The State Academy of Artistic Sciences (GAKhN, 1921–1931), like other early Soviet state institutions, was organized by the famous artists, scientists, and philosophers of this critical time (it suffices to name Kandinsky, Shpet, A. Gabrichevskii, A. Sidorov) with the personal support of the People's Commissar for Education, A. Lunacharskii. GAKhN was originally conceived as an interdisciplinary project combining psychophysiological, sociological, and philosophical approaches, and was aimed at establishing a synthetic science of art in a new institutional form. Two items were on the agenda: creating a purely scientific approach to understanding contemporary art, including that of the avant-garde (INKhUK collaborators such as Malevich, Eisenstein, Vygotsky, Ginzburg, Arvatov, and many others either joined GAKhN or presented there at various moments); and aligning the cultural policy of the Soviet state in the fields of science and art (the organization of international exhibitions, the development of criteria for original art, and even control of the activities of scientists and artists). But GAKhN played an equally important role in transforming the most traditional currents of scientific knowledge, from physics and psychology to philosophy and literary criticism, as they applied to the study of such an important anthropological experience as the production of artistic images in the broadest sense of the word. In its study of the temporal and spatial arts (primarily literature, painting, and theater), GAKhN placed an emphasis on analyzing the internal form of works of art and on explicating the particular "language" of the diverse arts, which resulted in a general reorientation of the sciences of art from metaphysical concepts like truth and beauty to the specific problems of meaning and value in concrete works.

Bringing together the best members of the humanities community in the postrevolutionary period—including, at different times, representatives of the "Silver Age" such as S. Frank, N. Berdyaev, and M. Gershenzon; young Soviet researchers A. Losev, N. Zhinkin, B. Yarkho, G. Vinokur; and many others—the academy held regular meetings for its departments, sections, and offices. Some of the resulting materials were published in the 1920s in journals, monographs, and anthologies, while other materials were preserved in different Russian archives as abstracts of reports, stenographs, and records of scientific experiments. Among them, the *Dictionary of Artistic Terms*, which remained unpublished at the time, was

the most significant product of GAKhN's activity, testifying to the highest level of aesthetic and art-historical knowledge of the last two cultural generations of Russia before the Stalin era and marking their inclusion in the most important pan-European scientific discussions. I succeeded in reconstructing an exemplary collection of dictionary entries based on materials from seven archives, and published the *Dictionary* in 2005 in Moscow. It includes a series of texts by well-known Soviet scholars on diverse art-historical topics ranging from general philosophical aesthetic categories to specialized artistic terms and applied concepts.

I. M. Chubarov, July 2017

Abstraction Abstraction (from Latin abstractio, from abstrahere, "to draw away") is a logical operation (and, by extension, a psychic process) by means of which one extracts specific signs (or properties) from a complete concept (or representation); these signs thereby become independent objects of thought. In common usage the abstract is contrasted with the concrete, which is understood as the fullness of real or ideal existence. In reaction against naturalism, much of the art and art history of the early twentieth century promoted the significance of abstracted forms as a way to counteract the claim that representational art conveyed actual reality in all of its fullness. With the help of these abstracted forms, the artist overcomes and transforms the material given to him from the outside. Lipps distinguished between positive empathy, defined as an unobstructed aesthetic perception of living organic forms, and negative empathy, which is somewhat more complex but nevertheless enables aesthetic enjoyment of inorganic, abstract forms. In his philosophy of art, particularly as expressed in his highly influential book Abstraction and Empathy, Worringer posited the opposition between empathy and abstraction, naturalism and style. In his view, every style and all great art can be labeled as such inasmuch as they have a developed system of abstract forms that symbolize fear, struggle, and the victory of human beings over natural forces. The majority of Eastern arts, as well as Gothic art, created a distinct language of inorganic but artistically animated forms (see his Formprobleme der Gotik). The art of the Renaissance, on the other hand, and the naturalist art of Europe that derives from it essentially lack style because, like the cave art of the Stone Age, they mainly serve to satisfy instincts of imitation (in the process of empathizing), which, in the author's view, is an extra-artistic factor. The understanding of style as a system of abstract forms, brought about by this or that culture, was also perceived by Spengler, who saw the initial and necessary growth of each major culture in its creation of architecture and ornament. Starting with Worringer, one can notice a tendency to see abstraction and naturalism as the two main forces that define humanity's artistic creativity. [Often (for instance, by Spengler) parallels are drawn between abstraction and empathy, on the one hand, and folk notions of taboo (prohibition) and totem (identification with live objects) on the other.]1

One should note the attempts in the contemporary sociology of art to explain the alternation between abstract and naturalist directions in the development of artistic creation as a reflection of the dialectical development of economic forms. Thus, for example, Kühn (Herbert Kühn, *Die Kunst der Primitiven*) proposes that abstract (imaginative) art manifests during the transition from the stage of settled subsistence farming and during the transition from capitalism to socialism, while naturalistic (sensory) art is equally characteristic of the anarchic individualism of primordial hunter-gatherers as of the individualism of the era of market and industrial capitalism.

Aleksandr G. Gabrichevskii

1. In the manuscript, this phrase is crossed out by Gabrichevskii's hand.

**Action of Art** Since artworks don't exist in direct connection with our everyday life, which determines our interests, special conditions are needed to strengthen the effect aesthetic impressions have on us. Among these conditions Hamann names:

- 1. Reality (*Aktualität*)—the narrator, in order to make a stronger impression, describes events as if he had lived through them himself;
- 2. Intensity—the strength of impression achieved, for example, by increasing the brightness of colors. This explains why, for instance, mechanical reproduction is always more bleak in comparison with the effect of the original;
- 3. Stimulation of attention (*Irritation*)—for a moment and in a concentrated space, art gathers together phenomena that are separated in nature;
- 4. Touching (*Ergreifende*)—because virtual things that leave us cold have a contrary character;
- 5. Impressionability, which can be reduced to the rule of saying as much as possible with the fewest possible means. Concentration (the combination of different parts into a single whole) plays the same role in art's influence upon us.

Dessoir places the analysis of aesthetic impressions at the center of his aesthetics; analyzing various stages of perception, he insists on the central value of the first impression, which is distinguished by being particularly fresh. Given the fact that feelings find their most direct manifestation in the first impression, one can talk about a distinctive "aesthetic reflex" (impression).

Art's influence can also be extra-aesthetic, as when, for example, a viewer is compelled by an unfolding comedy to tell the administration about the illegal nature of actions he is witnessing onstage.

