

RETHINKING PAINTING STYLE FROM THE PHENOMENO-LOGICAL PERSPECTIVE

FINE ART AND AXIOMATIC METHOD

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Abstract

It is known that a professional artist can enter the structure of any already created painting style, simulate it, or even independently create in it. Today, a painter can, for example, paint an impressionist, fauvist, cubist, etc., composition. The question that arises, however, is what does he have to know, understand, and master so that an existing painting style can “come to life” in a concrete painting? And, of course: what actually is the “existence” of style, as it appears to have already existed before a work

of art, while on the other hand it does not factually reveal itself until the painting is realized? The hypothesis that the author will be defending on these pages is that painting artworks as “systems of organized perceptions” and painting styles as their generative matrices have an axiomatic nature and organization, that in their formal-semantic complexity they behave as specific axiomatic systems.

Keywords: style, axiomatic method, axiom, axiomatic system, generative grammar, syntactic rules, axiomatic structure of style.

Ponovni premislek o slikarskem stilu s fenomeno-logične perspektive. Likovna umetnost in aksiomatska metoda

Povzetek

128 Znano je, da lahko profesionalni umetnik, če želi, vstopi v strukturo katerega koli že *ustvarjenega* likovnega sloga, ga simulira ali celo samostojno ustvarja v njem. Postavlja pa se vprašanje, na osnovi česa lahko to stori. Kaj mora poznati, razumeti in obvladati, da lahko nek obstoječi stil »oživi« v konkretni formi? In seveda: kakšna je pravzaprav »eksistenca« slikarskega stila, saj se zdi, da stil na nek način obstaja že *pred* umetniškim delom, po drugi strani pa se faktično razodene šele, ko je delo realizirano? V razpravi dokazuje avtor tezo, da imajo slikarske umetnine kot sistemi organiziranih zaznav in slikarski stili kot njihove generativne matrice aksiomatsko naravo in organizacijo in da se v svoji formalni in semantični kompleksnosti obnašajo kot specifični aksiomatski sistemi.

Ključne besede: stil, aksiomatska metoda, aksiom, aksiomatski sistem, generativna gramatika, sintaktična pravila, aksiomatska struktura slikarskega stila.

Exposition

Numerous articles and books have been written about style in (fine) art.¹ The topic has been discussed from various historical, cultural, genealogical, philosophical, etc., perspectives. In this paper, I intend to approach it from the phenomenological, logical, and practical perspective, that is, from the position where the artist is faced with the conceptual and productive questions of style in his work.

It is known that a professional artist can enter the structure of any *already created* painting style, simulate it, or even independently create in it. Today a painter can, for example, paint an impressionist, fauvist, cubist, etc., composition. The question that arises, however, is what does he have to know, understand, and master so that an existing painting style can “come to life” in a concrete painting? And, of course: what is actually the “existence” of style, as it appears to have already existed *before* a work of art, while on the other hand it does not factually reveal itself *until the painting is realized*?

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I. Hypothesis

The hypothesis that I will be defending on these pages is that painting artworks as “systems of organized perceptions” (Moles 1972, 90–91) and painting styles as their generative matrices have an *axiomatic nature and organization*, that is to say, in their formal-semantic complexity they behave as *specific axiomatic systems*.

II. Definitions

Since we are not accustomed to using the vocabulary of logic in connection with fine art, this hypothesis could very well sound unfamiliar, incomprehensible, or even trivial to both logicians and artists alike. I shall, therefore, very generally explain how I understand the phenomenon of

¹ Cf. Eck, McAllister and van de Vall 1995; Eroms 2007; Gumbrecht and Pfeiffer 1986; Kirsch and Kirsch 1986, 1988, 1989; Kirsch 1998; Lauzzana and Pocock-Williams 1988; Muhovič 1997; Stiny 1975, 1981; Vitale 1988; Wollheim 1978.

axiomatics, i.e., the concepts of *axiomatic method*, *axiom*, and *axiomatic system*, and then demonstrate how this phenomenon is linked to artistic creativity and the nature of painting style.

Axiomatic method

According to contemporary logic, the axiomatic method is a form of systematic mastery of phenomena. The axiomatic approach to a specific phenomenon is based on the assumption that there are substrata that justify and principles that cybernetize the behaviour of this phenomenon. By its nature, the axiomatic method is a deductive method, i.e., a method of moving from the basic and general to the derived and concrete. We generally refer to this method when an entire area of human knowledge or experience is organized in the form of a deductive system, that is, when the deductive method is combined with a systematic definition of the underlying assumptions in the area concerned. From this aspect the axiomatic method is never a starting point for research or creativity, but its long-matured result.

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It is therefore quite surprising that the emerging Western thought, as it was freeing itself from the grips of mythological and religious interpretations of the world, began to develop concurrently with the emergence of axiomatics. In that period, Greek philosophy, which was the framework of all sciences, spontaneously devoted most of its speculations precisely to searching for the *foundations of all that exists*. Its pre-Socratic start was entirely dominated by the incredible common-sense conviction that beneath the enormous diversity of things and phenomena, there exists a substratum common to all, an *arche*, from which all else originates. In response to questions about the “basic building blocks of the universe,” Greek philosophers gave varying replies. Many of these are today the curiosities of the history of philosophy. Some of them, such as Democritus’ and Leucippus’ teachings on atoms and their organization, were only confirmed in their modified form by contemporary science.

