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Semiotic symmetry and the question of identity

There she makes a jump amidst in this ray of light
and starts from now on to watch herself.

Unica Zürn, "Der Mann im Jasmin" (1977, p. 80)

1. How many sign classes are there?

Sign classes are normally defined in the abstract form (3.a 2.b 1.c) with a, b, c $\in$ {1, 2, 3} and a $\leq$ b $\leq$ d:

1. (.3.) $\rightarrow$ (.2.) $\rightarrow$ (.1.)
   Examples: sign classes, degenerative graph (Bense 1971, p. 37)

However, that this order is not the only one, is shown be the following instances:

2. (.1.) $\rightarrow$ (.2.) $\rightarrow$ (.3.)
   Examples: reality thematics, generative graph (Bense 1971, p. 37)

3. (.3.) $\rightarrow$ (.1.) $\rightarrow$ (.2.)
   Example: thetic graph (Bense 1971, p. 37)

4. (.2.) $\rightarrow$ (.1.) $\rightarrow$ (.3.)
   Example: communicative graph (Bense 1971, pp. 40 s.)

5. (.3.) $\rightarrow$ (.1.) $\rightarrow$ (.2.)
   (.1.) $\rightarrow$ (.3.) $\rightarrow$ (.2.)
   Example: creative graph (Bense 1971, p. 102)

6. (.2.) $\rightarrow$ (.3.) $\rightarrow$ (.1.)
   From this sixth possible combination, no example has been given yet. This semiotic order is fulfilled, however, by the reality thematic of each creative graph (cf. no. 5).

However, the semiotic orders no. 2 to 6 do apparently not fulfill the Law of Inclusive Trichotomic Order (a $\leq$ b $\leq$ c) of the general sign class structure (3.a 2.b 1.c). It is this law that restricts the theoretically possible 3^3 = 27 combinations to only the following 10 sign classes:

(3.1 2.1 1.1)	(3.1 2.3 1.3)
(3.1 2.1 1.2)	(3.2 2.2 1.2)
(3.1 2.1 1.3)	(3.2 2.2 1.3)

(3.1 2.2 1.2) (3.2 2.3 1.3)
(3.1 2.2 1.3) (3.3 2.3 1.3)

Therefore, sign sets like

*(3.1 2.2 1.1)
*(3.2 2.1 1.3)
*(3.3 2.2 1.1)

are not considered sign classes in a semiotics in which the Law of Inclusive Trichotomic Order is valid, since in the above sign sets we find the following non-inclusive orders:

*(a < b > c)
*(a > b < c)
*(a > b > c)

But there are a few good arguments for allowing non-inclusive sign sets as sign classes and thus expanding the system of 10 to a system of 27 sign classes:

1. Bense himself considered the above 5 types of transpositions of the order of a sign class semiotic valid (cf. above).

2. The non-inclusive sign structure (3.3 2.2 1.1) shows up as main diagonal of the semiotic matrix:

$$\begin{pmatrix} \mathbf{1.1} & 1.2 & 1.3 \\ 2.1 & \mathbf{2.2} & 2.3 \\ 3.1 & 3.2 & \mathbf{3.3} \end{pmatrix}$$

3. The reality thematics of all 10 sign classes – with the exception of the dual-invariant sign class (3.1 2.2 1.3 $\times$ 3.1 2.2 1.3) - do not follow the Law of Inclusive Trichotomic Order.

4. The 27 dyadic pairs of sub-signs that Bense listed in his "complete triadic-trichotomic sign-circle" (Bense 1975, p. 112) contain all possible combinations of sub-signs and thus not only the ones restricted by the Law of Inclusive Trichotomic Order. As a matter of fact, there is no reason why this restriction should apply for sign classes but not for pairs of dyads, since according to Walther (1979, p. 79), sign classes can be understood as sets of intersections of pairs of dyadic sign sets:

   (3.1 2.1) $\cap$ (2.1 1.1) = (3.1 2.1 1.1)
   (3.1 2.1) $\cap$ (2.1 1.2) = (3.1 2.1 1.2)
   ...
   (3.3 2.3) $\cap$ (2.3 1.3) = (3.1 2.3 1.3)

We thus conclude that the 10 sign classes are only a structural fragment of the 27 sign classes, and hence a complete semiotic organ has to be based on these 27 sign classes and their dual reality thematics.

