 2 1 - 1.3)
(31 2.1 13)	(31 2.1 –1.3)

The three sign classes on the left side lie in 2 contextures, the three on the right side in 3 contextures. Because the sign is defined as a triadic relation, no sign class can lie in more

than 3 (f. ex. in all 4) semiotic contextures (cf. Toth 2001a; 2003a; 2007, pp. 52 ss.; 2008, pp. 82 ss.).

We will now show all possible combinations of the four basic or "homogeneous" sign classes. The result will be 46 sign classes that are heterogeneous either in their triadic or in their trichotomic or in both values. Besides the 4 homogeneous sign classes that lie in 1 semiotic contexture, there are 18 sign classes that lie in 2 semiotic contextures and 24 sign classes that lie in 3 semiotic contextures. We will give all of these 46 sign classes in their numerical form, in the form of their parametric sets, by characterization of their semiotic coordinate system and their participation on the four semiotic contextures. As an example, we take again the parametric variations of the sign class (3.1 2.1 1.3), but one should keep in mind that each of the 10 sign classes and each of their 10 dual reality thematics can appear in exactly 46 possible parametric forms.

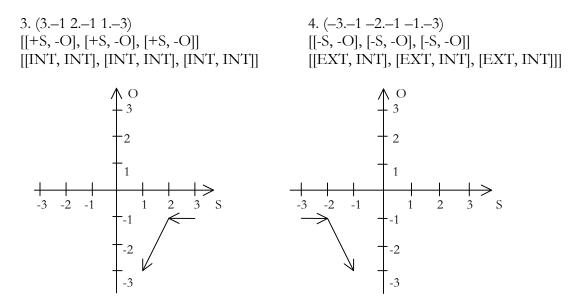
4.1. Parametric sign classes in 1 contexture



We see that the basic or "unmarked" sign class has semiotic interiority in all three triadic positions and its basic or "unmarked" reality thematic has semiotic exteriority in all three trichotomic positions. We can use this fact in order to redefine sign classes and reality thematics:

Zkl := [[INT, —], [INT, —], [INT, —]] Rth := [[—, EXT], [—, EXT], [—, EXT]

Therefore, the following combinations show sign classes with "reality share" and reality classes with "sign share". What this exactly means, we will demonstrate under the respective parametic sign sets.



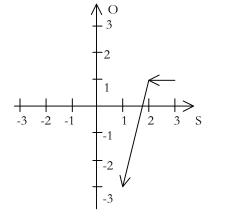
In no.3, we meet first for the first time a hidden subject in an interpretant relation [-S, +O]. Noth quotes as an example for this kind of "absent interpretant" the famous beginning of Jabberwocky's poem from Lewis Carroll's "Through the Looking-Glass": "Twas brillig, and the slithy toves / Did gyre and gimble in the wabe: All mimsy were the borogoves, / And the mome raths outgrabe" and comments as follows: "Although Alice knows this poem by heart, she does not know its meaning. She is not able to construct the complete triadic sign relation" (Noth 1980, p. 72).

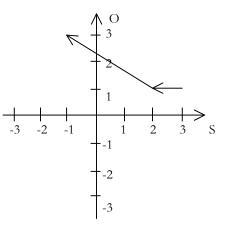
Furthermore, we have here the first instance of a sign class whose medial relation is characterized characterized by a hidden object, [+S, -O]. In this case, the sign does not have a "material sign-carrier" (Bense 1971, p. 33), but an immaterial one. As an example, we can quote the gradual disappearance of the Cheshire Cat in "Through the Looking-Glass". At the end of its vanishing process, only the cat's grinning stays (cf. Nöth 1980, p. 96 s.), and obviously, with the head's disappearance, the grinning lacks a material sign-carrier.

4.2. Parametric sign classes in 2 contextures

5. (3.1 2.1 1.–3) 6. [[+S, +O], [+S, +O], [+S, -O]] [[+ [[INT, EXT], [INT, EXT], [INT, INT]] [[I

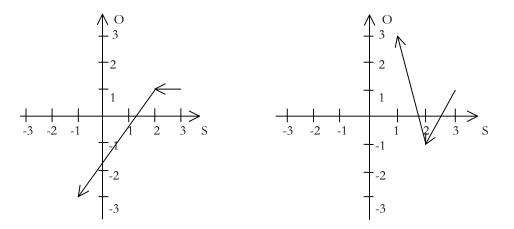
6. (3.1 2.1 –1.3) [[+S, +O], [+S, +O], [-S, +O]] [[INT, EXT], [INT, EXT], [EXT, EXT]]