For example, physics has proved that the material world is in reality organized according to the principle of a small number of elementary “building blocks” (atoms, protons, neutrons, electrons, subatomic particles), whose properties (mass, energy, electric charge) demonstrate such an exceptional ability to

integrate that, by a play of combinatorial interaction, they generate the entire phenomenology of the universe.

And, of course, organic chemistry and biology uncovered the complex organizational logic of the living world. The largest molecules in living cells contain several thousand million atoms. What is particularly interesting, is not so much the number of atoms involved, but the fact that every single atom has an important role in preserving healthy cells. After all, a sand particle is composed of many more atoms than a cell. Yet despite its size, a grain of sand has a very simple chemical composition. It is a simple repetition of the same elementary “loop,” one silicon and two oxygen atoms. Similar to an arabesque, where a single principle is enough to fill an entire space by repetition. If, in the pre-living world of atoms and simpler molecules, all parts are equally integrated into larger wholes and equally important, then in living nature a type of organization appears that is based on the principle of *hierarchy*. The essential questions of biology are therefore not questions related to quantity and statistics, as in physics, but *questions regarding the position, shape, and organizational pattern* of a living substance, that is, questions on functional connection, formation, and form.

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However, alongside the axiomatics of building processes in nature, Greek philosophy also autoreflexively noticed the axiomatic structure of cognitive processes themselves. This is most evident in the phenomenon known as *proving*. To prove something means to make a statement that is not clear to someone, and is therefore incomprehensible to them, visible or comprehensible with the help of other statements that are understandable and are logically connected to the incomprehensible statement in such a way that this statement is derived from them. But what if our co-speaker does not recognize these other statements either? Then we need to bring in new statements. And, if necessary, prove these as well? There are only two possibilities: either such proving will never end (*regressus in infinitum*) and hence we shall not be able to prove anything, or we need to come up with findings that are so elementary, general, and universal that any contradiction with them would also reveal the incorrectness of all derived theses, yet at the same time so evident by themselves (*per se nota*, as scholastic philosophers would say) that they need not be proven. These are the foundations of all proof on which the buildings

of all sciences are founded. Some of them are referred to as “first principles” or axioms.

Therefore, in both cases Greek thought enriched human reflection regarding material and spiritual phenomena with a special cognitive orientation, at the core of which is *axiomatization*, that is, *recognizing the basic in the derived*, and *deriving the complex from elementary starting points*.

Axiom

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2 “The most difficult thing is to know what we do know, and what we do not know. Therefore, desiring to know anything, we shall before all else determine WHAT we accept as *given*, and WHAT as demanding definition and proof; that is, determine WHAT we know already, and WHAT we wish to know. In relation to the knowledge of the world and of ourselves, the conditions would be ideal could we venture to accept *nothing* as given, and count *all* as demanding definition and proof. In other words, it would be best to assume that we know nothing, and make this our point of departure. But unfortunately such conditions are impossible to create. Knowledge must start from some foundation, something must be recognized as known; otherwise we shall be obliged always to define one unknown by means of another. [...] But what do we know? We know that with the very first awakening of knowledge, man is confronted with two obvious facts: The existence of the world in which he lives; and the existence of psychic life in himself. Neither of these can he prove or disprove, but they are facts: they constitute *reality* for him. It is possible to meditate upon the mutual correlation of these two facts. It is possible to try to reduce them to one; that is, to regard the psychic or inner world as a part, reflection, or function of the world, or the world as a part, reflection, or function of that inner world. But such a procedure constitutes a departure from facts, and all such considerations of the world and of the self, to the ordinary non-philosophical mind, will not have the character of obviousness. On the contrary the sole obvious fact remains the antithesis of I and Not-I – our inner

phenomena and *unprovable* findings that are a *deductive* basis for all other phenomena or findings in a specific area can be referred to as—*axioms*.³ The only difference being that in the phenomenal area, axioms are *substrata* by their function (e.g., elementary particles in physics, chemical elements in chemistry), whereas in the cognitive area they are *principles* (e.g., the principle of causality, principle of contradiction, principle of excluded middle, etc.). The first modality of axioms may therefore be called *ontic*, and the second *epistemic* axioms.

Axiomatic system

The predecessor of reflective axiomatic thinking was Aristotle (384–322 BC) in his work *Organon* (ὄργανον; “tool”). The first axiomatic system, however, was created by the Greek mathematician *Euclid* (4th–3rd cent. BC) in a system named after him—*Euclidean geometry*. From the early 20th century onward, there were frequent and successful attempts at developing axiomatic systems in mathematics (e.g., Hilbert’s axiomatic system for geometry) and in logic (e.g., Łukasiewicz’s axiomatic system of polyvalent logic), as well as many axiomatizations of empirical sciences (e.g., linguistics, technology [axiomatic design], and computer science [programming language theory]), etc.). Axiomatic systems serve as *methodological tools* in the systemic mastery of complex areas of reality and experience, and in the systematic building of new complex units of reality and experience.

Generally speaking, an axiomatic system is a *generative matrix* founded on a group of independent axioms, in which one can, with the help of specific assumptions, definitions, and syntactic rules, creatiativity enables the construction of various complex wholes (Figure 1).

psychic life and the outer world. [...] But thus far we have no basis on which to found a contradiction of the obvious fact of the existence of ourselves – i. e., of our inner life – and of the world in which we live. This we shall therefore accept as the given.” (Ouspensky 1922, 11–12).

