

## Original Paper

# Semiotics of the Image: Addressing the Different Types of Mental Operation and Their Sematic Interpretation

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Received: May 13, 2020

Accepted: May 21, 2020

Online Published: May 25, 2020

doi:10.22158/eshs.v1n1p68

URL: <http://dx.doi.org/10.22158/eshs.v1n1p68>

### **Abstract**

*Our era is dominated by the prevailing presence of images. The spectator often identifies with the characters and aims to interpret the signs evoked by the objects, since every image is governed by codes. If we look at the history of image semiotics, we observe a cognitive and pragmatic approach. According to Kant, the images we receive from the environment are not simply reproductions but often creative productions based on patterns generated by the imagination. According to recent research in semiotics, we observe that the pragmatic approach is extended by a study of stimuli collected by the environment. On the other hand, Köhler's theory of Gestalt considers perception as a pre-conscious activity, linking visual semiology with the functional interpretation of perception. In addition, Tardy brings into focus strategies of visual communication by highlighting the semiotic status of represented objects. For this reason, it is essential to deepen the versatility of the field of semantic interpretation of a visual support from different types of mental operations. Finally, the semiological approach to the image with different types of mental operation will be able to generate a plural and original semantic interpretation through the creative exploitation of visual elements.*

### **Keywords**

*Image semiotics, semiotic and cognitive approach, Gestaltian perception, mental operations, semantic interpretation of an image*

## 1. Introduction

Images occupy an overwhelming place in today's life. The spectator tends to identify with the characters and interpret the signs evoked by the objects because every image is governed by codes. In this case, the viewer is confronted with an imaginary reality and is invited to develop a critical mind in order to counteract the psychological influence on the image. On the one hand, we are going to look at the semiotics of the image by carrying out both a cognitive and pragmatic approach. On the other hand, Köhler's theory of Gestalt will lead us to the idea that perception is unconsciously pre-constructed, a fact which will allow us to deepen the versatility of the field of semantic interpretation of a visual stimulus through different types of mental operations.

## 2. Semiotics of the Image: Cognitive and Pragmatic Approach

If we consider the history of schematism we shall notice that in his work entitled "Critique of the faculty of judging", Kant E. (1790) argues that there are two theories simultaneously: an empirical one with semantic value as well as a transcendental one (Kant, 1790, Introduction, VIII, pp. 949-952) (Note 1). In this aspect, the images we receive from the environment are not simply reproductions but often creative productions based on the schemas generated by the imagination.

Formigari, L. (1994, p. 18) points out Kant's empirical semiotics by emphasizing the productive function of images by linking the concept through the intuitive use of schemas (Note 2). "In contrast to images that are merely reproductions of empirical data, schemas are generated by the imagination, whose function is not only reproductive but productive (i.e., creative), according to an "art hidden in the depths of the soul" (Kant, 1787, p. 887) (Note 3). In this way, we can see that the patterns are distinguished from pure mental objects aimed at a simple reproduction of the image. Thus, signs facilitate the synthesis of original intuitive images through the use of imagination drawn from ideas hidden in the depths of the psyche.

According to recent research in semiotics, we observe that the pragmatic approach is extended by a study of stimuli collected from the environment concerning sensory-motor, social, technological and media semiotic mediations. According to Darras B. (2006), "The precursors in this field are Jean Piaget and Lev Vygotski, but also Jack Goody, Eleanor Rosch, George Lakoff, Mark Johnson and Ron Langacker. Today, the work of Jean-Paul Bronckart, Bernard Darras, Jean-Pierre Meunier and Daniel Peraya is moving in this direction" (Darras, 2006, p. 6) (Note 4).

## 3. Gestalt Theory and the Semantic Interpretation of an Image

On the one hand, it would be interesting to approach the theory of Gestalt advocated by Köhler (1938). Indeed, Köhler emphasized the idea that visual perception was limited to the external field only. However, it is essential to study the processes of mental perception and to relate visual semiology to the functional interpretation of perception. Köhler (1938) points out that "Whatever the process underlying

Gestalt perception, we know that it occurs pre-consciously, since the articulation of the visual field is produced at the same time as the contents of vision are given” (Köhler, 1938, p. 60) (Note 5). Moreover, St. Martin F. (1990) highlights perceptive activity, which is unconsciously preconstructed even in Freud’s work. “According to Freudian terminology, perception takes place at the level of the preconscious, i.e., even if it is likely to become the object of conscious knowledge, perceptive activity does not, in most cases, reach this level and remains unconscious” (St. Martin, 1990, p. 13) (Note 6). On the other hand, Tardy Michel (1989) focuses interest on strategies of visual communication by highlighting the semiotic status of represented objects. For Tardy, visual communication presupposes the shared possession of a triple culture: a culture of knowledge, a culture of thought, a culture of images. “In the same image, the same visual element can, depending on the circumstances, be either a simulacrum (identification), a clue (inference), a sign (decoding), or a symbol (interpretation). The encounter of an image implies, therefore, a decision regarding its semiotic functionality” (Tardy, 1989, p. 70) (Note 7).

If we wish to discern the meaning existing in the semantic interpretation of an image, we can distinguish six (6) different types of mental processes in order to exploit the versatility of mental signs. First, the operation of perception is related to the form represented by an object, a person or a setting and the interpretation of the sign related to the signified.