2. Sign classes, reality thematics and their transpositions

Since now all possible transpositions of the abstract sign structure

(3.a 2.b 1.c)

are allowed to be considered sign classes, we must abolish the constants in the above structure and write instead:

(a.b c.d e.f)

However, in semiotics, there is a Law of Triadicity that requires that the set (a., b., c.) must be mapped to the set {1., 2., 3.} so that this mapping is bijective. This Law of Triadicity implies that sets like

*(3.1 3.2 1.3)
*(2.1 2.2 1.1)
*(1.1 1.3 1.2)

are not considered sign classes. Assuming the validity of this Law of Triadicity, in replacing the dyads (a.b), (c.d) and (e.f) by sub-signs from the above given semiotic matrix, we are able to generate all of the 27 sign mentioned in the last chapter. Since each sign class has its dual reality thematic, we get as abstract scheme of semiotic representation:

(a.b c.d e.f) × (f.e d.c b.a).

However, at this point we have to remember again that each sign class can appear in 6 transpositions, which is also true for their reality thematics. Hence the above scheme of semiotic representation is but a structural fragment of the complete semiotic representation system in the same way as the 10 sign classes are but a structural fragment of the 27 sign classes. We therefore get the following complete system of semiotic representation:

(a.b c.d e.f) × (f.e d.c b.a)
(a.b e.f c.d) × (d.c f.e b.a)
(c.d a.b e.f) × (f.e b.a d.c)
(c.d e.f a.b) × (b.a f.e d.c)
(e.f a.b c.d) × (d.c b.a f.e)
(e.f c.d a.b) × (b.a d.c f.e)

Since all 27 sign classes and reality thematics fulfill this system of semiotic representation, we get a total of $6 \cdot 27 = 162$ sign classes and thus $2 \cdot 162 = 324$ sets of semiotic representation in a semiotic system, in which the Law of Inclusive Trichotomic Order is abolished and in which all the previously defined types of triadic orders, i.e. the transpositions, are allowed.

3. Symmetric sign classes

Amongst these total amount of 162 instead of 10 sign classes we are now interested in those exhibiting types of symmetry. As Bense (1992) had pointed out, in the system of the 10 sign classes there are only the following two types of symmetry:

1. (3.1 2.2 1.3) × (3.1 2.2 1.3)
2. (3.3 2.2 1.1) × (1.1 2.2 3.3)

Type 1 is fully symmetric since the reality thematic is identical with the sign class. Type 2 is mirror-symmetric since the sub-signs of the reality thematic appear in the inverted order of the sub-signs of the sign class. But type 1 shows in addition symmetry inside of both sign class and reality thematic:

3. (3.1 2. × .2 1.3) × (3.1 2. × 2. 1.3)

However, this type of "inside-symmetry" appears not only inside of, but also between sign classes and reality thematics:

(3.1 2.3 1.3) ×
‖ ╳ ‖
(3.1 3.2 1.3)

Thus sign classes, reality thematics and their transpositions can be either fully symmetric, inside-symmetric, mirror-symmetric or a combination of these symmetries (for example, fully symmetric structures are always both inside-symmetric and mirror-symmetric).