3 Gr. ἀξίωμα (*aksioma*) value; a general statement accepted as being true; Lat. *dignitas* value, standing, respect.



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Figure 1: Lego blocks direct attention to their axiomatic or modular foundations, the universal compatibility of which enables the construction of various complex wholes.

A chess game that is based on a small number of playing assumptions/axioms (chessboard, 6 different chess pieces), *definitions* (color and value rank of pieces), and *rules* (moves and mutual neutralizing of pieces), but where an unnumbered amount of concrete chess matches can be developed, exposes the layered nature and organization of the axiomatic system.

III. Axiomatic strokes of artistic articulation

Fine art and axiomatic method

If, rather than on its verbal expression, we focus on the meaning of axiomatics, namely, on the *possibility of producing a large number of consequences from a small number of generative starting points*, then the axiomatic method in connection with fine art is not a fiction or theoretical violence, but a fact. Who isn't immediately reminded of color mixing when "producing consequences from a small number of starting points?"

Color mixing is a simple example of the axiomatic method in the field of artistic creativity, as it allows us to mix, or produce, from three primary colors, as well as white and black (coloristic axioms), according to the rules of subtractive mixing, the entire array of color tones that color mixing substances are able to provide and which our visual apparatus can perceive. This is evident in paintings as well as in the standardized CMYK color model, which is for the same reasons widely used in color printing (Figure 2).

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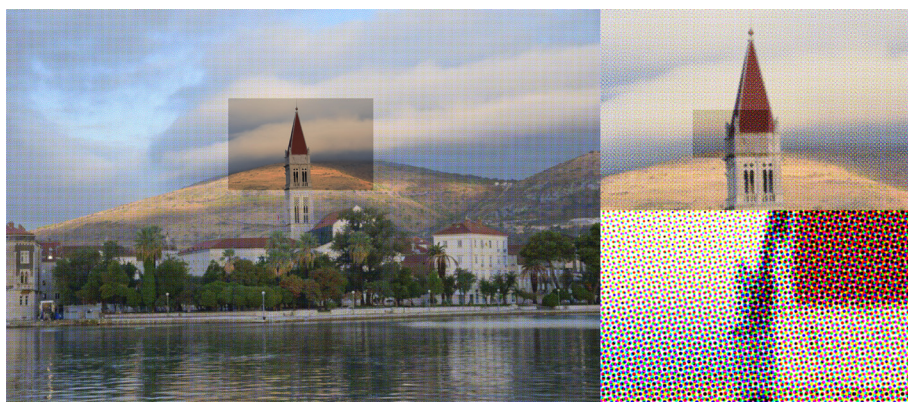


Figure 2: CMYK color model used in color printing. Photo: author.

Moreover, there is something exemplary in color mixing. On the one side, it shows that the axiomatic method can be at work even in places where no-one calls it by this name, and, on the other, it simultaneously reveals the operational

nature of artists' colors and, indirectly, of all artistic means of expression.

Allow me to explain. Gestalt psychologist David Katz (1884–1953), who was engaged in researching color modalities, introduced the so-called *reduction method* into psychology: he observed surface colors through a hole in a reduction screen and thus isolated the color from the object on which he was observing it. In this way the color appeared as a pure and homogenous *film color* quality, abstracted from its object-bearer and meaning, hence as a color abstraction (cf. Katz 1930, 27–34). And such a film color is basically the prototype of artists' colors that also have to be reduced to themselves so that the painter can subordinate them to his intentions and give them his own meanings. The entire history of painting technology reveals that painters were always searching for substances that had the purest chromatic quality and were abstracted from objective meanings. So, when a painter puts such pure color substances on his palette, he begins to work with technological and mental abstractions. It is only because artists' colors are on such a high level of generality that they can express all the special and subjective thoughts which the painter's spirit is capable of imagining and articulate them.

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In this light one can also understand the thoughts expressed by painter Juan Gris about his work in 1921 in a survey of the *L'Esprit Nouveau* newspaper:

I work with the elements of the intellect, with the imagination. I try to make concrete that which is abstract. I proceed from the general to the particular, by which I mean that I start with an abstraction in order to arrive at a true fact. My art is an art of synthesis, of deduction, as Raynal has said. I want to arrive at a new specification; starting from a general type, I want to make something particular and individual. [...] Cézanne turns a bottle into a cylinder, but I begin with a cylinder and create an individual of a special type: I make a bottle – a particular bottle – out of a cylinder. Cézanne tends towards architecture, I tend away from it. That is why I compose with abstractions (colours) and make my adjustments when these colours have assumed the form of objects. [...] Though in my system I may depart greatly from any form of idealistic or naturalistic art, in practice I do not want to break away from the Louvre. Mine is the method of all times, the method used by the old masters:

there are technical means and they remain constant. (Kahnweiler 1969, 93)

Gris' quotation explicates the fact that artistic means of expression are, by their nature, *deductive/generative/axiomatic* assumptions, from which one can generate an endless multitude of visual concretenesses, and this undoubtedly points to the axiomatic nature of fine art practice. Cézanne refers to this in his own terms with the observation that everything in nature is *modelled as a sphere, cone, and cylinder* (cf. Doran 1978, 36). But while Gris exposes the *generative* aspects of axiomatics, Cézanne emphasizes its *operationality*, which enables the visual artist to master diverse and complex areas of visual experience.

