

## FROM THE FORMATION OF THE IMAGE TO THE CRYSTALLIZATION OF THE IDEA

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<p>1. <i>aggregate states</i> of substances - <b>gas, liquid and solid</b> Solids: amorphous (without form) or with a <i>crystalline structure</i></p>	<p>2. <b>Crystallization</b> - formation... "as it were through a leap, which transition is also called <i>crystallization</i>. Many salts as well as stones that have a crystalline figure are generated in the same way from some sort of earth which is, by means of who knows what sort of mediation, dissolved in water." (Kant, CPJ)</p>	<p>3. One and the same <b>structure</b> of generating - a 'universal', 'archetypal' model of each and every structure (or texture) as such - the <i>crystal grid</i>, in its <b>elementary cage</b> which can completely reproduce it (through successive translations).</p>
<p>8. <i>The idea</i> of the object (or of the hero-person) is <i>the form of the adequate, truthful (cognizable) understanding of the objectual essence of the sign-word</i>. In the crystallization of the form of the idea the role of the <i>representative model</i> develops into a <b>stereotype</b> or <b>ideal</b>. The core around which ideas crystallize, is the <b> motive</b> which fulfills a sense-formational function.</p>	<p>9. The <u>central component</u> of this presentation - the maker of types, genres and species of a mental content (full of sense) is the symbol. <u>There are no objects without their corresponding ideas and names. Together, these three form the linguistic sign which is a symbol</u>, for the relations between them are symbolic. Therein lies the symbol's value, that it serves for giving rationality to thought and behaviour and enables us to predict the future" (Peirce, EG).</p>	<p>4. Symmetric types as such: (<i>mirror</i>) <i>axial</i> and <i>central-radial</i> (or <i>concentric</i>). Relations that repeat themselves, such as the so-called 'golden ratio', are based on <b>proportionality</b> - the main characteristics of any spatial and objectual <b>form</b>, as well as of any linear and temporal formation. Any formation has <b>compositional</b> and/or <b>textual</b> characteristics.</p>

<p>7. <i>In the object's structure there is no principal distinction between real and fictional heroes, between the hero's biography and the autobiography of an ordinary man, or between human beings and things.</i> What is specific about the <b>figure of the hero</b> is that it is formed in combination with a narrative about him. A typical representative model is added to the typical formation in a typical (con)text. Images of the object and the hero are formed through the <b>representative model</b>.</p>	<p>6. The integral (ideal) <b>objectual image</b> or <b>figure</b> of the object is the image of what is typical in the object with the necessary and sufficient characteristics for grasping it. For denoting an objectual image or figure, we use the term <b>figure</b> which means <i>silhouette and external shape, as well as image and eidos</i>.</p>	<p>5. <b>Schemas</b> and <b>forms</b> are necessary and sufficient conditions for the formation of any solid object, artefact, paragon of beauty, as well as any other representation of the imagination - and of objects and any other beings, including humans. <i>The schema</i> is equal to a unit or a <b>numerically distinct thing (con)figuration (formation)</b> with (external and internal) boundaries, but still without determined qualities.</p>
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### *From the formation of the image to the crystallization of the idea*

1. It is well-known from physics and praxis that there are three possible **aggregate physical states: gas, liquid and solid**. Solids are amorphous (without form, with a non-structured molecular composition, such as resin or glass) or a *crystalline structure*.

Another essential difference between amorphous and real solids is that the transformation of amorphous solids into another aggregate state happens gradually, as with wax, viz they have no temperature point of melting. As you can see, a key-term for understanding the process of real (crystal) solid formation is the point of transition from one aggregate state to another.

2. What Kant says about **Crystallization** as a comparative base between aesthetics in nature and in art:

"[n]ature displays everywhere in its free formations not so much mechanical tendency to the generation of forms that seem as if they had been made for the aesthetic use of our power of judgment without giving us the slightest ground to suspect that it requires for this anything more than its mechanism, merely

as nature, by means of which it can be purposive for our judging even without being based on any idea. By a **free formation of nature**, however, I understand that by which, from a **fluid at rest**, as a result of the evaporation or separation of a part of it (sometimes merely of the caloric), the rest assumes upon solidification a determinate shape or fabric (figure or texture) which, where there is a specific difference in the matter, is different, but if the matter is the same is exactly the same. [...]