P. S. Popov

Afterimage [posledovatel'noe izobrazhenie] A psycho-physical phenomenon that consists in an action being performed on a sense organ and continuing for some time after the stimulant is gone. Even though this phenomenon can be found amidst various sensations (for example, taste, pressure, temperature, etc.), it acquires special significance in the sphere of visual senses, where one distinguishes between positive afterimages and negative ones. In the first instance, the afterimage has the same color as the initial impression; in the second, the image, preserving its initial form and size, is colored in a different (complementary) color. The ability to maintain impressions after the stimulant is gone is the cause of such phenomena as the fire ring, which we perceive when a lit match is rotated quickly, and the mixing of colors when one turns a circle with sections painted in different colors. This phenomenon of "visual memory" was identified already by Ptolemy (during the second century AD), who pointed out that when a white disk with a colored section is rotated, it appears to be painted in that color in its entirety. Explanations of negative afterimaging differ in the theories of color perception developed by Helmholtz and Gering. The former explains it by the tiredness of the optical nerve, the latter by the assimilation of optical matter [zritel'nykh veshchestv эрительных веществ] that replaces dissimilation. Concrete and expressive descriptions of the afterimage may be found in Goethe's color theory (in the chapter "Physiological Colors"). In those schools of painting that formulated their task as that of describing as precisely as possible all impressions received from reality . . . , that made it their goal to represent the world "as it appears," the phenomenon of afterimages played a special role (for instance, in the work of the Impressionists). In V. Ostval'sky's Letters about Painting we find a curious analysis of a painting, in which the subjective phenomena of irradiation and the afterimage are transferred onto the canyas.

V. P. Zubov

Architectonics Architectonics (architectonic/tectonic/structural, not to be confused with **Constructivist**<sup>2</sup>) is a special term used primarily for architecture, in the same way as plasticity and painterliness are used primarily for the two other visual arts. Tectonics is based on a mode of thinking through signs that symbolize mastery of space, as it was clearly expressed in prehistoric cromlechs (megalithic monuments). An architectonic construction differs from cromlechs mainly in its formalism, which is a necessary general characteristic of structural thinking. Tectonics always deals with space, the fundamental form of architectural creation, but rather than merely mastering a specific parcel of land and of real space with the goal of its practical usage of a certain kind, architectonic formalization raises the mastery of geometric space to an artistic form. At the same time, the abstract geometric character of that space is transposed into a system of signs, which delimit it from all sides. Architectonics thereby creates a frame, an ossature, which outlines the limits of space; from the continuous walls, which carve out a piece of space, the structural formation articulates definitive edges, creating a skeleton of active components reduced to their possible minimum. Tectonic thinking operates with three-dimensional values. For example, a system of columns connected with each other by horizontal members on their tops describes the spatial magnitude of the building's cube. Projecting such a system onto a surface erected before the viewer creates a façade, which is characterized by the juxtaposition of structural elements and the passive spaces between them that symbolize space. Architectonics necessarily emphasizes the human being and his ideas, to which it subordinates formal space. As a result, structural thinking requires rational clarity and visibility. One of the most important methods of tectonic formalization is the division of the whole into a series of parts that are forced into simple relations with one another and governed by the law of subordination. At the heart of architectonics is the fact that the ossature it builds dominates the space it sketches out.

<sup>2.</sup> In what follows, the bolding of a term indicates that its definition appears among the selection here.

The elements of tectonics stand in opposition to those of plasticity and painting, and both the compression of an architectural organism into a continuous block and its dissolution in the play of light and shadow break the crystalline harmony of an architectonic composition. A systematic architectonics is imaginable only if one differentiates the arts. Finally, one shouldn't forget that the notion of architectonics is most closely bound up with the artistic ideas of the Renaissance.

N. I. Brunov

**Architecture** The art of organizing a given part of space in the service of the specific goals of an individual, a collective, or a class, using one or another kind of material means that are determined by the technical level of an era, is architecture.

Two main premises determine architecture:

- 1. the goal of an architectural work, and
- 2. the means of its realization.

Without an understanding of these two foundational premises, there can be no understanding of architecture.

Primitive prehistoric structures, the Greek temple, the Gothic cathedral, the Renaissance palace, and contemporary dwellings—are all functions of one or another set of goals of a given period and of its technical level. Each of these structures, which can be designated as *social types of an epoch*, can be understood in the context of given historical conditions, the economic and social structure of the ruling class, labor and social and domestic relations, availability of certain building materials and the means of working with them, and the technical level of construction.

Architecture emerges on the basis of these premises as the art of organizing the behavior of individuals and the collective in the service of their goals with the help of the material means that are at the disposal of the architect. One of the fundamental goals given to the architect on this concrete goal-oriented path is the task of *organizing a space* that is circumscribed in a certain way and within certain limits.

The main aim of architecture is as follows: By unfolding a circumscribed space in the longitudinal and transverse direction, extending it upwards, dividing it into separate spatial molecules in one or another way, or grouping various spatial measures into a single complex, depending on the aim, we create architectural objects that are entirely different in their meaning and character of practical use, in the impression they make on human beings, and in their social meaning and significance. Comparing the longitudinally deployed cella of a Greek temple, the centripetal spatial system of a Renaissance palace, the centrifugally scattered spatial cells of an Eastern dwelling or garden, and the vertically stacked office spaces of an American skyscraper makes it abundantly clear that the task of organizing space is of primary importance in architecture.

Yet the material implementation of such spatial organization is closely connected with specific building materials and methods of building industry. That is to say, the difference in the organization of the space of an Eastern dwelling and

an American skyscraper consists as much in their end goal as in the difference of the level of technological development.

An architectural space that is circumscribed and articulated with a specific goal and materialized through technique creates specific architectural volumes. The latter, in their turn, are formed by the intersection of planes. The organization of these materialized volumes and the resolution of specific planes are individual elements of the same teleological spatial task. Color and **facture** of the planes and volumes here emerge as extremely efficient components of the overall solution.

On the other hand, given that architecture nearly always isolates a particular space, in each case there appears a series of problems of exceptional significance. These include the problem of illumination (diurnal and nocturnal), issues of temperature and cleanliness of the air in the circumscribed space (thermo-insulation, heating, ventilation, and greenery), acoustical concerns, and so on. Since these aspects strongly affect the sensory organs of human beings (sight, hearing, smell, tactility), dealing with these problems constitutes a significant part of the overall conceptual task of architecture, determining the extent of its social usefulness and the significance of its objects.