Nature and modalities of artistic axioms

Artistic thinking is *syncretic* by nature. This means that its concepts are not abstract in the same way as philosophical and scientific concepts, because even as concepts they are always bound, linked to their material carriers and to the sensual modalities of perception. In this regard, they are a synthesis of sensual concreteness and mental abstraction, because this is the only way they can be defined in line with their nature, as is also confirmed by Arnheim's *perceptual concept* (cf. 1997, 44–46). Artistic thinking therefore unites two components of discovering—an ontic or *formal* and a gnostic or *epistemic* component. The first component represents reflection on material and sensual means with which one can realize artforms, and the second represents reflection on the modes of operating with such means. The first searches for the *origins* of artistic production, that is, what it is being created from and “is” artistic reality, while the other searches for *principles*, namely, for that which is the basis of artistic discovery and treatment. In artistic creativity in this respect there also exist two modalities of axioms—formal and epistemic.

Formal axioms are the consciousness of the most general material-sensual assumptions of spatial phenomena (differences in lightness, color, shape, etc.), on which artistic creativity is based, that is, the consciousness of the elements or elementary aspects of visual and tactile reality. And, on the other hand,

the consciousness of the fact that these elements can be—and how they can be—used as the means of articulating artistic phenomena. The concrete forms of formal artistic axioms are artistic means of expression (*dark-light, color, point, line, mass, volume*), which in art practice perform the function of formal hypostases and categories of artistic thinking.

Epistemic axioms are the consciousness of the most general aspects and principles of operating with formal axioms. The concrete forms of epistemic axioms in the area of fine art articulation are, e.g., the principles of colour mixing, shading, modulation, color composition, and similar. Epistemic axioms in fine art are the basis of artistic algorithms.

IV. Axiomatic structure of painting style

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Exploring styles in fine art has an equally long history as the systematic observation of formative transformations of this art in space and time, because style is their most noticeable manifestation. Despite its long history, the study of styles has, due to their visual-spatial nature and high complexity, which avoid any definitions in natural languages, predominantly remained on a descriptive, surface-structural level (planar, plastic, picturesque style; early, high, late style, etc.), while the deep structural nature of styles has remained in the shadow of subjective feelings and empirically unverifiable assessments.

A hint from computer analysis

In everyday life people spontaneously recognize formal similarities between the artworks of specific artists, milieus, or periods. These similarities are usually referred to as “style.” In reality, however, we do not know how to adequately describe this stylistic “common denominator,” let alone precisely define it. In this respect “style” remains a kind of *intuition* that is nonetheless sufficiently concrete and even applicable, but still only intuition.

In the 1970s and 1980s, computer experts (e.g., Shi-Kuo Chang, Raymond G. Lauzzana, Lynn Pocock-Williams, Joan L. Kirsch, Russel A. Kirsch, James Gips, George Stiny)⁴ attempted to explore art styles also on a non-intuitive

4 Cf. Chang 1971, 121–148; Lauzzana and Pocock-Williams 1988, 445–452; Kirsch

level, in a verifiable, formalized manner enabled by the recursive procedures of formal grammar (cf. Gips 1975). By identifying the *formal characteristics* of a style, an analysis would subsequently enable the searching for stylistically similar compositions in pictorial databases.

In order to identify the characteristics that typically define a specific style, computer experts analyzed the decorations on ancient Greek vases, as well as a series of compositions by Wassily Kandinsky, Piet Mondrian, Joan Miró, Richard Diebenkorn, etc. To facilitate formalization during analysis, they selected works from a specific period of the artist's creativity (formal similarity), works with a maximally articulated and authorially recognizable morphology (Kandinsky, Miró), and works characterized by a more or less visible geometrization (e.g., Diebenkorn's series of paintings *Ocean Park*).

By means of reconstruction procedures based on formal grammar, they found that the examined painting compositions were, without exception, sign systems with a specific surface-structural and deep-structural organization. The first comprises the *appearance* of a composition, which is linked in its entirety to the painting medium and can in computer form only be simulated,⁵ while the second comprises a *matrix of structural levels* which in all analyzed cases is invariant. It is built on the basis of specific (i) *primitives* referred to by computer analysts as "graphic" (points, lines, circles, filled polygons, etc.), i.e., from morphemes or graphemes enabling generation, (ii) *prototype shapes* (Figure 3), and (iii) from a set of *rules* which, on the one side, determine the formation of shapes from primitives (formation rules), and, on the other, the arrangement and semantic activation of relations between shapes in pictorial space (transformation rules) (cf. Lauzzana and Pocock-Williams 1988, 445–452; Kirsch and Kirsch 1988, 437–444).

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and Kirsch 1988, 437–444; Stiny and James 1972, 125–135; Stiny 1981, etc.
 5 Cf., e.g., Gatys, Ecker, and Matthias 2018; Liszewski 2016.