7. (3.1 2.1 –1.–3) [[+S, +O], [+S, +O], [-S, -O]] [[INT, EXT], [INT, EXT], [EXT, INT]]

8. (3.1 2.–1 1.3) [[+S, +O], [+S, -O], [+S, +O]] [[INT, EXT], [INT, INT], [INT, EXT]]

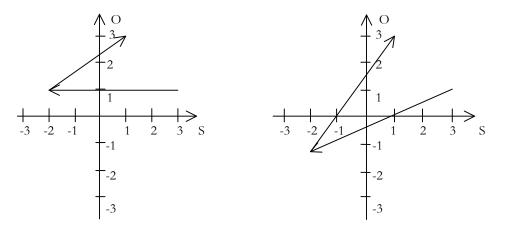


In no. 8, we have for the first time a hidden object in the object relation, thus [+S, -O] as a parametric characterization of an "absent object". "After Alice got disappointed because of the part-time absent object of a sign, she continues her trip, until she reaches the supposed center of the world. There, she poses the following question about her standpoint: "I wonder what Latitude or Longitude I've got to?". This question is directed to a goal which is a sign *without* object, since there no point of reference and thus no object at all for a geographical indication by aid of longitude and latitude in the center of the world" (Nöth 1980, p. 73).

Another example that clearly shows the hidden object together with an overt subject is the real signpost that points to an "absent" object of reference: "[Alice] went on and on, a long

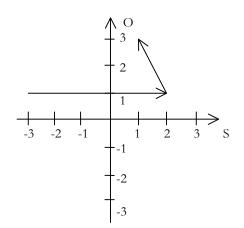
way, but wherever the road divided, there were sure to be two finger-posts pointing the same way, one marked ,TO TWEEDLEDUM'S HOUSE', and the other ,TO THE HOUSE OF TWEEDLEDEE' [...]. A little later, however, Alice poses the question if the object to which the signposts point really do exist, since Alice does not meet Tweedledum and Tweedledee in a house, but standing under a tree. Thus, the suspect arises that the denoted house do not exist after all, so that the signposts point to significants without objects whose aim it is to confuse the interpreters" (Nöth 1980, p. 74).

9. (3.1 –2.1 1.3) [[+\$, +O], [-\$, +O], [+\$, +O]] [[INT, EXT], [EXT, EXT], [INT, EXT]] 10. (3.1 –2.–1 1.3) [[+S, +O], [-S, -O], [+S, +O]] [[INT, EXT], [EXT, INT], [INT, EXT]]



In no. 10, we see that both parameters of the object are hidden. This is a case of a really "absent" object. Elisabeth Walther gives as an example "an inscription that could not yet been deciphered". In the case of the object-less signpost the subject is overt ([+S, -O]) and the interpreter can thus establish a complete triadic sign relation, although the object of reference does not exist. However, in the present case of an inscription with both hidden subject and object ([-S, -O]), the interpretant is not capable of establishing or reconstructing the full triadic sign relation of the inscription, which is thus "not yet a sign, resp. does not yet contain a sign" (Walther 1979, p. 50; cf. also Bogarin 1989).

11. (3.–1 2.1 1.3) [[+S, -O], [+S, +O], [+S, +O]] [[INT, INT], [INT, EXT], [INT, EXT]]

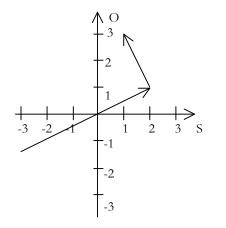


[[-S, +O], [+S, +O], [+S, +O]]

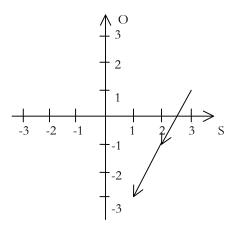
[[EXT, EXT], [INT, EXT], [INT, EXT]]

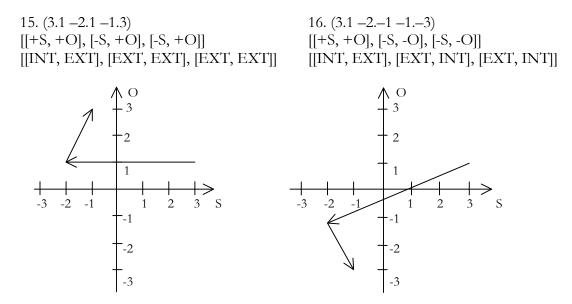
12. (-3.1 2.1 1.3)