Nevertheless, we don't always deal with the same architectural objects when considering architecture historically. Analyzing the historical legacy in a schematic way, we can divide architecture into periods of an organic character; periods of maximum tension in the social pursuit of goals, when architecture created its own social types following the basic principles of its construction (the time of the crystallization of the concepts of the Greek temple, the Gothic cathedral, etc.); and periods that correspond to the social decline of the ruling class, when the main problems of architecture were substituted by purely decorative tasks (the Hellenistic period of Greek architecture, the last Gothic period, etc.). The period of eclectic prewar architecture serves as the most explicit example of this purely decorative period, during which the very understanding of the real meaning of architecture was lost. Even more pronounced is the postrevolutionary architecture in the USSR based on the exceptionally active social constructiveness of the working class, and, in the West, the rise of a purely organic architecture with new goals and technological possibilities, primarily on the basis of an incredible technological progress.

The distinction between these premises thereby creates the divide between the new architecture in the West and in the USSR. Soviet architecture is characterized not by the decoration of canonical objects but by active participation in the building of a new society, of the new social and domestic relations, and new social types.

Moisei Ia. Ginzburg

**Association** Association is the connection between two impressions, formed on the basis of experience, that determines the way they are manifested in consciousness. The law of association is used to explain the events of memory: Impressions

received simultaneously are connected to each other in such a way that subsequently one impression brings up the other in one's mind.

Associationist psychology (which found its classical expression in the work of Hartley, both Mills [James and his son John Stuart], and Benn) has broadened the meaning of this principle; from this viewpoint, all events of mental life are a simple product of the association of ideas.

There is a tendency today to understand association, on the one hand, as merely a law of reproduction, and, on the other, in much broader terms that extend well beyond its narrow definition as the association of images and ideas with the association of emotional and volitional states. The associative principle plays an important role in aesthetics. We find it in some theories of empathy as a hypothesis of memory (Lotze, Zibek, F. Vischer, Biset, and others), and it was given special prominence in Fechner's study of the "associative factor." Fechner understood everything given through sensory impressions and accessible to the direct perception of an observer as "direct factors," and he ascribed the domains of expressivity and spirituality to the "associative factor." The lack of complete clarity of the latter term in Fechner's work, its considerable expansion beyond just memory events, and the lack of limitations of purely random and individual associations eventually led to the rejection of the accuracy of the terms "association" and "associative" in this sense (Volkelt, Ziegler, and others).

Recently, the application of the associationist principle to aesthetics has led to a certain process of purification from extra-aesthetic aspects. We observe an effort to separate aesthetically significant associations from extra-aesthetic and contingent ones. Scholars have started to propose unity and a clear connection to directly given aesthetic moments, as well as an association's own "contemplative value" (Külpe), as signs of aesthetically significant associations. Aesthetic associations are required to be "objective" (Müller-Freienfels), i.e., only those associations that are more or less common and accessible to everyone are allowed. Such a requirement runs counter to the understanding of aesthetically valuable associations as conforming to the object (it is especially emphasized in the work on musical psychology) rather than being universally accessible. Moreover, if one further underscores the objective meaning of an aesthetic event, one finds it is no longer possible to talk about any kind of "meaning" as an association (as a *Bedeutungsassoziation*, Laurila), which leads to a tendency to deny the aesthetic function of associative ideas.

The meaning that is sometimes found within subjective associations is usually reduced to an increased enjoyment, but it is considered unrelated to the judgment one makes about the subject (Dessaur, S. N. Beliaeva-Ekzempliarskaia).

P. S. Popov

Collective Artistic Creation (or Collective Creativity) In its broadest sense, science considers every work of art, even the most unique, to be the product of collective work. Since every artwork is a social phenomenon, it always bears the quality of

"collective psychological expressiveness" and reflects the ideology of a given community or social group. So-called autonomous, individual creativity is as much a collective product as the works described as stemming from collective creativity, opposed to the individual one.

In a more narrow sense, the term "collective creativity" is used when an artwork is linked not to the life of a collective as a whole but to specific aspects of its activity. Workers' songs that serve to coordinate working processes and whose format depends on the nature and tendency of these collectively performed processes are an example.

After artists formed a distinct professional group, it became possible to use the term "collective creativity" to refer to unions of professional artists formed in order to work together (guilds). In contemporary times, Richard Wagner strongly promoted the role of "artists' associations" in creating works of drama: Every dramatic piece should be the result of an artistic association that had never emerged before and could never be formed again. This sort of collective creativity was to be fostered by popular masses, and therefore they would become the true creator of the future. From the outward mechanical perspective, cut off from the interpersonal interaction described by Wagner, this collective creativity takes the form of co-authorship, where individual parts of an art piece are completed by different authors.

Finally, collective creation is not only about simultaneous collaboration, it can also take place sequentially, when changes to the draft of an artwork, which is often created by an individual, are made gradually over a given period of time, even though most often it was created by an individual. Examples of such collective creativity include rhapsodists, folk storytellers, etc. Often the anonymity of a work contributes to the perception of it as a product of collective creation.

The essential features of collective artistic creation have been defined differently depending on the prevailing understanding of the nature of the collective. In cases when a collective was thought to represent a number of individuals who were simply brought together, where the collective was secondary to the individuals themselves, the laws of collective artistic creation and "collective imagination" were frequently interpreted by analogy with individual creativity in opposition to objective sociology. The estimation of collective artistic creation changed at various stages of the development of aesthetics. Its estimation as a primordial, pre-individual stage that was followed by the "superior" individual stage is linked to the development of individualism during a certain period of European history.

Over the last decade and especially during the postrevolutionary years, the subject of collective artistic creation has regained the close attention of both theoretical art historians and practicing artists.

V. P. Zubov

**Composition** Composition (from Latin *composition*, from *componere*, "to put together, to compose") has been one of the fundamental notions of philosophy

and art theory since the Renaissance, which inherited the term from the aesthetics of antiquity.... Composition designates the structure or order according to which individual elements of an artwork come together into an organized visual unity. Emphasizing the external arrangement of an artistic construction that is perceivable with the senses, the term "composition" expresses the kind of harmony that is unique to every work of art, which manifests between a subjective intention and an objective image or idea, on the one hand, and the perceptible material being used, as well as the nonartistic elements that become part of and turn into an artistic unity, on the other. As an abstract and formal notion, the term "composition" can therefore denote either a concept or a certain stage of a creative act in artwork production (from the viewpoint of implementing a subjective intention); it may also refer to the actual visible designs of artistic construction. The latter, defined as a special layer of compositional forms, can vary depending on the nature of the construction itself (symmetrical, periodic, cyclic, pyramidal, etc.), as well as on the specific group of visible forms that are combined and subdivided (the subject matter of an artwork or the method of its analysis) into a given compositional unity.