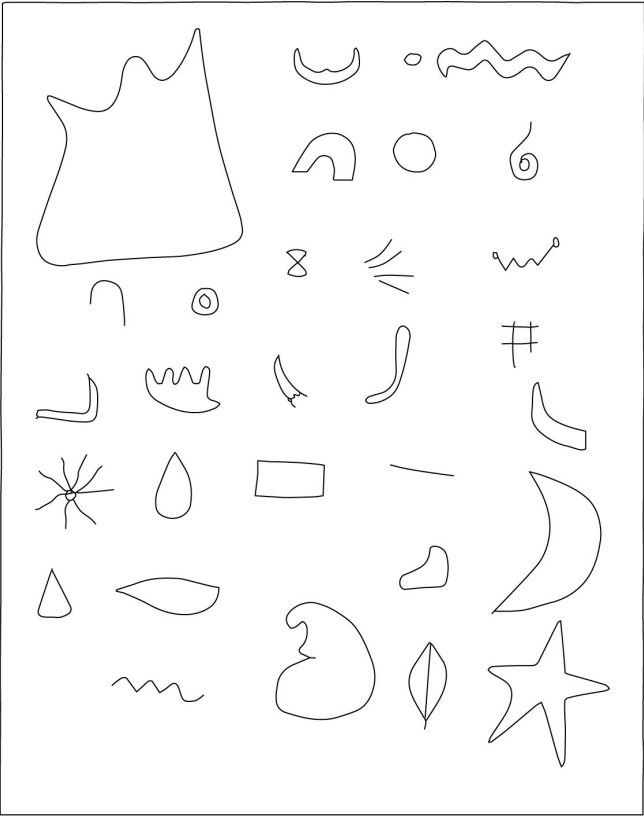


Figure 3: A dictionary of prototype shapes used in the generation of a pseudo-Miró composition (on the basis of Miró's *Constellations* compositions, 1939–1941); after: Kirsch and Kirsch 1988, 442.

Once they had extracted, by means of reconstructive procedures based on formal grammar, the primitives from the already articulated composition, the dictionary of prototype shapes, and the syntactic rules of composition, computer analysts were able to generate new, unknown composition variations within the “rules of the game” of the analyzed style milieu, i.e., produce pseudo-Mondrian, pseudo-Miró, pseudo-Diebenkorn, etc., compositions (Figures 4a and 4b). It is, however, true that they were unable to create new, original style milieus, but this was not even their intention.



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Figure 4a: Joan Miró, *Chiffres et constellations amoureux d'une femme* (*Ciphers and Constellations in Love with a Woman*), 1941, gouache and watercolor with traces of graphite on ivory wove paper, 18 1/8 x 15 inches (46 x 38 cm), The Art Institute of Chicago; photo: The Art Institute of Chicago / Art Resource, NY, Art, © 2017 Successió Miró / Artists Rights Society (ARS), New York / ADAGP, Paris.

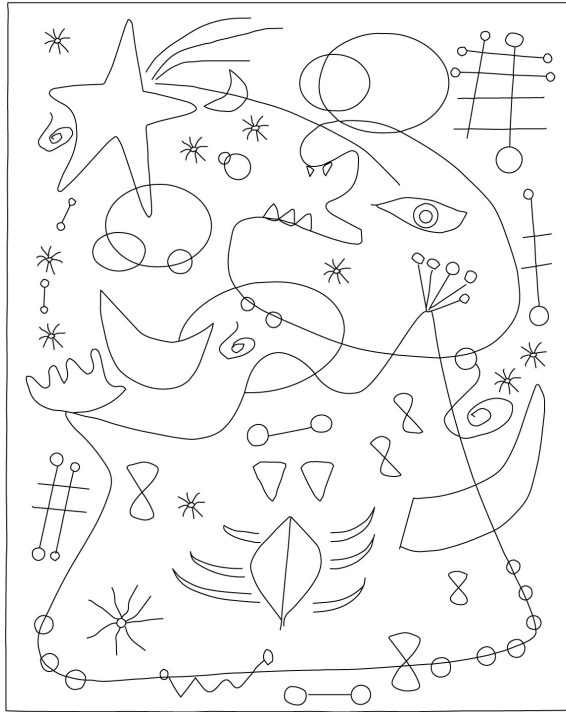


Figure 4b: A pseudo-Miró composition in the style of *Constellations*; after Kirsch and Kirsch 1988, 442.

Analogy with generative grammar

What has been said so far can be extrapolated in the words of Ludwig Wittgenstein, as follows: “Essence is expressed by grammar. [...] Grammar tells what kind of object anything is. [...] Our investigation is therefore a grammatical one.” (Wittgenstein 1984, § 90)

The discoveries of computer analysts provide a basis for an analogy, according to which one can view style as a “generative matrix” that is similar to “generative grammar,” because it enables the articulation of a large number of concrete expressions on the basis of the same formative assumptions. This matrix is, in a certain way, i.e., conceptually, “before” what it can form, while in reality it exists only in the concrete shape of an articulated form.

Axiomatic reality of painting style

As mentioned above, the structure of this matrix is comprised of (i) fine art *primitives*, (ii) prototype *shapes*, (iii) *rules of formation and transformation*, and (iv) *fine art products* as artistically deduced consequences. These elements, together with their stratification, conform precisely to the elements in the structure of the axiomatic system. Namely, one cannot overlook the fact that by their structure and function, the primitives in the generative matrix of style completely correspond to the axioms, the prototype shapes to the definitions, the formative-transformational rules to syntactic rules, and the products to the theses in the structure of the axiomatic system (Figure 5). Here, in my opinion, one can already see a justified reason for the conception that style actually involves stratification which, in reality and not only figuratively, conforms to the structure of the axiomatic system.

AXIOMATIC SYSTEM		STYLE	
Theses		Works of art	
Syntactic rules	Rules of transformation	Rules of transformation (composition)	Syntactic rules
	Rules of formation	Rules of formation (shape)	
Definitions		Prototype shapes	
Axioms		Primitives	

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Figure 5: Correspondences between the structure of an axiomatic system and the general structure of style in fine art.