The formation in such a case takes place through **precipitation**, i.e., through a sudden solidification, not through a gradual transition from the fluid to the solid state, but as it were through a leap, which transition is also called **crystallization**. The most common example of this sort of formation is freezing water, in which straight raylets of ice form first, which then join together at angles of 60 degrees, while others attach themselves at every point in exactly the same way, until everything has turned to ice, so that during this time, the water between the raylets of ice does not gradually become more viscous, but remains as completely fluid as it would be if it were at a much higher temperature, and yet is fully as cold as ice. [...] Many salts as well as stones that have a crystalline figure are generated in the same way from some sort of earth which is, by means of who knows what sort of mediation, dissolved in water." (Kant, CPJ, §58:348-9, engl. trsl. by P. Guyer, CUP 2000)

3. Crystals are characterized with absolutely one and the same **structure** of generating. Probably it is an 'universal', 'archetypal' model of each and every structure (or texture) as such - a structure known as the *crystal grid*. This model is a spatial periodic arrangement of atoms, ions or molecules in crystal in its **elementary cage** which can completely reproduce it (through successive translations). I. e., There is a so-called compositional symmetry of crystals as atoms (internal form), whereas the external form and qualities of the crystals, are that crystals can coincide with themselves and are reproducible. Crystal structures are in only (6-7 groups in 14 types possible) symmetric forms - *polygonal, lamellate, needle-shaped, skeleton-shaped, dendrites, pen-shaped...* They are "radial" of course (or needle-shaped as a simple snow-flake) or "chain-like" (if they are regarded as dendrite or skeleton-shaped formations) but they are never unconnected. It suffices to consult any encyclopedia.

4. Symmetric forms of crystal structures correspond to **symmetric types** as such - in nature and art (aesthetic), in mathematics (structural), as well as cultural types: (*mirror*) *axial* and *central-radial* (or concentric). Solids'

symmetry is their main invariant characteristic, founded in the so-called "physical law of preserving". Viz, symmetry exists between different points, between figures and (solid) bodies and between internal and external form and structure, as well. Just as in crystals - it is a kind of "grammar" of nature.

Symmetry is the "measure" or creative, developing and visual (or, at least, in aesthetic evaluation) qualitative-quantitative integrity of any unit. Together with relations that are constantly repeating themselves, as the so-called 'golden ratio', they are based on proportionality - functional and determined parts of the whole unit of the simplest type. Symmetry and proportionality are the main characteristics of any spatial and objectual **form**, as well as of any linear and temporal **formation**. These are not structural but compositional characteristics of any given unit.

Any formation has *compositional* and/or *(con)textual* characteristics, as far as compositional characteristics do not transmute from one to another, but are compositional factors namely because of their clear distinction. (Con)textual factors, on the contrary, transmute each other in two directions, as shown by Mukarzhovsky:

a	b	c	d	e
	a	b	c	d
		a	b	c
			a	b
				a

from which appears then with finalization of the whole sequence (gradually given before) accumulate simultaneously in the opposite order... As long as context is incomplete, its complex sense is still undetermined, but the striving for integral contextual sense is accompanied it from the first word. Attention is directed to the whole, in the context, as well as in the form.

For example, a given (poetic) work of art can be regarded both as compositional and (con)textual, but even in any of its fragments, its structure appears as a pure correlation (with hierarchization) between its elements. In the case of literary works of art, it is language as a sign-system, as in the plastic arts and (natural) objects which depend on material essence, for instance, the grain size of the stone determining the work's specific fracture.

5. From the above, we can see that the structure on the base of any distinctive wholeness, regarded as *form* or *schema*. (silhouette, skeleton) is, in minimal quality determination, positive (+, in harmony) or negative (-, in contradiction). That is the basic characteristic of any structure: in works of art,

as well as in biological and physical structures. *Schemas* and *forms* are necessary and sufficient conditions for the formation of any solid object, artefact, paragon of beauty, as well as any other representation of the imagination - and of objects and any other beings, including humans - from real to fictional or mythic.

A schema is a clearly drawn "visible" silhouette with a specific "internal" skeleton or carcass of the object, dividing it, first of all, from the background of the others - all things left as a something whole and also from the background of the others' different silhouettes and, finally - as a representative of all others like it. On a pure logical plane, *the schema* is equal to a unit or a *numerically distinct thing (con)figuration (formation)* with (external and internal) boundaries, but still without determined qualities.

Such a distinct thing can be regarded as a geometrical point in space or as absolutely (qualitative) units in a given correlation between them. Mathematical multitude theory (Cantor) deals precisely with the problem of unit-formation, with creating or constituting limited distinct (objects) entire units.

Such units in some correlations are regarded as the structure (of some existing or hypothetical) system. Quality indetermination makes it possible for attention to be directed only to its organization, i. e. to structural correlations. It is a purely deductive mathematical approach which does not deal with the applicability in a given real system. Corresponding to any possible system is enough.

