

# ФІЛОСОФСЬКІ ПРОБЛЕМИ ЛОГІКИ

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## SOME ASPECTS OF EXEMPLIFICATION ROLE IN THE CONTEXT OF SIGN SYSTEMS

*One of the major problems in sign system is the way of denotation. Any character included in the system, has certain characteristics taking into account the opportunities of its combination with other characters (inscriptions, utterances) of the system. Signs are always directly related to subjects they denote. However, we should always remember that symbols are associates with both verbal and non-verbal ways of denotation. The latter include, for example, the pictorial image, motion or gesture. The level of abstractness in sign systems complicates denotation process itself. How, for example, should one show the cold character of a subject or express joy in non-verbal system of denotation? Is the expression of certain emotions equivalent to emotions themselves and is it always possible to change their expression into their illustration? Syntactic, semantic and pragmatic aspects are compulsory for constructing the scheme of any sign system. The main problem is rooted not in the plane of construction, but in the plane of functioning of the given system in which exemplification as a way of symbolizing, proposed by Nelson Goodman in notation theory, plays a key role.*

**Key words:** *N. Goodman's notation theory, exemplification, signs system of illustration, reference, abstract art.*

**Formulation of the problem.** In “Languages of Art: an Approach to a Theory of Symbols”, Nelson Goodman considers the general problem of how the representation operates, in other words, how signs on the paper are associated with various kinds of things in the world, e.g., photos, music and other types of identifiers. One of the main tasks is to determine what differentiates “a system of symbol notation” from other kinds of sign systems. The author’s detailed speculations consider the difference between language and non-verbal images. It is about painting, dances, sculpture. The notation theory proposed by Goodman pursues the idea that the graphics (painting) must be defined through the notion of essential (relevant) relative structural images.

It encourages the revision of some famous Goodman’s views on symbolic representation that will be **the goal of our study**.

**Analysis of the recent research and publications.** The researches of J.H. Kim, M. Mengel, C. Files, R. Shusterman, J. Coldron deal with some analysis aspects of identification theory of artworks, Goodman’s notation theory, exemplification concept. The works by T. Dmitriev, Y. Chaika, N. Arutiunova represent a definite interest in Russian speaking scientific literature.

**The main material.** Formulating the demands of notation theory, Goodman points out that “The symbol scheme of every notation system is notational, but not every symbol system with a notational scheme is a notational system. What distinguishes the notational systems from the others are certain features of the relationship obtaining between scheme and application. “Notation” is commonly used indifferently as short for either “notational scheme” or “notational system” and for brevity I shall often take advantage of this convenient vacillation where the context precludes confusion” [10, p. 130]. Asking “What, first, constitutes a notational scheme? he answers that “Any symbol scheme consists of characters, usually with modes of combining them to form others. Characters are certain classes of utterances or inscriptions or marks. (I shall use “inscription” to include inscriptions; an inscription is any mark—visual, auditory, etc.—that belongs to a character)” [10, p. 131]. The essential feature in the notation is that its elements can be interchanged without any syntactic actions, or more literally, that all signs of the characters should be syntactically equivalent. In other words, being an instance of one character in the notation they must be a sufficient condition to be exact copies of each other. Goodman specifies the syntax and semantic rules, and according to his theory, there are basic conditions that are necessary for the system of symbols to serve as a denotation:

1. The system should consist of characters (statements, inscriptions, signs), which form equivalence classes (symbols) on the basis of the fact that they can be exchanged without any syntactic action. The simplest example is “any” being as good as any other; characters must be indifferent and their elements should not be crossed, no sign qualifies as an instance more than once.

2. Characters should be “surely differentiated” (or “formulated”) in the sense that their disjunction can be checked and it excludes, particularly, the systems that are difficult to perceive, where any two (ordered) elements have one more element (a new one) between them.

3. Notational systems must be unambiguous.

4. Elements of the notational system should not be crossed.

5. Elements of the notational system should be finitely differentiable. For example, any system which is “semantically dense” forms two elements, together with another one.

Any language, written or not, should meet the syntax requirements of disjunction and differentiation; however, usual languages often violate semantic rules. Goodman writes that, concerning denotations in art, there are some issues that often cause irritation, penetrating deep into the theory of language and knowledge. He tries to solve the issue of possible notation for painting in “Languages of Art...” and “Way of Worldmaking” (Fact, Fiction and Forecast. Way of Worldmaking).