13. (-3.-1 2.1 1.3) [[-S, -O], [+S, +O], [+S, +O]] [[EXT, INT], [INT, EXT], [INT, EXT]]



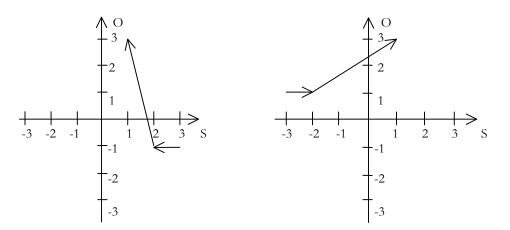
14. (3.1 2.–1 1.–3) [[+S, +O], [+S, -O], [+S, -O]] [[INT, EXT], [INT, INT], [INT, INT]]

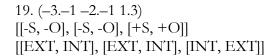




No. 16 is characterized by the parametric set [-S, -O] both in the object and in the medium sub-relation of the sign relation. Since the Peircean medium corresponds to the Saussurean "signifiant" and the Peircean object corresponds to the Saussurean "signifié", we have here a sign relation with both "absent" object and medium. "In the 'wood, where things have no names', the signs are lacking both their signifiant and their signifié" (Nöth 1980, p. 75). Since the Peircean "symbol" (2.3) is that object relation of the sign that is bound of legi-signs (1.3) as its medium, "the 'wood, where things have no names' is a region in which one cannot communicate with symbolic sign" (Nöth 1980, p. 81). Therefore, the "absence" of symbolic signs is characterized by the double occurrence of the parametric set [-S, -O] both in object and in medium position.

17. (3.–1 2.–1 1.3) [[+S, -O], [+S, -O], [+S, +O]] [[INT, INT], [INT, INT], [INT, EXT]] 18. (-3.1 -2.1 1.3) [[-S, +O], [-S, +O], [+S, +O]] [[EXT, EXT], [EXT, EXT], [INT, EXT]]





20. (3.-1 2.1 1.-3) [[+S, -O], [+S, +O], [+S, -O]] [[INT, INT], [INT, EXT], [INT, INT]]

\ O

3

2

1

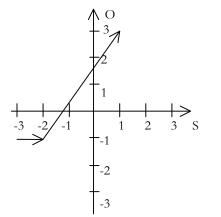
-1

-2

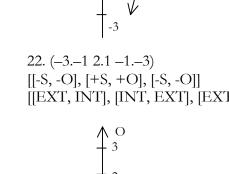
1

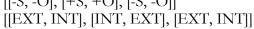
S

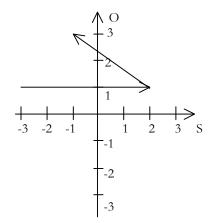
. -3 -2 -1

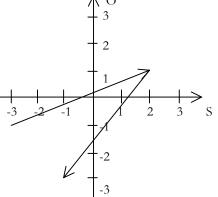


21. (-3.1 2.1 -1.3) [[-S, +O], [+S, +O], [-S, +O]] [[EXT, EXT], [INT, EXT], [EXT, EXT]]



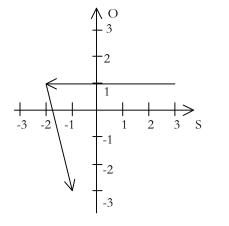


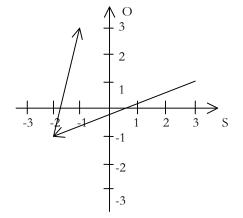




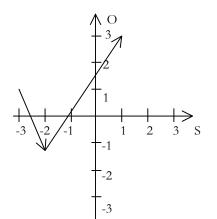
4.3. Parametric sign classes in 3 contextures

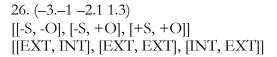
23. (3.1 -2.1 -1.-3) [[+S, +O], [-S, +O], [-S, -O]] [[INT, EXT], [EXT, EXT], [EXT, INT]] 24. (3.1 –2.–1 –1.3) [[+S, +O], [-S, -O], [-S, +O]] [[INT, EXT], [EXT, INT], [EXT, EXT]]