But let us doubt, for the last time, the correlation between hypotheses and facts. Are the axiomatic strokes of artistic creativity in my interpretation perhaps only a *Fata Morgana* of the computer method, formalization, and

reconstruction? The answer to this question can only be given by painting reality itself, that is, an artistic and not a computer analysis. Let us take a look at what such an analysis reveals in two concrete cases.

Two proofs

Example 1

Because of its explicitness and clarity of style, let us first examine, the pointillist painting of Paul Signac *La calanque (The Bay)* (1906; Figure 6). If we take a closer look and immerse ourselves in its formal tissue, we shall discover relatively quickly, even with today's retrospective view, that it is based and created on certain recognizable formative starting points.



Figure 6: Paul Signac, *La calanque (The Bay)*, 1906, oil on canvas, 73 x 93 cm; Musées royaux des beaux-arts de Belgique, Brussels.

1. The evident foundation of these starting points comprises two means of expression: the *point*, as indicated by the very name of the style milieu,⁶ and *color* in its chromatic purity, as revealed by a close-up look. In this generative function, both artistic elements have the role of formal artistic axioms.

2. These two means of expression defines the nature of articulated prototype pointillist shapes and, indirectly, the nature of pointillist syntactic rules.

3. As already mentioned, syntactic rules are divided into rules of formation of shapes, and rules of their compositional transformation.

a) *Rules of formation* of shapes: the main rule of this type is a pointillist grammar, which builds shapes by indicating them more than by defining them perfectly clearly. An equivalent rule is based on formative grammar—optical color mixing, founded on then discovered principles of simultaneous contrast and on the procedures of *divisionism*, which enable the intensification of color perceptions and a morphology of the coloristic type.

b) The *rules of compositional transformation* include rules of transformation of prototype shapes (e.g., rules of scaling, translation, rotation, reflection, etc.) and rules of the establishment of semantic relations between shapes in a pictorial space (e.g., rules of framing, proportioning, contrasting, static and dynamic symmetry, etc.). In a pointillist milieu, these rules are generally linked to the morphology of a motif (landscape, still life, genre scene) and serve the needs of its articulation.

The general “rules” of pointillist style are presented in the matrix of these starting points. On this formal and operational basis selected in very close connection with Signac’s pointillist “view of the world,” the painter builds his authorial landscape form by means of formative invention. The foundation of his work comprises formatively open assumptions of the pointillist style paradigm which, in the process of painting, have been “closed” into a concrete visual solution by the author’s personal view of the world and of life. In other words: Signac’s work is a final artistic syntagma pointing to its pointillist style paradigm.

6 Pointillism (from Fr.: *le point*, point; *pointiller*, to point, furnish with points).

Example 2

Let us now take a look at Mondrian's *Composition C (No. III) with Red, Yellow and Blue* dating from 1935 (Figure 7). As in the previous example, one can relatively quickly discover, on the basis of temporal and culturological distance, that the work is founded and created on certain recognizable formative starting points.

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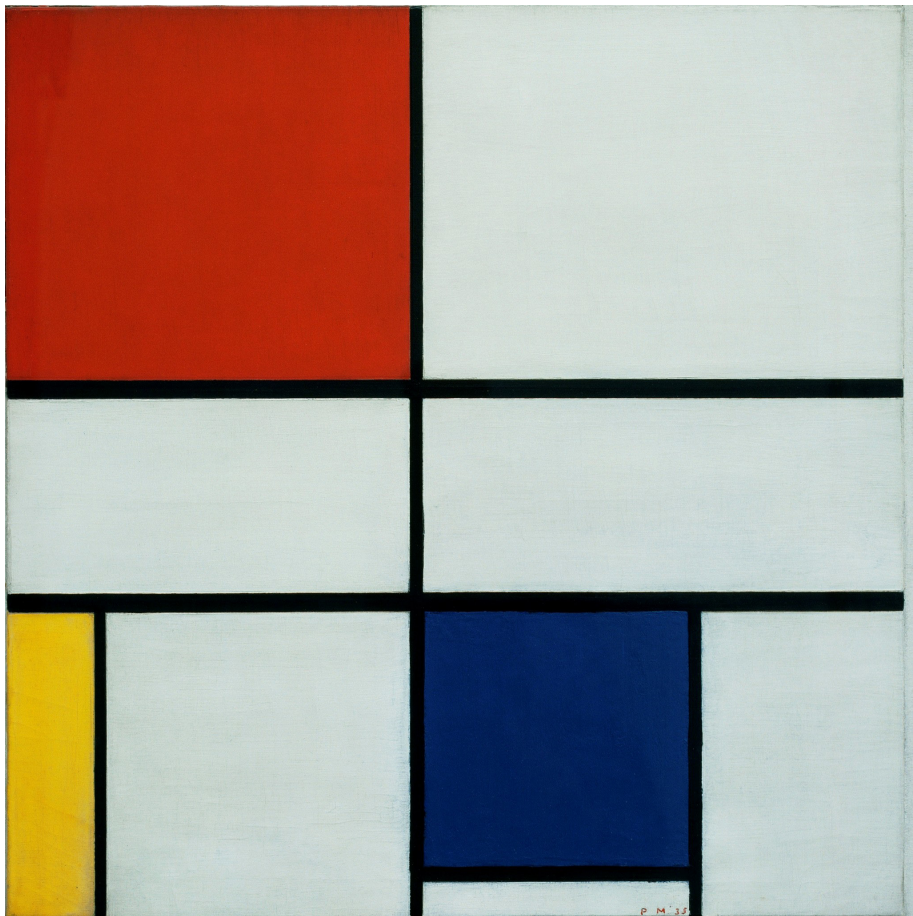


Figure 7: Piet Mondrian, *Composition C (No. III) with Red, Yellow and Blue*, 1935, oil on canvas, 56,2 x 55,1 cm; private collection (on loan to the Tate Gallery, London).