The use of language depends not only on the application of the rules, and the use of image does not depend on our ability to recognize visual similarity. Explaining the notation theory, Goodman introduces the concept of exemplification. The word “exemplification” is translated as “explaining by an example” in the dictionary of V.K. Muller [6, p. 263]; in our opinion, it is rather capacious meaning that reveals the features of this concept. Goodman determines that “exemplification is an important and widely used mode of symbolization in and out the art” [10, p. 52], “exemplification is possession plus reference” [10, p. 53]. Thus, for example, “Consider a tailor’s booklet of small swatches of cloth. These function as samples, as symbols, exemplifying certain properties. But, a swatch does not exemplify all its properties; it is a sample of color, weave, texture, and pattern, but not of size, shape, or absolute weight or value” [10, p. 54]. The pattern demonstrates only the example of qualities; we will discuss it as an illustrating element. However, an illustration is always limited.

Exemplification may be expressed by a scheme: “For example, if the elements (nodes of the diagram) are antecedently distinguished into two categories, A and B, and every single-headed arrow runs from an A to a B, then reference from an A to a B here is always denotation, reference from a B to an A exemplification. This general idea can be refined and elaborated to operate in some more complicated cases; but in others the distinction between denotation and exemplification may lose significant. It is pertinent only where there are two dominant opposing directions” [10, p. 58]. Goodman is absolutely correct in stressing the relevance of the scheme if there are two dominant directions. Otherwise, we get statement conversion but, as we know, conversion is not a transformation of equivalence. Exemplification is always an example of something, it is deeper than denotation. Thus, a story may be an example of what is written in pencil

Goodman writes: “Matters are further complicated by symbols that refer to themselves. A symbol that denotes itself also exemplifies itself, is both denote and exemplified by itself. “Word” is thus related to itself, and so are “short” and “polysyllabic”, but not “long” or “monosyllabic”. “Long” is a sample of “short”, “monosyllabic” denotes short words, and “short” both exemplifies and denotes short words”, defining self-reference in the following way:

a) If  $X$  exemplifies  $Y$ , then  $Y$  denotes  $X$ .

b)  $X$  and  $Y$  denote each other if and only if they exemplify each other.

c)  $X$  exemplifies  $Y$  if and only if  $X$  denotes  $Y$ .

d) If  $X$  exemplifies and is coextensive with  $Y$ , then  $X$  denotes and exemplifies  $X$  [10, p. 59].

The proposed options of illustration and denotation almost always operate in the language, but if we deal with non-verbal characters, the differences in the direction and exemplification are determined on the basis of formal features.

We'll try to give an example. If a pedestrian crossing is illustrated with "zebra", the "zebra" will denote the crosswalk. However, the crosswalk can be illustrated by not only "zebra" but signs, plates or something else. In our opinion, the concept "coextensive", meaning the same extension in space and time, plays a key role in the rules of reference feasibility. In other words, a subject and its illustration should be from one sign plane; with different semiotic or pragmatic fields, a sign and its denotation do not coincide and cannot be explained. After all, "Zebra" is only possible variant of many other ones for illustration.

Or, for example, in 1650, Velazquez painted "Portrait of Pope Innocent X" and, in 1953, Francis Bacon (1902-1992) painted a picture "Study after Velazquez's Portrait of Pope Innocent X". Pope Innocent X is recognized in each of the paintings; the portraits were definitely performed in different techniques; but, are they an example of exemplification? We suppose, yes. Not being coextensive, Velazquez's painting exemplifies Pope Innocent X, and "Study after Velazquez's Portrait of Pope Innocent X" – "Portrait of Pope Innocent X". Each of the proposed examples offers us a possible world created by means of symbols. In both cases, we deal with the alternative ways of denotation; and hence a different vision of the world often found in different sciences, in writers and artists' works.

Goodman often repeats that exemplification is a widely used method of symbolization in art and beyond. The image represents the object graphically and the representation can be named. Besides, there are representations pointing on nothing; there is nothing to do reference.