In order to recognize symmetric semiotic structures (which we shall underline in the following), we now present the full list of the 27 sign classes together with their 6 transpositions and their 6 reality thematics (which we shall write in the second line of each sign class):

(3.1 2.1 1.1)×	(3.1 1.1 2.1)×	(2.1 3.1 1.1)×	(2.1 1.1 3.1)×	(1.1 3.1 2.1)×	(1.1 2.1 3.1)×
(1.1 1.2 1.3)	(1.2 1.1 1.3)	(1.1 1.3 1.2)	(1.3 1.1 1.2)	(1.2 1.3 1.1)	(1.3 1.2 1.1)
(3.1 2.1 1.2)×	(3.1 1.2 2.1)×	(2.1 3.1 1.2)×	(2.1 1.2 3.1)×	(1.2 3.1 2.1)×	(1.2 2.1 3.1)×
(2.1 1.2 1.3)	(1.2 2.1 1.3)	(2.1 1.3 1.2)	(1.3 2.1 1.2)	(1.2 1.3 2.1)	(1.3 1.2 2.1)
(3.1 2.1 1.3)×	(3.1 1.3 2.1)×	(2.1 3.1 1.3)×	(2.1 1.3 3.1)×	(1.3 3.1 2.1)×	(1.3 2.1 3.1)×
(3.1 1.2 1.3)	(1.2 3.1 1.3)	(3.1 1.3 1.2)	(1.3 3.1 1.2)	(1.2 1.3 3.1)	(1.3 1.2 3.1)
(3.1 2.2 1.1)×	(3.1 1.1 2.2)×	(2.2 3.1 1.1)×	(2.2 1.1 3.1)×	(1.1 3.1 2.2)×	(1.1 2.2 3.1)×
(1.1 2.2 1.3)	(2.2 1.1 1.3)	(1.1 1.3 2.2)	(1.3 1.1 2.2)	(2.2 1.3 1.1)	(1.3 2.2 1.1)
(3.1 2.2 1.2)×	(3.1 1.2 2.2)×	(2.2 3.1 1.2)×	(2.2 1.2 3.1)×	(1.2 3.1 2.2)×	(1.2 2.2 3.1)×
(2.1 2.2 1.3)	(2.2 2.1 1.3)	(2.1 1.3 2.2)	(1.3 2.1 2.2)	(2.2 1.3 2.1)	(1.3 2.2 2.1)