Secondly, the operation of identification refers to the brain imaging through the idea of an absent object, which can be represented in the imaging consciousness, in contrast with the perceptive consciousness. In this case, similarity or metaphor or even a very strong and powerful perception can be presented when evoking several objects in relation to a single inductive object. As Stöckl H. points out (2004), “Most importantly, the image’s metaphoric nature is realized by a morphing technique which allows for the carefully engineered blending of visual features. As a result, the reader gets a very realistic impression of an imaginary object, which plays tricks on his perception (Stöckl, 2004, p. 24) (Note 8). Moreover, the inference operation allows a person to infer ideas from non-existent data. It is possible to classify three (3) categories of inferences: a) spatial inferences, by completing what is not shown, b) temporal inferences to refer to later or earlier moments, c) psychological inferences to resort to the expression of emotions. It is interesting to deprive oneself of floating information or incorrect inferences.

Subsequently, the decoding operation focuses on the choice of an object from a general image, taking into consideration clues and signs. In this way, codes are generated by the existence of extra-visual codes from everyday life ones; specifically, visual codes drawn solely from the image, and semiogenesis by the birth of unprecedented codes by invention or even by combination of edited codes. In this case, semiogenesis derives either from the unexpected birth of a new original code or from the association of already instituted codes, which result from the combination of old semiogenesis.

On the other hand, the idea-association operation distinguishes three mental mechanisms: a) Reacting

by similarity (resemblance), b) Reacting by contiguity by associating convergent or even divergent elements, c) Reacting by contrast by displaying lateral thinking. With regard to areas of idea-association, it is important to regulate the proliferation of ideas either evoked by repetition in the social areas or emitted by invention in the personal areas.

Finally, isotopy resolution gives rise to plural interpretations by seeking cohesive and coherent meaning through an effective selection during the process of evaluating ideas and selecting ideas which can be deployed across the evocation of disparate and heterogeneous elements and the multiple interpretations of context.

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**Table 1. Semiotics of the Image: Six (6) Different Types of Mental Operation and Their Semantic Interpretation**

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**1. OPERATION OF PERCEPTION (FORM)**

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Material variations

Gestalten (Shape)

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**2. IDENTIFICATION OPERATION**

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a. The idea of an absent + a represented object/Representation of an object by the imaging consciousness as opposed to the perceptive consciousness

Similarity / Metaphor

b. Errors in identification / Images of objects versus real objects

Induction (1 inductive object - 3 target objects)

A very strong and powerful perception

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**3. INFERENCE OPERATION**

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To infer: to overstep the given; to construct and deduce what is not evident

**Three (3) Categories of Inference**

a. Spatial inferences: filling in what is not shown

b. Temporal inferences: referring to later or earlier moments of time

c. Psychological inferences: using expression of emotions. Relationship of adjacency: adherence, metonymy

Errors

a. Floating information

b. Incorrect inferences

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**4. DECODING OPERATION**

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Sign/Language: Moving from the general image to the focus of a specific object by taking into consideration clues and signs.

**a. Established codes:**

- Extra-visual codes (from the codes of everyday life)

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- Specific visual codes (just from the image)

**b. Semio genesis** (birth of new codes by invention or by combination of established codes)

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## **5. OPERATION OF ASSOCIATION OF IDEAS**

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Emergence of fantastic ideas: proliferation of ideas

### **Three (3) Mechanisms for associating ideas**

- a. Reacting by similarity (likeness)
- b. Reacting by contiguity: associating converging or even diverging elements
- c. Reacting by contrast: using lateral thinking

### **Idea association zones**

- a. Social areas (by repetition)
  - b. Personal areas (by invention)
  - c. Regulation of the association of ideas
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## **6. ISOTOPY RESOLUTION**

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Levels of overload: process of evaluating ideas and selecting ideas

Evocation of disparate and heterogeneous elements

Multiple interpretations of context: search for a cohesive and coherent meaning through an effective selection of disparate and heterogeneous elements

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As a result, the field of interpretation of ideas is multiplied by the fruitful exploitation of different types of mental operations through the cognitive and pragmatic approach of a visual support. Thus, Fisette (2006, p. 16) highlights a few examples of dynamic interpreters according to the triadic model. At the first level, there is an emotional interpreter, designating aesthetic pleasure (or boredom or emotional neutrality) (Note 9). Then there is the second energetic interpreter, designating the effort made to produce analysis and research. The third dynamic interpreter is called logic. In this case, the sign is strictly mental, aiming to recognize either associations and trans-associations or dis-associations since it goes directly from the image to the symbol. Finally, according to the hypo icon, this mental sign invites deviations and binds itself to the imaginary.

## **4. Discussion**

Ultimately, the semiotics of the image are characterized by a close correlation between the form of expression and the form of content by linking the signifier to the signified, which leads to a multiple interpretation by acting not only by denotation by evoking semio genesis but above all by associative connotation by resorting to complex mental operations, with a view to enriching the semantic interpretation with convergent, divergent and even original ideas. "Moreover, it is observed that the sequence of ideas by contiguity leads to original associations, emphasizing the appeal to the creative imagination. Finally, the scope of the interpretation of the inducing object suggested always remains

wide. Thus, the territory of the associated ideas remains unconquered and reveals the psychology and the inventiveness of the participants” (Efthimiadou, 2017, p. 58) (Note 10). Consequently, a semiological approach of the image can be encoding by different types of mental operation and generating a plural and an original semantic interpretation through the creative exploitation of visual supports.

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## Notes

Note 1. Kant, E. 1790: Introduction, VIII, 949-952.

Note 2. Formigari, L. 1994, p. 18.

Note 3. Kant, E. 1787, p. 887.

Note 4. Darras, B. 2006, p. 6.

Note 5. Köhler, 1938, p. 60.

Note 6. St. Martin, F. 1990, p. 13.

Note 7. Tardy, M. 1989, p. 70.

Note 8. St öckl, H. 2004, p. 24.

Note 9. Fisette, 2006, p. 16.

Note 10. Efthimiadou, 2017, p. 58.