We afford ourselves not to agree with Goodman fully concerning his remarks with regards to abstract art. "Abstract painting, like created by Mondrian, says nothing, means nothing, shows nothing and is neither true nor false, but shows a lot" [2, p. 136], he writes in "World Making" adding somewhat below in the text, "Abstract painting, which depicts nothing and is not figurative at all, can express, and, thus, symbolize, feeling, emotion, idea" [2, p. 177]. Our disagreement with the fact that an abstract painting means nothing and shows nothing is expressed in the following action: the use of puzzles. They are needed to lay down a particular picture. If it is the image of an object or shape, most likely, we have no difficulties folding puzzles. It may be the painting of Raphael, Velasquez, Mondrian, and Kandinsky. The works of Mondrian deals with intersecting vertical and horizontal lines and their colour scheme. The same aspects may be observed with the paintings of Kandinsky. Triangle with an angle painted in a particular colour will form a core of the picture. And only, if we collect Malevich's "Black" or "Red Square" cut into a few pieces, we'll face with certain difficulties. What will we get as a result? The elements of puzzles themselves cannot be figured being equal squares or rectangles. Since the picture is painted in exactly this or that colour, without tints and shades, basically, it does not matter whether they are the elements of the conditionally right or left side, from the bottom or top of the picture. If we try to collect almost any of Pollock's paintings, it is also possible, because the fabric surface is not smooth of some colour, each work is structural; we can trace the movement of lines, strokes and patches of colour on it. We get somewhat similar variant folding Munch's "The Scream". There is a major figure on the canvas, around which the elements of puzzle will develop. However, Goodman is absolutely right concerning the fact that a picture shows, symbolizes feeling, emotion, idea.

A sign is often characterized in the basis of Pierce's definition; earlier definition can be found in Augustine. In the second book of "Christine Science", Augustine writes about the difference in understanding an object and a sign. "When speaking about objects, he writes, one should look for their essence in them themselves, but not for what they can else denote. ... I notice on the contrary about signs: one should look at not what signs themselves are, but what they denote. For a sign is generally an object that beyond its own type or form, acting on our senses, arouses the representation of other known objects in our mind; thus, e.g., having seen a trail, we imagine an animal having paved the trail..." [1, p. 67]. Classifying signs into natural and artificial ones, Christian theologian notices that "the essence natural ones are those which, in addition to representations of themselves, arouse the concept of another thing in us, by themselves but not according to anybody's will, connected with the meaning of this thing in them", the essence artificial or conventional signs are "those by which the living creatures express the soul movements,

feelings and thoughts by mutual consent. The purpose of using them is to pass and reflect through them in the soul of another one what is in the mind of the man giving a sign" [1, p. 69]. Today, the more natural discussion is about more sophisticated classifications of sign systems (e.g. of C.S. Peirce), however, Augustine's ideas in somewhat interpreted form are exactly read in V. Kandinsky's work "Concerning the Spiritual in Art", in the "Logic of Sensations" by Gilles Deleuze, and, naturally, they are met in Goodman's reasoning. It is abstract painting where the connection with denotation function is observed; the representative of so-called non-figurative art deals with not with a white surface which should be filled in with something by him, but he, primarily, should overcome standard sign character existing in his time and suggest his way of denotation and the illustration with an example.

A vivid example is the paintings of Kandinsky, Malevich, Pollock, Dali, Bacon. J Deleuze, analyzing the features of F. Bacon's painting, points out that classical painting has other relations with figuration and illustration than modern one. Quoting the artist, he notes that, on the one hand, illustrative and documentary function is assumed by photography; so, there is no need for modern painting, unlike classical one, to perform it. On the other hand, classical painting was stipulated by "religious opportunities" while modern painting is a godless game" [3, p. 25]. Why is Francis Bacon concerned with the function of photography? It is due to the fact that the photography "is dangerous not because it is figurative, but because it claims to *dominion over vision*, and, consequently, over painting", it is not an image of visible, it is what a modern man sees" [3, p. 29-30]. And abstract painting took its exceptional effort to wrest contemporary art from figuration [3, p. 30], Deleuze writes.