- 1. Composition of ontical forms:
- a. temporal (scales, ..., meter, rhythm, words, movement, tempo, etc.), and
- b. spatial (volumes, surface, figures, light, color, etc.).

Meanwhile, the physical characteristics of the material are reinterpreted and emerge as its artistic characteristics (see **construction**).

- 2. Composition of narrative and visual forms such as figures and actions, with pragmatic and causal interactions being translated into the specialized language of artistic laws.
- 3. Teleological and tectonic composition, in which forms of nonartistic expediency, such as in a sermon or in a building, form a distinctive artistic rhetorical or architectural composition.
- 4. Finally, composition as a centered unity of primarily expressive elements (intonations, strokes, gestures) that are manifestations of the creator's style and manner (see **concept**).

It is quite natural that every form of art (depending on the nature of the material and on the inner structure of the image, i.e., depending on the different relations among expressive, constructive, and graphic elements) has different composition issues to address. In music, for example, all types of composition are reduced to the constructive principle. It is no accident that the term "composition" is used to refer to the art of music, designating the process of creating music and musical work in general.

The rules of composition are represented by:

- 1. General abstract definitions of artistic presentation, such as unity, diversity, contrast, etc., which have no content or normative significance.
- 2. Some perceivable qualities of objects, sounds, or words that function as artistic principles (e.g., acoustic and mechanical relations in music and architec-

ture, optical relations in painting and sculpture, pragmatic relations in narrative forms of painting and poetry) but do not bear any artistic significance of their own and therefore, strictly speaking, cannot be instrumental in establishing any "laws" of composition. They only constitute negative conditions for materials to adhere to their qualities.

3. Some compositional techniques have been considered indispensable during this or that period, although they themselves and their canonization are no more than stylistic forms and practical recipes that dominated the artistic will of this or that period (pyramidal composition of the Renaissance, sonata form in the nineteenth century, pseudo-classical tragedies of the seventeenth and eighteenth centuries).

To conclude, the role of compositional forms in the history of art is extremely varied. In times of rational and idealistic worldviews, when the artistic image itself is perceived not as an individual unit but as something that is socially binding—as a calculated system with strict differentiation and, at the same time, with coordination of its elements—the predominance of constructive mathematical composition is usually canonized. Conversely, because of individualistic and irrational tendencies, compositional elements are either dismissed altogether theoretically or, in practice, come to embody the irrational, indivisible unity of an individual concept, objectified in expressive improvisation. Naturally, there is a great deal of overlap between the two described poles.

A. G. Gabrichevskii

Composition and Construction Composition and construction are dialectically interrelated in any artistic activity as the two principles of "co-positioning" and "building" (these are the literal meanings of the terms) parts of an artwork into one artistic whole. Since composition and construction are often not clearly differentiated from one another, it is necessary to make a preliminary distinction between them. The construction of an artwork is a mechanical notion: It denotes the system of linear axes that builds the abstract spatial skeleton of the piece and gives it stability. At the same time, construction makes the piece stand out from its surrounding environment, be it real or illusionary, and thereby characterizes its external system of regularity. By contrast, composition is a purely organic interrelation of the piece's elements that forms a rhythmic unity through a dynamic balance of masses (like body, color, and light) with their formal reciprocal transitions between one another, and all the individual gradations of the depicted motifs that build up on the construction's skeleton like a pattern. Composition concerns the inner regularities of an artwork, those determined by its arrangement of aesthetic space around an image. It is easy to notice that, artistically speaking, the latter principle (composition) is a more important factor in an artwork and can sometimes overshadow the former, to the point of undecipherability, as is the case with rococo art. One has to acknowledge, how-

ever, that the relative significance of composition and construction in each kind of spatial art is entirely unique and is different from other arts.

Thus, in architecture, construction naturally plays the role of the thesis, as the architectonic of forces of rigidity and gravity, of load-bearing and supporting parts, of the overall design and its details; meanwhile, since construction completely takes over the principal rhythmic accents, composition is assigned a secondary role of arranging purely stylistic details and combining decorative surfaces and masses. A good representation of this is such a remarkable architectural style as Gothic. At the core of every Gothic building lies a rationally designed skeleton of axes, with decorative details appearing only on its periphery. In sculpture, composition and construction are almost equal and gain dominance depending on the tastes of the period and technical requirements needed for execution. Finally, in two-dimensional art forms (those in which the third dimension is created by purely aesthetical means atop a flat surface), composition takes on the role of the thesis and unfolds its visual richness with an infinite variety of compositional rhythms; such are the paintings of the Baroque period. Here construction is limited only by the structure's design (mostly planimetrically simple and arbitrary), as well as the need to consider the exterior framing. One also has to bear in mind that the dialectical relation between composition and construction undergoes considerable changes within various stages of historical styles: The sculpture of antiquity and modern painting alike demonstrate a similar evolution of composition, which remains rudimentary during the archaic period, gains considerable interest during the classical period, and, toward the later stages of the style, finally dominates over construction.

D. S. Nedovich

Constructivism Constructivism was a twentieth-century artistic movement that became widespread mainly in Russia. The term "Constructivism" was originally used to designate three-dimensional constructions put together from separate planes (Medunetsky, Stenbergs, Tatlin, and others). Later the term became more widespread and began to be used to refer to paintings and sculptures. This use is controversial since Constructivism rejects painting and sculpture, and, in its extreme form, dismisses art altogether. The main premises of Constructivism are the utilitarian purpose of art, an expedient organization that demonstrates the qualities of the material the artist is working with, and the rejection of decorative and ornamental elements. One should distinguish between two kinds of Constructivism:

- 1. formal-abstract;
- 2. utilitarian.

Formal-abstract is a logical conclusion of nonobjective art. Having destroyed the representation of the object, a constructor creates a new, three-dimensional object by combining abstract planes. The clarity of composition, determined by the economy of perception and the demonstration of material, is seen as the guiding principle of formal-abstract Constructivism. Working directly with material forces, artists go beyond the limits of painting and sculpture (Picasso, Tatlin, Baumeister, and others). The combination of paper, tin, wood, wire, and other materials on a surface cannot be called painting; in the same way, three-dimensional constructions made of flat planes, where mass has evidently been eliminated as such, cannot be called sculptures.