(3.1 2.2 1.3)× (3.1 2.2 1.3)	(3.1 1.3 2.2)× (2.2 3.1 1.3)	(2.2 3.1 1.3)× (3.1 1.3 2.2)	(2.2 1.3 3.1)× (1.3 3.1 2.2)	(1.3 3.1 2.2)× (2.2 1.3 3.1)	(1.3 2.2 3.1)× (1.3 2.2 3.1)
(3.1 2.3 1.1)× (1.1 3.2 1.3)	(3.1 1.1 2.3)× (3.2 1.1 1.3)	(2.3 3.1 1.1)× (1.1 1.3 3.2)	(2.3 1.1 3.1)× (1.3 1.1 3.2)	(1.1 3.1 2.3)× (3.2 1.3 1.1)	(1.1 2.3 3.1)× (1.3 3.2 1.1)
(3.1 2.3 1.2)× (2.1 3.2 1.3)	(3.1 1.2 2.3)× (3.2 2.1 1.3)	(2.3 3.1 1.2)× (2.1 1.3 3.2)	(2.3 1.2 3.1)× (1.3 2.1 3.2)	(1.2 3.1 2.3)× (3.2 1.3 2.1)	(1.2 2.3 3.1)× (1.3 3.2 2.1)
(3.1 2.3 1.3)× (3.1 3.2 1.3)	(3.1 1.3 2.3)× (3.2 3.1 1.3)	(2.3 3.1 1.3)× (3.1 1.3 3.2)	(2.3 1.3 3.1)× (1.3 3.1 3.2)	(1.3 3.1 2.3)× (3.2 1.3 3.1)	(1.3 2.3 3.1)× (1.3 3.2 3.1)
(3.2 2.1 1.1)× (1.1 1.2 2.3)	(3.2 1.1 2.1)× (1.2 1.1 2.3)	(2.1 3.2 1.1)× (1.1 2.3 1.2)	(2.1 1.1 3.2)× (2.3 1.1 1.2)	(1.1 3.2 2.1)× (1.2 2.3 1.1)	(1.1 2.1 3.2)× (2.3 1.2 1.1)
(3.2 2.1 1.2)× (2.1 1.2 2.3)	(3.2 1.2 2.1)× (1.2 2.1 2.3)	(2.1 3.2 1.2)× (2.1 2.3 1.2)	(2.1 1.2 3.2)× (2.3 2.1 1.2)	(1.2 3.2 2.1)× (1.2 2.3 2.1)	(1.2 2.1 3.2)× (2.3 1.2 2.1)
(3.2 2.1 1.3)× (3.1 1.2 2.3)	(3.2 1.3 2.1)× (1.2 3.1 2.3)	(2.1 3.2 1.3)× (3.1 2.3 1.2)	(2.1 1.3 3.2)× (2.3 3.1 1.2)	(1.3 3.2 2.1)× (1.2 2.3 3.1)	(1.3 2.1 3.2)× (2.3 1.2 3.1)
(3.2 2.2 1.1)× (1.1 2.2 2.3)	(3.2 1.1 2.2)× (2.2 1.1 2.3)	(2.2 3.2 1.1)× (1.1 2.3 2.2)	(2.2 1.1 3.2)× (2.3 1.1 2.2)	(1.1 3.2 2.2)× (2.2 2.3 1.1)	(1.1 2.2 3.2)× (2.3 2.2 1.1)
(3.2 2.2 1.2)× (2.1 2.2 2.3)	(3.2 1.2 2.2)× (2.2 2.1 2.3)	(2.2 3.2 1.2)× (2.1 2.3 2.2)	(2.2 1.2 3.2)× (2.3 2.1 2.2)	(1.2 3.2 2.2)× (2.2 2.3 2.1)	(1.2 2.2 3.2)× (2.3 2.2 2.1)
(3.2 2.2 1.3)× (3.1 2.2 2.3)	(3.2 1.3 2.2)× (2.2 3.1 2.3)	(2.2 3.2 1.3)× (3.1 2.3 2.2)	(2.2 1.3 3.2)× (2.3 3.1 2.2)	(1.3 3.2 2.2)× (2.2 2.3 3.1)	(1.3 2.2 3.2)× (2.3 2.2 3.1)
(3.2 2.3 1.1)× (1.1 3.2 2.3)	(3.2 1.1 2.3)× (3.2 1.1 2.3)	(2.3 3.2 1.1)× (1.1 2.3 3.2)	(2.3 1.1 3.2)× (2.3 1.1 3.2)	(1.1 3.2 2.3)× (3.2 2.3 1.1)	(1.1 2.3 3.2)× (2.3 3.2 1.1)
(3.2 2.3 1.2)× (2.1 3.2 2.3)	(3.2 1.2 2.3)× (3.2 2.1 2.3)	(2.3 3.2 1.2)× (2.1 2.3 3.2)	(2.3 1.2 3.2)× (2.3 2.1 3.2)	(1.2 3.2 2.3)× (3.2 2.3 2.1)	(1.2 2.3 3.2)× (2.3 3.2 2.1)
(3.2 2.3 1.3)× (3.1 3.2 2.3)	(3.2 1.3 2.3)× (3.2 3.1 2.3)	(2.3 3.2 1.3)× (3.1 2.3 3.2)	(2.3 1.3 3.2)× (2.3 3.1 3.2)	(1.3 3.2 2.3)× (3.2 2.3 3.1)	(1.3 2.3 3.2)× (2.3 3.2 3.1)
(3.3 2.1 1.1)× (1.1 1.2 3.3)	(3.3 1.1 2.1)× (1.2 1.1 3.3)	(2.1 3.3 1.1)× (1.1 3.3 1.2)	(2.1 1.1 3.3)× (3.3 1.1 1.2)	(1.1 3.3 2.1)× (1.2 3.3 1.1)	(1.1 2.1 3.3)× (3.3 1.2 1.1)
(3.3 2.1 1.2)× (2.1 1.2 3.3)	(3.3 1.2 2.1)× (1.2 2.1 3.3)	(2.1 3.3 1.2)× (2.1 3.3 1.2)	(2.1 1.2 3.3)× (3.3 2.1 1.2)	(1.2 3.3 2.1)× (1.2 3.3 2.1)	(1.2 2.1 3.3)× (3.3 1.2 2.1)