Goodman gives interesting explanations in using non-verbal signs. A gesture can denote or exemplify or both. Conductor's gestures, for example, denote sounds for a piece of music, but they do not sound themselves; sport gymnastics instructor, unlike conductor, offers patterns. His demonstrations illustrate the embodiment of necessary action properties, which will be performed in the class while his oral instructions will prescribe but will not show what should be done. The correct answer to his knee bend is squatting and the right answer to his cry "below" (even if with high voice) will be not to cry "below", but to bend your knees deeper. Nevertheless, since the demonstration is a part of instruction, it is not accompanied by the statement, but it can be replaced with it. Denotation is a sample of actions as predicative characteristic, showing itself.

The facial expression of any person may be associated with politeness or past discomfort. An artist or a composer must not have emotions, which he expresses in his work. However, what about the picture, for example, which is characterized as "sad"? Sadness as such (in one of its possible manifestations), the picture may not depict, but the colours used by an artist in his work can be characterized as "sad" or "happy". Can we identify that possible world which we get in painting or music? If it concerns iconic sign, most likely yes. We saw footprints in the snow, distinguished the traces left by a man from animal tracks and can suggest what an animal or a man, who left the trace, did and how it or he behaved.

In the chapter "A Difference in Domain", Goodman notices, that "in everyday talk we play at least and loose with word "express" as with word "represent". We can say, he continues, "that a picture expresses a feeling, a fact, an idea, or a personality" [10, p. 45.]. The author tries to overcome the formed ambiguity. The word "express" can be rather translated as "unambiguous" and "represent" – as "present, symbolize", although, there is a parallel problem of solving the difference between statement and presentation, on the one hand, and indication and illustration, on the other hand. Then, the difference may be looking for in the opposite direction: the expression may be more straight and direct than presentation. Expression is causatively associated with what is expressed. "A man is expressing sorrow" means that he is expressing sadness having this feeling. An actor should not be sad but he must be able to express sadness to such a degree to make me to feel sad. Black and white image expressing colour does not make me colourfully; and a portrait expressing courage and intellect can hardly impress the spectator with these qualities. Goodman sums up that "to express" can be used in those cases when it concerns feeling or other quality but not the examples of them. Expression may be less literal than presentation. A picture may express

warmth, and musical composition – colour or fragility. And Goodman makes a conclusion that expression is rather a sign than a copy. Let us agree with the author concerning this position; after all a sign always has conventional character.

Goodman gives an example: “If I ask the colour your house, you may say “red”, or you may show me a red paint-chip, or you may write “red” in red ink. You may, that is, respond with a predicate, with a simple, or with a combined predicate and sample” [10, p. 67]. The purpose is to achieve or preserve maximum similarity. If I point out an object and ask you to denote the object type, you may offer any variant from a wide range of answers.

And what about a situation when colour itself is not determined? Is there no name, no label for the colour? May we speak about exemplification in this case? Let us take a word “grey” concerning a man. In Russian and Ukrainian, the predicate “grey” supposes additional characteristics of age and life experience. In English, “grey” literally means “grey-headed” or the word “hoar” may be used; in Russian and Ukrainian, we may offer a synonymous row: wise, gray-haired, old, middle-aged, gray-haired, each element of which will be similar with the word “grey”.

The features of metaphor function have a special place in Goodman’s works. In “Metaphor as Moonlighting”, he writes “The oddity is that metaphorical truth is compatible with literal falsity; a sentence false when taken literally may be true when taken metaphorically, as in the case of “The joint is jumping” or “The Lake is a sapphire” [11, p. 175]. If it concerns usual exemplification, then it is possible to speak about metaphoric one. Therefore, the direction from A to B is understood as metaphoric exemplification, and from B to A – as metaphoric denotation. May a picture be literally grey or metaphorically grey? Is colour seen to us as literally or metaphorically cold? Metaphor is sometimes difficult involved into the possible catalogue of images as some images are not qualified as metaphoric. However, if metaphoric system of denotation is used, it takes place among alternative spheres. Both verbal and non-verbal denotations may be applied in figurative sense. The example is a caricature on a politician as a parrot or despot. The image of Churchill as a bulldog is metaphoric, as a possible symbol of bull’s persistence attributed to him. Concerning metaphor poly-semantics, Goodman notes that metaphoric use of the word is preceded by its use in the direct meaning having an influence upon metaphoric one.