N. V. Iavorskaia

**Continuum** (that which is uninterrupted) Unlike mathematics, philosophy often uses the term "continuum" in an extremely broad (sometimes even metaphorical) sense. Eisler's dictionary defines continuum as a "continuous, uninterrupted magnitude that is free of gaps, where the end of one part is simultaneously the beginning of another part" or as "a gradual transition from one content of thought to another." Mathematics distinguishes between a *continuous* set (a set of all numbers, including both irrational and rational ones) and a *homogeneous* set (for instance, a set of all rational numbers without exception). Philosophy does not distinguish between the two, opposing them both to discrete (discontinuous) sets. Based on this distinction, philosophy solves the question of infinitesimals. Traditional philosophy posed the question in the form of an opposition:

- 1. Object A is not infinitely divisible;
- 2. Object A is infinitely divisible.

In the latter case, it was tacitly assumed (Kant) that the infinite divisibility of object A rules out the possibility that object A in fact consists of an infinite number of parts. From this point of view, the infinite and the continuum were seen simply as the law or the consistent pattern for a process of division, while their component elements were given rather than preestablished. (In mathematics, this concept corresponds to the view of the creators of so-called classical analysis.) The mathematical theories ("analysis") that formed Kant's views had a significant influence on the development of the natural sciences and logic. Hermann Cohen proclaims the principles of these theories to be "the triumph of pure thinking." Yet this claim was made on the eve of a radical revision of this viewpoint by these exact sciences. Georg Cantor's work demonstrated that Kant's conclusion was untenable: Set A can consist of an infinite number of elements without being counted or exhausted in any given sequence of processes. In the meantime, the field of natural sciences shifted its focus toward discontinuous phenomena. Depicting these phenomena in the framework of continuity would neither have conveyed their nature nor have been necessarily useful as a supporting fiction. The same is true for the field of psychology, which adopted the term "continuum" to describe mental magnitudes (the degree of strength, clarity, quality, etc.). While the eighteenth century's dream of a "mathematics of the soul" attempted to describe the flow of the psyche from the viewpoint of "continuity" (Leibniz), Weber and Fechner's dis-

covery of the law of absolute and relative thresholds of sensory perception (the minimal measure of sensation and of difference between two sensations) revealed the discrete nature of a series of sensations (a continuous change in stimulus is accompanied by a discontinuous change in *sensations*). It is worth mentioning that already in the eighteenth century, English psychologists (Berkeley, Hume, and others) who opposed mathematical "analysis" modeled psychological processes (and especially their contents) with the help of finite and discrete "minimal sensations" (for visible objects, for instance, they used the term "visual minimums"—colored and perceptible points). A series of sensations that is free of gaps can be called "continuous" only conditionally (e.g., a continuum of spectral colors). The discrete character of mental activities has been mentioned more than once in psychological literature (James and others); its significance for the theory and psychology of **creativity** is becoming increasingly apparent. Since the notion of a continuum as such lies outside the domain of aesthetics, its interpretation has varied in accordance with the differences in aesthetic canons. Thus, Christiansen sees the unique quality of Neo-Impressionism (Pointillism) in its radical "decomposition of continuity" aimed at "stimulating the nervous system in sensory perception." Production of a "quasi-continuous" movement from discrete moments is also prominent in cinema. The above examples clearly indicate that, when applied to objects of thought, the term "continuum" is not used in its original meaning and designates objects of sensory and visual perception, thus being no different from a series of real elements with empty intervals between them.

V. P. Zubov

**Craftsmanship** As the lowest quality level of art, craftsmanship is antithetic to artistry. Workmanship, understood as the material processing of an object, is included in every art as a necessary technical category. In pure art this aspect of workmanship is absorbed by its creative aspect until it is no longer felt at all. Therefore, craftsmanship as an obvious trace of technical difficulties during work is an indicator of the low quality of artistic synthesis and imperfect mastery. Evidence of craftsmanship may be observed in **dilettante art** and in student works of epigones of academic art. On the contrary, the higher and purer the art, the less craftsmanship it contains, i.e., labor that has not been understood or synthesized by creativity.

D. S. Nedovich

**Creativity/Creation** [Tvorchestvo] The word creativity is often used to refer to broadly different notions. First of all, one needs to establish the distinction between creation as a product and creativity as a process. As creation one may understand the work of art or artistic monument itself; thus, by the "creation of Goethe" one may imply Faust or his other works—this is creation as an already

constructed object that may be studied from the point of view of its structure, composition, etc. In the more specific sense, one understands creativity as the very process of creation, the gradual transformation into form, the process of working on a piece of art or a different object of creation, the history of its creation, as it were.

The term "creation" has theological origins. Schaffen, Schöpfung, and creation were originally connected to the issue of God's creation of the universe, which brings up its own range of questions (creation ex nihilo, etc.). In philosophy and metaphysics, creation and creativity were used to denote that productive origin by way of which a known manifold may appear from a single principle. Fichte said that all creation, all genesis, is rooted in primordial thinking that is always selfgrounding. For the idealists of the early nineteenth century, the creative principle consisted in the activity of the imagination. But the notions of "fantasy," "imagination," and "creativity" were used not in the sense of actions or abilities of given individuals or a collective, but as a general principle of a supra-individual, nonhuman character. Only at the end of the nineteenth century, in connection with the development of psychology, did creativity begin to be talked about as the totality of those processes and specificities that cause the appearance of an artwork. The issue of artistic creativity has been more or less developed, and creativity in general and in spheres such as technology has been studied only in connection with an interest in artistic creativity. Lately, however, independent studies have appeared that examine creativity in technology in connection with an interest in inventions and in connection with the development of psychotechnics. In its own, specialized psychological understanding of artistic creativity one should distinguish three aspects:

- 1. the question of the methods of study;
- 2. the question of the main factors in creativity;
- 3. the question of the unfolding of creativity—the study of the individual stages that creative thought goes through.
  - I. There are five main methods of study of the psychology of creativity:
- 1. The subjective method relies on the testimony of the authors; that is, statements of the artists themselves, such as autobiographies, diaries, memoirs, letters, etc. It is enough to name such examples as *My Life* by Wagner, *The Chronicle of My Musical Life* by Rimsky-Korsakov, the diaries of Leonardo da Vinci, the correspondence between Schiller and Goethe, Goncharov's *Author's Confession*, Stanislavsky's *My Life in Art*, etc. There is no doubt that the individual remarks and reflections of major artists sometimes shed light on the genesis of art. Authors' descriptions of the emergence of ideas for individual works, for instance, are very valuable; equally valuable are artists' confessions about their internal evolution, about the technical devices of their work, etc. But the same material also has major shortcomings: Authors often deliberately conceal and cover up the mundane aspect of

their work; they often turn out to be poor judges of their labor; and sometimes they pursue other goals in their autobiographical writings, such as theoretical narratives. Goncharov, for instance, pursued obviously polemical goals in his *Confession*, and Goethe's book *Dichtung und Wahrheit* is full of theorizing.