(3.3 2.1 1.3) × (3.1 1.2 3.3)	(3.3 1.3 2.1)× (1.2 3.1 3.3)	(2.1 3.3 1.3)× (3.1 3.3 1.2)	(2.1 1.3 3.3)× (3.3 3.1 1.2)	(1.3 3.3 2.1)× (1.2 3.3 3.1)	(1.3 2.1 3.3)× (3.3 1.2 3.1)
(3.3 2.2 1.1)× (1.1 2.2 3.3)	(3.3 1.1 2.2)× (2.2 1.1 3.3)	(2.2 3.3 1.1)× (1.1 3.3 2.2)	(2.2 1.1 3.3)× (3.3 1.1 2.2)	(1.1 3.3 2.2)× (2.2 3.3 1.1)	(1.1 2.2 3.3)× (3.3 2.2 1.1)
(3.3 2.2 1.2)× (2.1 2.2 3.3)	(3.3 1.2 2.2)× (2.2 2.1 3.3)	(2.2 3.3 1.2)× (2.1 3.3 2.2)	(2.2 1.2 3.3)× (3.3 2.1 2.2)	(1.2 3.3 2.2)× (2.2 3.3 2.1)	(1.2 2.2 3.3)× (3.3 2.2 2.1)
(3.3 2.2 1.3)× (3.1 2.2 3.3)	(3.3 1.3 2.2)× (2.2 3.1 3.3)	(2.2 3.3 1.3)× (3.1 3.3 2.2)	(2.2 1.3 3.3)× (3.3 3.1 2.2)	(1.3 3.3 2.2)× (2.2 3.3 3.1)	(1.3 2.2 3.3)× (3.3 2.2 3.1)
(3.3 2.3 1.1)× (1.1 3.2 3.3)	(3.3 1.1 2.3)× (3.2 1.1 3.3)	(2.3 3.3 1.1)× (1.1 3.3 3.2)	(2.3 1.1 3.3)× (3.3 1.1 3.2)	(1.1 3.3 2.3)× (3.2 3.3 1.1)	(1.1 2.3 3.3)× (3.3 3.2 1.1)
(3.3 2.3 1.2)× (2.1 3.2 3.3)	(3.3 1.2 2.3)× (3.2 2.1 3.3)	(2.3 3.3 1.2)× (2.1 3.3 3.2)	(2.3 1.2 3.3)× (3.3 2.1 3.2)	(1.2 3.3 2.3)× (3.2 3.3 2.1)	(1.2 2.3 3.3)× (3.3 3.2 2.1)
(3.3 2.3 1.3)× (3.1 3.2 3.3)	(3.3 1.3 2.3)× (3.2 3.1 3.3)	(2.3 3.3 1.3)× (3.1 3.3 3.2)	(2.3 1.3 3.3)× (3.3 3.1 3.2)	(1.3 3.3 2.3)× (3.2 3.3 3.1)	(1.3 2.3 3.3)× (3.3 3.2 3.1)

As one can see, some of the transpositions of certain sign classes can be symmetric although their proper sign classes are not. Using our tri-partite classification for semiotic symmetry, we thus get the following types:

1. Fully symmetric semiotic structures:

(3.1 2.2 1.3)× (3.1 2.2 1.3)	(1.3 2.2 3.1)× (1.3 2.2 3.1)	(2.1 3.3 1.2)× (2.1 3.3 1.2)
(3.2 1.1 2.3)× (3.2 1.1 2.3)	(2.3 1.1 3.2)× (2.3 1.1 3.2)	(1.2 3.3 2.1)× (1.2 3.3 2.1)

Therefore, in a semiotics that is not only based on a fragment of its representation system, there are 6 and not only 1 type (as Bense 1992 was assuming) of fully symmetric structures.