**Conclusion.** If we need a yellow pencil to colour something, there is a yellow pencil in a standard set of seven pencils. We say, ‘We need to buy yellow paint’; it means we should buy yellow paint but not red, blue or black. And if we have a statement “We need to buy yellow paint to paint a fence”, it concerns a definite action to be done, particularly, to paint a fence. And now, the choice of paint supposes not only the recognition of yellow colour among all the others but more precise definition of yellow paint shade that we need to paint a fence. The shape may be light blue, bright blue, canary, dark – or dirty yellow, deep yellow or whatever else. Our task is complicated by new circumstances of paint application. Therefore, speaking about exemplification, one of the key roles is played by applicability and event in which objects, their denotation and illustrative examples are involved.

Speaking about illustration use in sign systems we deal with ambiguities and contradictions of everyday use of certain signs. Efforts should be made to see the basis for similarities in the work of Francis Bacon “Head VI” (1949) and “Portrait of Pope Innocent X” by Velasquez. There also are a lot of variants of illustrating an object both coinciding and non-coinciding in time with this cultural epoch.

Various referents can be used in the same pattern of different sign systems. The degree of abstractness in sign systems used in contemporary music and non-figurative art should be surely considered. For example, we show the movement of the sun across the sky for a child and accompany our story with the facts that the sun rises and sets, and if we apply the movement scheme in the sun system, the sun will be stationary relatively to the Earth. The interesting remarks about the sun in “New Organon” by the English philosopher Francis Bacon may be mentioned. And, at last, the complexity and ambiguity will arise in the application of metaphorical utterances and metaphorical presentations when reference routes, tasks and schemes should be compulsory specified.

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**Анотація.** *Астапова-Вязьміна О. І. Деякі аспекти ролі екземпліфікації в контексті знакових систем.* Коли йдеться про знакову систему, одним із ґрунтовних є питання про те, в який спосіб відбувається позначення. Будь-який символ, що входить до системи, має певні характеристики, враховуючи можливості його комбінування з іншими символами (надписами, висловлюваннями) системи. Знаки завжди пов'язані з предметами, які вони позначають. Але ми завжди маємо пам'ятати про те, що позначення може бути як вербальним, так і невербальним. До останніх можливо віднести, наприклад, живописне зображення, рух або жест. Рівень абстрактності в знакових системах ускладнює сам процес позначення. Як, наприклад, у невербальній системі позначень виразити холодність предмета або висловити радість? Чи буде вираз певних емоцій еквівалентним наявності самих емоцій і чи завжди можливо вираження замінити ілюструванням? Синтаксичний, семантичний і прагматичний аспекти є обов'язковими для конструювання будь-якої знакової системи. І основна проблема буде полягати не стільки в площині конструювання, скільки в площині функціонування заданої системи, в якій екземпліфікація, як спосіб символізації, запропонована Н. Гудменом в теорії нотації, відіграє ключову роль.

**Ключові слова:** теорія нотації Н. Гудмена, екземпліфікація, знакова система, ілюстрування, референція, абстрактний живопис.

**Аннотация.** *Астапова-Вязьмина Е. И. Некоторые аспекты роли экзemplификации в контексте знаковых систем.* Говоря о знаковой системе, одним из основных является вопрос о способе обозначения. Любой символ, входящий в систему, имеет определенные характеристики, учитывающие возможности его комбинирования с другими символами (надписями, высказываниями) системы. Знаки всегда напрямую связаны с предметами, которые они обозначают. Но при этом мы всегда должны помнить о том, что обозначения связаны как с вербальными, так и с невербальными способами означивания. К последним можно отнести, например, живописное изображение, движение или жест. Уровень абстрактности в знаковых системах усложняет сам процесс означивания. Как, например, в невербальной системе обозначений показать холодность предмета или выразить радость? Будет ли выражение определенных эмоций эквивалентно наличию самих эмоций и всегда ли возможно выражение заменить на их иллюстрирование? Синтаксический, семантический и прагматический аспекты обязательны для конструирования схемы любой знаковой системы. И основная проблема будет корениться не столько в плоскости конструирования, сколько в плоскости функционирования заданной системы, в которой экзemplификация, как способ символзации, предложенная Нельсоном Гудменом в теории нотации, играет ключевую роль.

**Ключевые слова:** теория нотации Н. Гудмена, экзemplификация, знаковая система, иллюстрирование, референция, абстрактная живопись.