- 2. The objective method can be reduced to the study of artistic monuments and their corresponding variants, sketches, preliminary plans, etc. Comparing the so-called canonical text with first drafts, for example, allows the historian to uncover the creative history of the writing through the gradual shaping and modification of the original raw material. Often one is able to trace how the life experience of an artist, which served as the original starting point, gradually turned into an autonomous artistic composition. Thus in Lev Tolstoy's work, the first drafts often contain the names of those who served as prototypes for individual characters in his writing. A self-portrait image of Aleksei Turbin in the novel White Army by Mikhail Bulgakov, having merged with the character of Nay-Tursa in the later text of *The Days of the Turbins*, became a new, hybrid Aleksei, more complex and structural, which becomes evident when one compares the novel with the play. The very products of artistic creation carry traces of their origins; one can look at them as a condensed whole (a cluster) of a certain productive development. Bühler (Crisis of Psychology, 1926) points out that alongside the psychology of experience (Erlebnis) and of behavior (Benehmen) one can distinguish the sphere of creation (Gebilde) as the development of internal powers (Geist). From this point of view Spranger noted already in 1922: "I request that the science of self-conscious life be called 'psychology." But isn't the creative life of an artist the highest manifestation of such self-conscious life, in which artworks are living monuments and witnesses of this intense life?
- 3. The biographical method serves to regulate the artist's testimony about himself. It encompasses the use of all kinds of dates and specific facts, which can be confirmed with accuracy. This way one can characterize the general atmosphere and the conditions of an artist's work in relation to her overall activity, which have at least as much importance as the description of the origins of individual works. An example of the way this method may be used is Busemann's work about lyrical poetry (1925). Busemann posed two questions: first, how is a poet's oeuvre distributed over the years of his life, and second, how is lyrical creation distributed over the months of the year? He studied seven authors. It turned out that Goethe, for instance, was most productive during the following years of his life: 25, 33, 40, 48, 58, 65, 72; his creative phases were short and his nonproductive ones long. Concerning all the poets he studies it turned out that the periods of sexual excitement coincide with the periods of artistic inspiration. Concerning the question of the distribution of creativity between the months of the year, it turned out that Hoffmann and Uhland were winter poets, while Hebbel was an autumn one. In general, the most productive months of the year in terms of writing were May, September, and January. In order to gather data of this sort, testimonies of the closest relatives, such as wives, children, etc., are especially important. As an exam-

ple one may refer to the *Memoirs* of A. G. Dostoevskaia and *My Life at Home on Yasnaia Poliana* by T. A. Kuz'minskaia, Tolstoy's sister. When using such materials, one has to be careful with general characteristics and evaluations, since the authors of such memoirs often turn out to be less talented than the creators themselves; such is the general tone of the writings of Dostoevskaia in relation to the work of the famous novelist.

- 4. In the survey method, one puts together a questionnaire regarding the dominant traits that characterize the creative laboratory of an artist and distributes it to a given circle of people. Then responses are systematized. Along with the questionnaires, one can include in-person individual questioning, where the scholar finds out those aspects of the creative process of the author he is interested in through a personal conversation or a series of conversations. One questionnaire is known concerning musicians—it was conducted by Riemann and Meumann. Already in 1894 Binet and Passy published "psychological studies of playwrights," which resulted from research by way of questionnaires of such creators as Sardou, Alexandre Dumas, Daudet, Pailleron, Meilhac, Edmond de Goncourt, and Curel. A known shortcoming of Binet's essays is their style of interview, but they give very salient characterizations. Here are some of the aspects of the work of Sardou and Dumas based on Binet's materials: Sardou always has paper with him, he writes everything down, in a carriage, coming back from dinner, etc. He has a special folder for each play; there are about fifty folders of plays that are already more or less finished. Along with these folders there are others that are less full. These are plays that are not finished—there are about two hundred of them; some have only two or three words, a note or newspaper clipping with underlined words, which present the "kernel of a play." Dumas, on the contrary, had no collections at all. He writes only one play at a time, while Sardou writes several plays at once. Dumas works very fast. Monsieur Alphonse was written in only seventeen days, Honeymoon Trip in eight days, "Princess Georgia" in three weeks. Such are the typical characteristics of creative work that can be obtained as a result of in-person questioning and written questionnaires.
- 5. The psychographic method. Psychographics proper means description of consciousness; by psychogram one understands a system of characteristic traits of a person. In this case, artworks themselves serve as the primary material. By using comparative statistics we may find out how often a given poet used certain poetic expressions or, for instance, images borrowed from the realm of visual perception, etc. In this way, one may establish that one poet used predominantly visual images, another one auditory ones; thus K. Gross established that the young Schiller used many more visual images than Goethe. The verbal vocabulary of the poets was also studied. It turned out that Shakespeare used about fifteen thousand words; Milton no more than half that. The best-known study in this regard is Paul Margis's book about E.T.A. Hoffmann (1911). For this work the author used 218 bibliographic references listed at the end of the book. In addition to the complete collection of Hoffmann's works, it includes his correspondence, biographies, records, notes, etc. Margis divides every general question into a range of subquestions; thus, for

instance, there are six questions concerning childhood influences in the parents' house, seven questions concerning education, and so on. There exists a similar study of Robert Schumann written by Moritz Katz.

- 6. Experimental study of creation may uncover the distinctive characteristic permutations and elements of the mechanism of emotional life (location of the totality, of parts, of abstractions, of generalizations, and so on) that are characteristic for the work of *nasēxtchrsus*<sup>3</sup> consciousness. Such is the experimental study *Toward a Psychology of Creative Thinking and Delusions* (1922), by Otto Selz.
- 7. Psychoanalytic method. The founder of this school, Sigmund Freud, starts from the assumption that the path of art is a reverse path from fantasy toward reality. A poet is besieged by very strong bouts of desires—a wish for praise, power, fame, and female love; he lacks the means to attain all of this and therefore, like every unsatisfied person, he takes leave from reality and transports his libido, his passion, into fantasy images. Endowed with the gift of giving an artistic form to the material, he dresses up his desires in poetic images. Psychoanalysis of an artwork consists exactly in the closure of the unsatisfied desires that have served as a stimulus for creating one or another artwork.
- 8. When one uses sociological method for studying creative work, the main emphasis shifts to the environment and the social-economic factors: Since these socioeconomic conditions determine the life of the class to which the author belongs, they also mostly determine the character of his creativity.
- 9. The reflexological method starts from the premise that all human actions and behavior represent a chain of reflexes, which layer on top of each other. Creativity is a complex action, within which one can uncover the presence of reflexes—the distinction between their combination is what determines the individual character of creativity (Bekhterey, Savich).