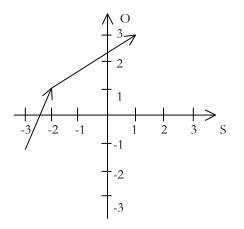


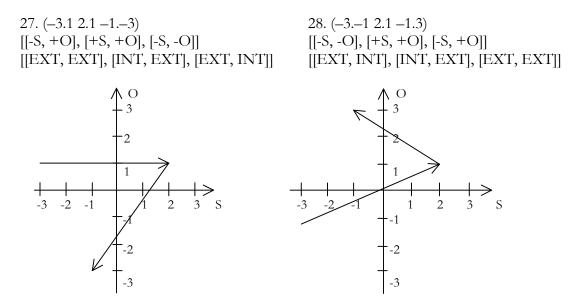


25. (-3.1 -2.-1 1.3) [[-S, +O], [-S, -O], [+S, +O]] [[EXT, EXT], [EXT, INT], [INT, EXT]]

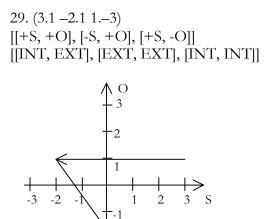




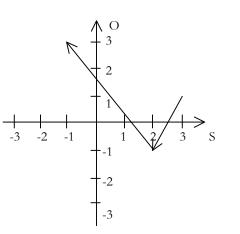




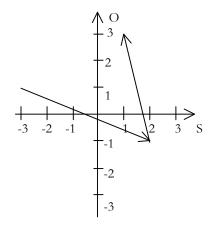
No. 28 shows both hidden subject and object ([-S, -O)] in its interpretant relation and thus characterizes a meontic interpretation for which Günther proposed the mystics of numbers (1976-80, vol. 2, p. xvi). As it was shown in Toth (2003b, pp. 59 ss.), the Hebrew othioth (letters of the Hebrew alphabet) amalgamate letters, numbers and pictures. Therefore, their object relation has both overt subject and object ([+S, +O]), but their medial relation [-S, +O], i.e. the letters are such, does not show the othioth openly as numbers and thus point to them as a hidden subject.

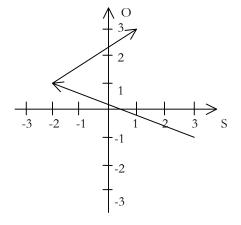


30. (3.1 2.-1 -1.3) [[+S, +O], [+S, -O], [-S, +O]] [[INT, EXT], [INT, INT], [EXT, EXT]]



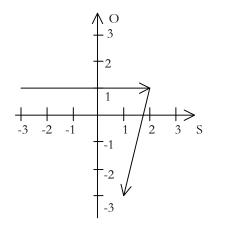
31. (-3.1 2.-1 1.3) [[-S, +O], [+S, -O], [+S, +O]] [[EXT, EXT], [INT, INT], [INT, EXT]] 32. (3.–1 –2.1 1.3) [[+S, -O], [-S, +O], [+S, +O]] [[INT, INT], [EXT, EXT], [INT, EXT]]

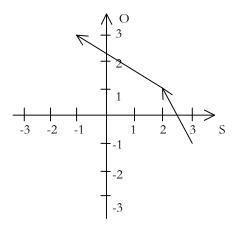




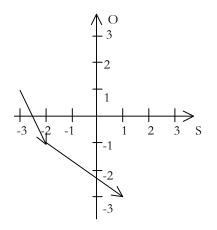
33. (-3.1 2.1 1.-3) [[-S, +O], [+S, +O], [+S, -O]] [[EXT, EXT], [INT, EXT], [INT, INT]]

34. (3.–1 2.1 –1.3) [[+S, -O], [+S, +O], [-S, +O]] [[INT, INT], [INT, EXT], [EXT, EXT]]



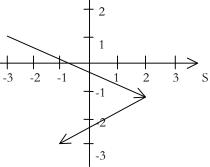


35. (-3.1 -2.-1 1.-3) [[-S, +O], [-S, -O], [+S, -O]] [[EXT, EXT], [EXT, INT], [INT, INT]]



[[-S, +O], [+S, -O], [-S, -O]][[EXT, EXT], [INT, INT], [EXT, INT]] $\begin{pmatrix} A & O \\ + & 3 \\ - & 2 \end{pmatrix}$

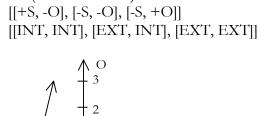
36. (-3.1 2.-1 -1.-3)

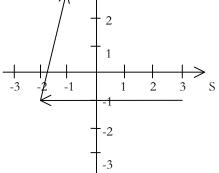


38. (3.-1 -2.-1 -1.3)