*Form* and logical *quality*, in closest interrelation, determine the object not only as an individual, but as characteristic. The main question here is, what exactly characterizes a given object, or which are its constituents, as well as its necessary and sufficient essential qualities. *Gestalt* psychology and mathematical *topology* (*Klein's groups*), or *invariants'* theory deal with this problem, examining the unchangeable or constant features of the object, which are its essential characteristics, constitutive of its form. (e.g. radius for circle).

6. The integral (ideal) *objectual image* or *figure* of the object is the image of what is typical in the object with the necessary and sufficient characteristics for grasping it. For denoting an objectual image or figure, we use the term *figure* which means *silhouette and external shape, as well as image*. Maybe the most suitable term for essential clarification of regarded here image-figure is the old concept of *eidosis*.

*Eidosis* means at the same time the 'external shape' of the object and 'its pure essence, idea'. An eidetic image supplies the transition from a concrete

sensible object to a mental generalization and vice versa (especially in an artistic image). An eidetic image is double-sized, which allows the fusion of heterogeneous essences in a whole entity: real with ideal (in cognition) and vice versa (in creative work), objectual and sensible, word-signed with implied (what is meant by). It combines subjective with objective, essential with possible, individual with general, ideal with real. An eidetic image permanently strives to *trans-form-ate* the object, to transform it into something different: complex in simple and vice versa, preserving all the sensitive tension between its poles and demonstrating diffusion between the different essences constituting it.

This is characteristic for an image in art. A word-image has its own specificity. It is not as visible-clear as a plastic art-image, but instead adds unity, reality and self-meanings of the word, nearly equal to its object.

*7. In the object's structure there is no principal distinction between real and fictional heroes, between the hero's biography and the autobiography of an ordinary man, or between human beings and things.*

What is specific about the *figure of the hero* is that it is formed in combination with a narrative about him. A typical representative model is added to the typical formation in a typical (con)text. Images of the object and the hero are formed through the **representative model**.

The role of the representative model is of extraordinary importance for understanding how objects are constituted from classes which are non-existing in reality and only possible-probable - fictional and miraculous as *fairies, witches, griffins*, extinct species, also very rare or endemic-exotic objects.

Schelling (1859) identifies works of art as symbols, because these are *hypotyposes*, modeling by means of their paragons. These figure are "exemplars of genus' which are not from series of common type" by public presentation.

*8. The idea* of the object (or of the hero-person) is the form of the adequate, truthful (cognizable) understanding of the objectual essence of the sign-word.

In the crystallization of the form of the idea the role of the representative model develops into a stereotype or ideal. The core around which ideas crystallize is the motive which fulfils a sense-formatational function of perceptible reality.

From a logical point of view, the idea as concept crystallizes on the base of number and quality, through term and category to the proper name. All these

terms strictly correspond to schema and form, through the representative model and figure-eidos to the animated image (hero) in idea as an intuitive objectual essential image. They are both expressed by means of a language symbol. Thus idea is equivalent to adequate, truthful (cognizable) meaning-understanding of the objectual essence of the sign-word in opposition to common word-meanings of language as veritable understandings of the objects or doxa. Beyond the idea, only the absolute (idea) is possible.

9. The central component of this presentation, expressing types, genres and species of a mental content (full of sense) is the symbol. Language signs' connections are deeply symbolic - obligatory, essential, cognizable and interpretative (theoretical), but necessarily contain iconicity (firstness) and indexicality (secondness) as constitutive or sign-forming.

Besides the discussed distinction between logical form and intuitive form as inexpressible sense-content forms we shall distinguish between these two and the semantic linguistic form - name, (possible) nomination or word in language as expression of the sense of all inexpressible forms. The main form of sense-expressive forms is the linguistic symbol, including concrete symbolic forms as: concrete symbol and terminus, expressed by symbolic sememe as a poly-semantic word comprising six types of word's meaning: concrete objectual (common) meaning, terminological (abstract) meaning, categorical grammar meaning, figurative metonymic meaning, image-metaphoric figurative meaning and personification-proposopoeic allegoric rhetoric meaning. These six types of word meanings, united in the symbolic sememe are linguistically expressible forms of sense and meaning in the real word of language as interpretative (semantic) expressive forms of all the other logical and figural forms of the sign.

The symbol is the maker of types, genres and species of a mental content (or words' meanings). Relations in signs are deeply symbolic - obligatory, essential, cognizable and interpretative (theoretical), but they necessarily contain iconicity and indexicality as constitutive or sign-forming constituents. There are no objects without their corresponding ideas and names. Together, these three form the linguistic sign, which is a symbol, for the relations between them are symbolic. Therein lies the symbol's value, that it serves for "giving rationality to thought and behavior and enables us to predict the future" (Peirce, EG).