1. These starting points constitute the *formal artistic axioms*—line, color, and “visual variable” direction—in their most fundamental form. Therefore: among the most diverse possible configurations of a line, there is only one single, straight line; among the infinitely numerous possible color hues, there are only three primary colors, along with white, black, and grey; and among the countless possible directions, there are only two fundamental ones— vertical and horizontal.

2. The minimal semantic values of formal starting points define the specific morphology of *prototype shapes* which, according to Mondrian, is characterized by “pure plasticity” (Holtzmann and James 1986, 288–300): pure orthogonal shapes, primary colors, pure values, and their maximally pure relations.

3. *Syntactic rules*

a) The *rules of formation* basically originate in geometric abstraction of the early 20th century. They are characterized by the consistent use of non-objective shapes of accentuated neutrality. Or, as the author himself writes:

Among the different forms we may consider those as being neutral which have neither the complexity nor the particularities possessed by the neutral forms or abstract forms in general. We may call those neutral which do not evoke individual feelings or ideas. Geometrical forms, so profound an abstraction of form, may be regarded as neutral; and on account of their tension and the purity of their outlines they may even be preferred to other neutral forms. (Holtzmann and James 1986, 290)

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b) The *rules of compositional transformation* include the syntax of dynamic rhythms created by primary contrasts of color, brightness and direction, as well as syntax based on the relationships of the golden section and dynamic symmetry (cf. Hambidge 1926). In *Composition C*, these rules serve to articulate Mondrian’s philosophically and theosophically founded neoplasticist ideology, at the core of which is the discovering of an ontic-prototype world that justifies the appearance of visual reality, and supraindividual feelings of “objectiveness” (Holtzmann and James 1986, 298). In this way the artist activates compositional procedures which, on the one hand, exclude the use of “individualized shapes” and the “presence of the artist’s hand” in the articulation of an artwork (avoiding

manufactural effects), and, on the other, include the archetypal charge of the golden section and dynamic symmetry, which enable the creation of dynamic, deep-structural balances, and the “objective beauty” stemming from them.

4. The result of these formal-syntactic starting points is a work of neoplasticist style provenance. However, the neoplasticist style matrix in this work is upgraded with Mondrian’s personal “note,” which recognizably differentiates him from his neoplasticist colleagues (T. Van Doesburg, Bart van der Leek, Robert van ’t Hoff). In short: Mondrian’s composition is also a final artistic syntagma that points to its axiomatically organized neoplasticist style paradigm.

Both levels of activity—syntagmatic and paradigmatic—were precisely described by Mondrian (an extremely rare occurrence). The syntagmatic level is the topic of an excerpt from his letter to the Dutch painter and art critic H. P. Bremmer in 1914:

148 I construct lines and colour combinations on a flat surface, in order to express general beauty with the utmost awareness. Nature [...] inspires me, puts me, as with any painter, in an emotional state so that an urge comes about to make something, but I want to come as close as possible to the truth and abstract everything from that, until I reach the foundation (still just an external foundation!) of things. [...] I believe it is possible that, through horizontal and vertical lines constructed with awareness, but not with calculation, led by high intuition, [...] these basic forms of beauty, [...] can become a work of art, as strong as it is true. (quoted in: Blotkamp 2001, 81)

In 1926 he presented the principles of the paradigmatic level in his programme essay, “De Woning – De Straat – De Stad” (“The Dwelling—the Street—the City”), in the form of “six neoplasticist laws:”

(1) The plastic means must be the rectangular plane or prism in primary colours (red, blue, and yellow) and in noncolour (white, black, and grey). (2) Equivalence in the dimension and colour of the plastic means is necessary. Although varying in dimension and colour,

the plastic means will nevertheless have an equal value. Generally, equilibrium implies a large area of noncolour or empty space opposed to a comparatively small area of colour or material. (3) Just a dual opposition is required in the plastic means, it is also required in the composition. (4) Constant equilibrium is achieved by the relationship of position and is expressed by the straight line (boundary of the pure plastic means) in its principal, perpendicular opposition. (5) Equilibrium that neutralizes and annihilates the plastic means is achieved through the relationships of proportion in which they are placed and which create vital rhythm. (6) Naturalistic repetition, symmetry must be excluded. (Holtzmann and James 1986, 214–215)

Universality of the axiomatic structure of style

It would be possible to analyze the artworks of various style provenances in a similar way as in the examples described above, and each time one would come upon the same invariant, deep-structured matrix woven from always the same functional, co-dependent variables: from formal starting points, style-specific “prototype” morphologies (definitions), and style-specific syntactic rules, whose mutual codependence enables on the one side and characterizes on the other the formal and semantic identity of the artworks derived from them. In this context, it is therefore not only possible, but necessary to say that fine art forms as systems of signs have an axiomatically stratified structure of varying evidence and complexity, regardless of whether we are already acquainted with this structure or are able to analytically reconstruct it, or not. Visual art forms have always had such a structure, because it is inscribed in the foundations of artistic articulation. Artists had practically mastered the axiomatic method of building their forms long before computer experts and theoreticians were capable of identifying it in their forms and presenting it in a formalized and conceptualized manner.