In addition to the methods enumerated above, there exist aggregate methods that combine different approaches.

- II. Addressing the question of the main individual factors of creativity, one needs to take note of the main conditions of physio-psychological nature, which have special significance for the development of artistic-creative elements in the work of the author being studied.
- 1. Physiological conditions. According to the research of contemporary physiologists, body structure determines the dominant tone of the worldview of a person, and therefore also his creativity. Thus, Ernst Kretschmer argues that an asthenic, for instance, is usually a schizophrenic—an individual prone to self-absorption, isolation, and fantasy. Schiller, with his excessively long limbs, sensitive skin, and oval face with a long, thin nose, is a typical asthenic. From this one can derive his main traits, those of a schizothymic, and at the same time locate a combination of pathos, dreaminess, heroism, and gentleness in his poetry. Following Kretschmer's formula, it is easy to combine the typically asthenic figure of Gogol with the humor in his creations.
- 3. This word of unknown meaning is rendered in Greek letters in the original.

2. Psychological conditions. In order to understand the mechanism of creativity, the following conditions are important: development of fantasy, the unconscious sphere of mental life, memory, emotional life, and thinking.

Fantasy or constructive (creative) imagination plays the foremost—one can say all-defining—role in the creative life of an artist. The significance of fantasy in work of artistic creation is enormous. As F. Vischer wrote: "The beautiful is created only with fantasy, no one can replace it; fantasy is a special organ of the beautiful." In connection with this, many psychologists consider the essence of creativity as a whole to consist in an unusual strengthening of the workings of fantasy in the creation of forms, valuable from the point of view of aesthetics (Kreibig). Fantasy plays an extremely important role in theoretical (scientific) creativity as well, but for science fantasy is necessary only as a point of departure. Meanwhile, in poetry (and in art in general), fantasy is not only an ability thanks to which an artwork is conceived but a means for completing the creative process. One can say that an artist lives through fantasy, in one way or another, while he creates. It is not so much the primordial image-quality of representation that is important for the power of imagination, but rather its ability to make the form constantly change in accordance with the tendency toward greater clarity.

Along with fantasy, the **unconscious** is an important factor in creativity. A composer once noted: "It is not me who writes but some kind of unknown force." This experience of some kind of external force during creative periods is very typical, and it is often accompanied by a known excitation, which sometimes escalates to a painful state. The following testimony by Grillparzer is curious: "No matter how much I thought during the walk, I composed only the first ten verses. After returning home and having had dinner before going to bed, I aimlessly wrote down these eight to ten lines and got into bed. Then I was overcome by a very special kind of anxiety. I became feverish. All night I was turning around in bed. Just as I dozed off I jumped up again, and in those moments had not a single thought about what I had written—I did not remember any of it. In the morning I got up with a feeling of an impending sickness, had breakfast with my mother, and again went to my room. Here I caught a glimpse of the piece of paper with the forgotten verses. I sat down and started writing and writing; thoughts and verses came as if by themselves, as if I was only copying them. I could not have been writing any faster. Thus, within three or four days the first act of my play was ready."

One has to note the special role of memory among the artists. Originality coexists with a weak memory, and geniuses are often forgetful (amnesiac). But one should remember that absentmindedness and forgetfulness don't prove the absence of memory, but are indicators of an exceptionally strong power of concentration and of special forms of memory. If within memory one distinguishes mechanical memorization, intellect, and intuition (i.e., the ability to retain complete pictures), then mechanical memory does not necessarily correlate with giftedness. For creative memory, the most typical mode is the contemplation of complexes, the instantaneous memorization of entire pictures. Artists need the

memory of their own particular past in order to transform themselves. Artists have clear memories of their childhood, sometimes very early on (Walter Scott, Ibsen, Tolstoy); one should also note their attention and powers of observation.

The emotional life of creator-artists is distinguished by special intensity. An artist is connected to the surrounding world in a special way; he feels it with the full intensity of his emotional life. Every artistic image has to have the maximum of power and expressivity. An artist may produce a bright image only when he feels it with the full intensity of his emotional power. Otherwise the image turns out abstract, cold. The presence of emotions in creative endeavors is also proven in indirect ways. From the psychological viewpoint the essence of aesthetic enjoyment consists in the presence of aesthetic experience, i.e., feeling; but every perception is a reproduction of what the artist brought to the act of creation. If we experience strong emotions when we perceive an artwork, this means that the author brought a strong emotional charge into the work. Moreover, if we discover feelings within aesthetic perception, then a respective creative act should contain a feeling experienced with a much stronger energy and power. During creation, this feeling is combined with pleasure and suffering. Creative experiences are difficult but sweet. An author suffers when he writes (suffering of creation), but at the same time he enjoys bringing his ideas to fruition (involuntary admiration of one's work).

Finally, thinking is found in artistic creation in various forms:

- 1. One needs to know the era, its cultural heritage, etc. Knowledge of historical details is a necessary condition for the historian-novelist. A painter cannot reach any height without the knowledge of technique, a musician without the knowledge of the theory of music, a poet without the knowledge of the structure of verse, and so on.
- 2. Artistic creation requires constant reworking; writers' archives hold enormous numbers of variants that present evidence of intense intellectual labor.

III. Such are the static resources of the psychic faculties that occasion artistic creation. But one needs to uncover their dynamic, to trace how the creative process unfolds in stages, from conception to final completion of the artistic whole. This can be presented by describing the sequential unfolding of artistic creation. These stages may be marked only conventionally; sometimes certain stages drop out, while others take their place. In the end, every author has his or her individuality; therefore, the path of every creator is distinct. For this reason, one can identify only approximate schematic stages. Folkelt's formula outlines the presence of four main moments:

- 1. creative mood;
- 2. conceptualization;
- 3. internal image;
- 4. embodiment or realization.

Müller-Freienfels's formula (*Psychologie der Kunst*, 1912) can be boiled down to three stages:

- 1. preparation;
- 2. conceptualization;
- 3. realization.