2. Inside-symmetric structures:

(2.1 3.1 1.2)× (2.1 1.3 1.2)	(1.2 3.1 2.1)× (1.2 1.3 2.1)	(3.1 2.1 1.3)× (3.1 1.2 1.3)	(1.3 2.1 3.1)× (1.3 1.2 3.1)
(3.1 2.3 1.3)× (3.1 3.2 1.3)	(1.3 2.3 3.1)× (1.3 3.2 3.1)	(3.2 1.2 2.3)× (3.2 2.1 2.3)	(2.3 1.2 3.2)× (2.3 2.1 3.2)
(3.2 1.3 2.3)× (3.2 3.1 2.3)	(2.3 1.3 3.2)× (2.3 3.1 3.2)		

These 10 inside-symmetric types that are lacking in the system of the 10 sign classes show an intermediary position between full and mirror-symmetry whereby the sub-sign in the middle position of each sign class returns in its dual form in the reality thematic.

3. Mirror-symmetric structures

(3.1 2.2 1.1)×	(3.1 1.1 2.2)×	(2.2 3.1 1.1)×	(2.2 1.1 3.1)×	(1.1 3.1 2.2)×	(1.1 2.2 3.1)×
(1.1 2.2 1.3)	(2.2 1.1 1.3)	(1.1 1.3 2.2)	(1.3 1.1 2.2)	(2.2 1.3 1.1)	(1.3 2.2 1.1)
(3.2 2.2 1.1)×	(3.2 1.1 2.2)×	(2.2 3.2 1.1)×	(2.2 1.1 3.2)×	(1.1 3.2 2.2)×	(1.1 2.2 3.2)×
(1.1 2.2 2.3)	(2.2 1.1 2.3)	(1.1 2.3 2.2)	(2.3 1.1 2.2)	(2.2 2.3 1.1)	(2.3 2.2 1.1)
(3.3 2.1 1.1)×	(3.3 1.1 2.1)×	(2.1 3.3 1.1)×	(2.1 1.1 3.3)×	(1.1 3.3 2.1)×	(1.1 2.1 3.3)×
(1.1 1.2 3.3)	(1.2 1.1 3.3)	(1.1 3.3 1.2)	(3.3 1.1 1.2)	(1.2 3.3 1.1)	(3.3 1.2 1.1)
(3.3 2.2 1.1)×	(3.3 1.1 2.2)×	(2.2 3.3 1.1)×	(2.2 1.1 3.3)×	(1.1 3.3 2.2)×	(1.1 2.2 3.3)×
(1.1 2.2 3.3)	(2.2 1.1 3.3)	(1.1 3.3 2.2)	(3.3 1.1 2.2)	(2.2 3.3 1.1)	(3.3 2.2 1.1)
(3.3 2.2 1.2)×	(3.3 1.2 2.2)×	(2.2 3.3 1.2)×	(2.2 1.2 3.3)×	(1.2 3.3 2.2)×	(1.2 2.2 3.3)×
(2.1 2.2 3.3)	(2.2 2.1 3.3)	(2.1 3.3 2.2)	(3.3 2.1 2.2)	(2.2 3.3 2.1)	(3.3 2.2 2.1)
(3.3 2.2 1.3)×	(3.3 1.3 2.2)×	(2.2 3.3 1.3)×	(2.2 1.3 3.3)×	(1.3 3.3 2.2)×	(1.3 2.2 3.3)×
(3.1 2.2 3.3)	(2.2 3.1 3.3)	(3.1 3.3 2.2)	(3.3 3.1 2.2)	(2.2 3.3 3.1)	(3.3 2.2 3.1)
(3.3 2.3 1.1)×	(3.3 1.1 2.3)×	(2.3 3.3 1.1)×	(2.3 1.1 3.3)×	(1.1 3.3 2.3)×	(1.1 2.3 3.3)×
(1.1 3.2 3.3)	(3.2 1.1 3.3)	(1.1 3.3 3.2)	(3.3 1.1 3.2)	(3.2 3.3 1.1)	(3.3 3.2 1.1)