In artistic hermeneutics, a textually or graphically explicated axiomatic matrix of a specific style is a rarity. As a rule, such matrices are enriched with artistic meaning and formulated directly in the artistic creative process or in an art product. Nevertheless, we are not lacking in such analyses and explications,

as has been shown in Mondrian's case. In recent times, they can be found, for example, in authors such as Josef Albers, Max Bill, or Richard Paul Lohse.

A brief note on the development of the axiomatic structure of style

"When we invented cubism," Pablo Picasso explains in his interview with Christian Zervos in 1935, "we had no intention of inventing cubist style but simply of expressing what was in us. Nobody drew up a program of action [...]." (Zervos 1935, 176)

150 At first sight, this idea may seem paradoxical, but it would be even more paradoxical to think that a painter gets up in the morning and says "today I'm going to invent a new painting style," writes a program of action—and by evening a new style is born. Anyone can see that styles—like falling in love and inventing something—do not occur on command or according to a program of action. And, how do they? The closest provable answer to this question is, in my opinion, the following: by "natural growth"—from artistic experimentations and their patiently matured purifications. These experimentations and purifications are mostly concealed from the viewer, as they are happening in the intimate world of art studios or are consumed in the processual underskin of artistic results. Occasionally, though, these purifications can also be traced in explicated form. Such is the case, for example, in two paintings by Henri Matisse, *Still Life with Purro I* (1904) and *Still Life with Purro II* (1904–1905) from the Metropolitan Museum of Art in New York (Figure 8).

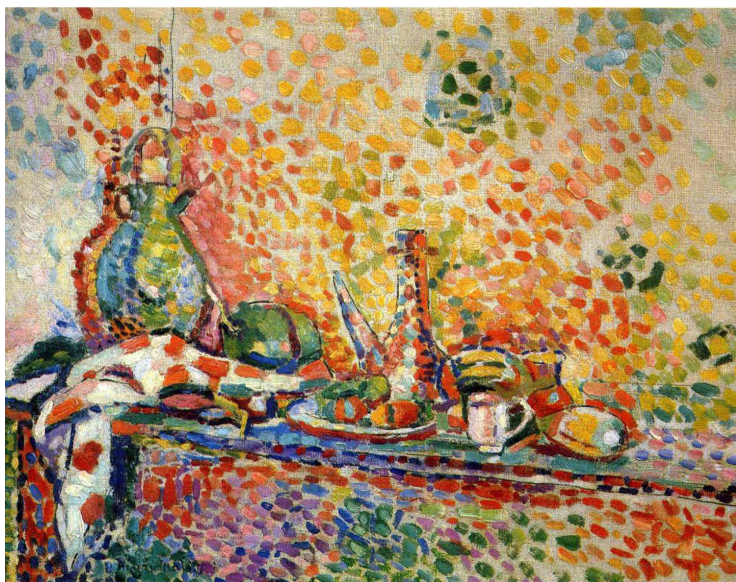


Figure 8: Above: Henri Matisse, *Still Life with Purro I*, 1904, oil on canvas; 23 1/4 x 28 1/2 in. (59 x 72.4 cm), private collection, © 2012 Succession H. Matisse / Artists Rights Society (ARS), New York. Below: Henri Matisse, *Still Life with Purro II*, 1904–1905, oil on canvas, 11 x 14 in. (27.9 x 35.6 cm), private collection, © 2012 Succession H. Matisse / Artists Rights Society (ARS), New York.

Both are founded on the same motif basis and virtually identical framing, but the mode of articulation in the first example is stylistically still indistinct (relatively large leaning on the appearance of the motif, the hybrid relationship between colorism and shading), whereas in the second example the articulation is purified, reflected, and visibly axiomatized in the direction of the pointillist paradigm (more open attitude towards the motif's appearance, clarity and purity of formal starting points, pointillist grammar, divisionism, optical color mixing, etc.). Thus, the previously mentioned conclusion of logicians, namely, that axioms and axiomatization are never a starting point of discovery and articulation, but its purified result, can also be confirmed in the field of fine art.

Epilogue

152 This discussion on the axiomatic nature of painting style is, from the viewpoint of the topic, by no means definitive, but rather a beginning of precise research that could also encompass styles in other branches of visual art. Its contents may nevertheless be condensed into a few fundamental findings that are indicative for further consideration:

(i) The axiomatic organization of painting forms is not the result of an *a posteriori* theoretical analysis and its product, but the expression of “the state of things” in artistic articulation.

(ii) The nature of painting style is defined by a matrix of formative starting points from which it is formatively derived. This matrix has an axiomatic nature and organization.

(iii) A generative matrix of painting style is comprised of (1) formative starting points or *axioms*, (2) *definitions* in the form of a dictionary of prototype shapes, (3) syntactic rules, divided into rules of formation of shapes and rules of their compositional transformation, and (4) concretized *painting artworks*.

(iv) The structures of all painting forms and styles do not have any equally evident and equally consistent axiomatic organization. At this stage, the styles based on well-defined morphology, clearly expressed formal starting points, and on geometrized syntaxes are “better suited” for the analysis and reconstruction of this organization.

(v) Style axiomatizations are never a starting point for artistic research and articulation, but its long-matured result.

(vi) The artist's ultimate goal is not understanding the axiomatic structure of an already established style and creating within it, but inventing a new, his own style.

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