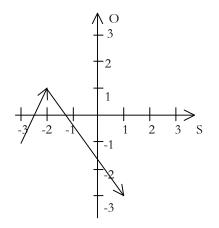
37. (-3.-1 2.-1 -1.3) [[-S, -O], [+S, -O], [-S, +O]] [[EXT, INT], [INT, INT], [EXT, EXT]]

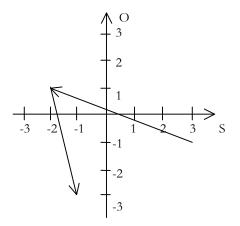
-3





39. (-3.-1 -2.1 1.-3) [[-S, -O], [-S, +O], [+S, -O]] [[EXT, INT], [EXT, EXT], [INT, INT]]



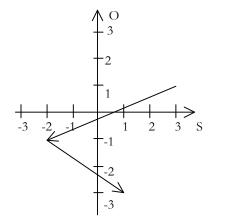


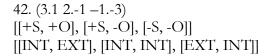
40. (3.-1 -2.1 -1.-3)

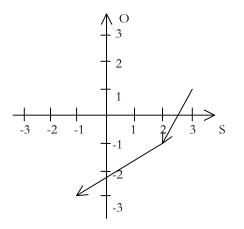
[[+S, -O], [-S, +O], [-S, -O]]

[[INT, INT], [EXT, EXT], [EXT, INT]]

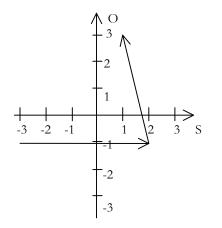
41. (3.1 –2.–1 1.–3) [[+S, +O], [-S, -O], [+S, -O]] [[INT, EXT], [EXT, INT], [INT, INT]]

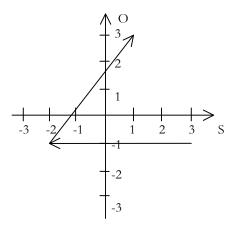




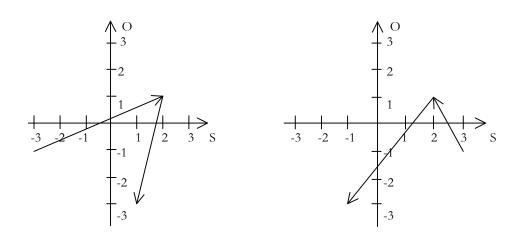


43. (-3.-1 2.-1 1.3) [[-S, -O], [+S, -O], [+S, +O]] [[EXT, INT], [INT, INT], [INT, EXT]]





45. (-3.-1 2.1 1.-3) [[-S, -O], [+S, +O], [+S, -O]] [[EXT, INT], [INT, EXT], [INT, INT]] 46. (3.–1 2.1 –1.–3) [[+S, -O], [+S, +O], [-S, -O]] [[INT, INT], [INT, EXT], [EXT, INT]]



Meontics – or more generally: polycontextural theory – and magic are part of our sciences as semiotics and logic are. Yet, classical semiotics is based on Aristotelian logic (cf. Toth 2001b) and thus incapable of dealing with polycontextural or magical phenomena. But provided one takes Bense's definition of the sign as "disjunction between world and consciousness" seriously, it is possible to map mathematical semiotics not only to the first quadrant of a Cartesian Coordinate System, as Bense (1976, p. 60) did, but to all of its quadrants. The main result then is that we get negative categories, which we may interpret as "hidden" in contrast to the "overt" categories. We may also introduce the distinction between exterior vs. interior semiotic interpretants, objects and media – a distinction that has up to now often been confused. Furthermore, we are able to redefine the abstract sign relation as an ordered set of three ordered parametric sub-sets, consisting of an open or hidden subject- and an open or hidden object relation each. By aid of this new mathematical semiotic model, which is fully

44. (3.–1 –2.–1 1.3) [[+S, -O], [-S, -O], [+S, +O]] [[INT, INT], [EXT, INT], [INT, EXT]] compatible with classical semiotics as well as with classical or polycontextural logic, with quantitative and qualitative mathematics and with the theory of magical series, we are able to analyze "paradoxical" or "pathological" phenomena from literature, painting or film, which hitherto never have been acknowledged before an adequate and exact theoretical background. In this contribution, we have just given a few hints in order to illustrate some crucial points of the theory of parametric semiotic sets. Hence there is a wide and open territory for applications.

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