In a semiotics that is structurally complete, we thus get 42 types of mirror-symmetry and not only 1 type as Bense (1992, p. 40) assumed. All together, this makes 6 + 10 +42 = 58 and thus 36% of symmetric semiotic structures in the total of 162 sign classes.

4. Identity, sameness and divergence

The three symmetric types are characterized by the fact that the structure of the sign classes is repeated up to a certain degree in their respective reality thematics. While sign class and reality thematic are identical in the fully symmetric type, the sub-sign in the middle position of the sign class is inverted in the reality thematic of the inside-symmetric type and vice versa, and the sub-signs of all positions are inverted in the mirror-symmetric type. Thus there is a loss of identity represented by these schemes of semiotic representation together with increasing mirror-symmetry:

Full symmetry	→	Inside-symmetry	→	Mirror-symmetry
	decreasing symmetry		decreasing symmetry	
(3.1 2.2 1.3)×	→	(3.1 2.1 1.3)×	→	(3.3 2.2 1.1)×
(3.1 2.2 1.3)	loss of identity	(3.1 1.2 1.3)	loss of identity	(1.1 2.2 3.3)

Therefore the degree of similarity between a sign class and its reality thematic is restricted by full symmetry at the one end and by mirror-symmetry at the other. It is thus interesting that Bense remarked about the sign class (3.3 2.2 1.1) that "this main semiosis (...) must be considered an abstractive sign process of maximal and evenly increasing abstraction and semioticity" (1975, p. 92). Therefore, (3.3 2.2 1.1) and the other mirror-symmetric sign classes mark the biggest possible types of diversity existing in a semiotic system.

While the 10 sign classes that respect the Law of Inclusive Trichotomic Order are connected with the fully identical sign class (3.1 2.2 1.3) in at least one sub-sign (Walther 1982), amongst the 27 sign classes there are 8 sign classes that are not connected with this sign class. Moreover, only a part of the 10 and 27 sign classes, respectively, is connected with the maximally divergent sign class (3.3 2.2 1.1), so that amongst the 27 sign classes there are several sign classes that are neither connected with (3.1 2.2 1.3) nor with (3.3 2.2 1.1). From this observation it follows that in the complete semiotic system with its 27 sign classes there are several different semiotic degrees of sameness relative to (3.1 2.2 1.3), which is the sign class for the sign itself, as intermediary state between identity and divergence.

Thus increasing mirror-symmetry is the same as increasing divergence in semiotic systems. Bigger divergence than expressed in the mirror-symmetric relations between a sign class and its reality thematic is not possible in semiotics, since the Law of Triadicity requires that in all three positions of a sign class there must be a sub-sign from each triadic value so that all three triadic values are represented. We thus get:

$$\begin{tikzcd}
\text{Full symmetry} \arrow[r] \arrow[d, leftrightarrow] & \text{Inside-symmetry} \arrow[r] \arrow[d] & \text{Mirror-symmetry} \arrow[d, leftrightarrow] \\
\text{Identity} \arrow[r] & \text{Sameness} \arrow[r] & \text{Divergence}
\end{tikzcd}$$

Since among the 162 sign classes there are 58 symmetric classes, the other 104 sign classes are situated between identity as expressed by fully symmetric sign classes and sameness as expressed by inside-symmetric sign classes on the one side and between sameness and divergence as expressed by mirror-symmetric sign classes on the other side.

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