Dessoir (Aesthetics and the Theory of Art, 1906) distinguishes

- 1. creative mood (E. Hartmann's term);
- 2. conceptualization, presented in sketches;
- 3. objectification.

Kreibig (Essays on the Psychology of Artistic Creation, 1909):

- 1. conceptualization;
- 2. composition; and
- 3. elaboration.

Engelmeyer's formula (1910) can also be reduced to three parts. All the authors generally outline three stages; Müller-Freienfels and Dessoir join only the second and third stages of Folkelt's formula; in turn, Kreibig unites the first two moments.

Schiller describes the creative mood (preparation) as follows (letter to Goethe from March 18, 1796): "At the beginning I have a feeling without a determined or clear subject; the latter is created only later, it is preceded by a certain musical mind-set." The appearance of images and forms is preceded by a condition that feels like a certain mood. Here the creator does not yet arrive at a form-giving fantasy; he feels in himself the creative, generative forces, sometimes agonizing impulses, which advance toward something that the author cannot yet either understand or name. The second stage is conceptualization. This is the moment of visual contemplation, when an image is created. Inspiration and felicitous thought belong precisely to this stage of clarifying conceptualization. Such a state—when suddenly consciousness seems to clear up and a new conceptualization, thought, formula, or point of view is understood—is also characteristic of scientific creation and technical inventions. In the arts this usually presents a series of creative displacements [sdvigov]. One needs to be very careful not to mistake conceptualization for a finished work. Sometimes conceptualization appears as a simple record of a notion that is still undefined and fluctuating; often this notion transforms into a schema, sometimes it becomes structured and turns into a more or less developed program or outline. Such are Turgenev's notes, which sometimes present a complete table of contents, a sequence of the narrative, or a preliminary summary of what should be narrated.

Such constructions come close to the third stage—internal elaboration (Hartmann's term). As a result of internal elaboration we have an outline, a sketch, a draft, an essay. The goal of a sketch consists in testing the internal image—whether it has matured in order to be realized into something objective.

This is the first test of objectification (F. Vischer). There are artists who only make sketches and never get to completed works.

There exist three types of connection between internal elaboration and outer realization:

- 1. Internal elaboration may be ready before the artist begins to work on sensory material.
- 2. The case when the shaping of sensory material happens simultaneously with its internal elaboration.
- 3. An intermediary case; here internal realization precedes elaboration to a known degree, but the artist shifts once again from partial elaboration to a supplemental construction of fantasy. Actions of elaboration exert a great influence on the images of fantasy. A playwright feels much more comfortable during the elaboration of the second act, when the first act is already verbally pinned down. In the case of improvisation, the third stage—of internal elaboration—is completely absent. The fourth stage is the phase of elaboration itself. This is the translation of images of fantasy into forms of sensory material. Here knowledge, skill, and training have an enormous significance. The author's mastery (knowledge of the technique of his craft) consists in his ability to stay on top of all the difficulties in the working of the material. Here there are two types of creators: Some speak playfully, others work with difficulty. Mozart's creativity, as he himself admitted, was light and nonchalant; Brahms's creativity, on the contrary, belonged to the category of the intellectual, linked to great mental strain.

P. S. Popov

**Cubism** Cubism was an artistic movement of the early twentieth century. The origin of the term "Cubism" is somewhat accidental; Matisse used the term to describe a painting with houses depicted in the shape of cubes (Salon d'Automne, 1908). The formal-analytical method of Impressionism finds its development in Cubism.

Initially, the term "Cubism" referred to all new art that had a tendency to greatly deform objects of the outer world and to abstract them; it also proclaimed a "pure art," an "art of conception" as opposed to an "art of imitation." However, Apollinaire further distinguished four tendencies in Cubism: *le cubisme scientifique, physique, orphique, and instinctif.* Today these tendencies have acquired the significance of independent categories, namely, Orphism, Futurism, and Expressionism, only the first two being Cubism per se.

Unique to Cubism is an analytical approach to the understanding of the world as well as to a construction of a painting that leads to a perception of objects that is purely plastic and volumetric. Cubism places an emphasis on construction and is transformed into an art of spatial relationships. Focusing on the depiction of an object, Cubism provides an analysis of it, deconstructing it into individual parts but not pursuing its complete elimination. Seeking to clarify the

representation of an object, Cubism resorts to various materials that characterize the given object when developing pictorial surfaces. Color in Cubism serves to articulate volume and plane, and Cubism mainly uses only one of the qualities of color—its radiance.

One should distinguish three dialectically related forms of Cubism:

- 1. Sculptural Cubism, in which the deformation of an object, its geometrization and faceting, is used to show its volume (Picasso, Braque, Metzinger, Gleizes, Le Fauconnier, and others; characteristic of the early Cubism of 1908–10).
- 2. Divisionist Cubism, in which, after the complete deconstruction of objects, a "new object" is constructed of separate planes and lines (Picasso, Braque, Gris, and others; covers the second decade of the twentieth century).
- 3. Aesthetic Cubism, which preserves the contours of objects while deforming them. Volumetric Cubism becomes planar, and the emphasis is placed on specific linear patterns and refined color combinations. In aesthetic Cubism, basic principles tend to die out and be rejected (Picasso, Braque, Lurçat, Marcoussis, and others). Aesthetic Cubism is typical for modern French painting.

Having emerged in France, Cubism was also embraced in other countries. In Russia, it evolved into a form of nonobjective art and is known under the name of Cubo-Futurism (Kliun, Udaltsova, Popova, and others).

N. V. Iavorskaia

**Depth** As a formal concept, depth represents one of the ways of resolving the spatial tasks in art. In painting it is achieved by the illusion of maximum breakthrough into the depth of pictorial space. Depth was absent from the monumental wall paintings of ancient Egypt, the Greek vase paintings of archaic Hellenism, and the art of the Middle Ages.

In European painting of the fifteenth century, linear perspective became the means of expressing depth in painting. Starting in the sixteenth century, depth begins to be expressed also by aerial perspective, where it is created by means of color. Seventeenth-century landscape painters, such as Hobbema, Potter, Cuyp, van de Velde, and others, sought to create the maximum illusion of depth. In terms of individual formal elements of an artwork, one can talk about the depth of individual shades of color, contrasting them with the superficial coloring of the canvas. If, for example, an artist takes a canvas with a black background and covers it with a thick layer of ultramarine, he achieves the effect of a deep, velvety, and soft black tone into which the eye seems to immerse itself endlessly during the process of contemplation.

Sculpture also uses certain devices in order to create the impression of depth. Thus, for instance, the outstretched arms of *Apoxymenos* by Lysippos give the composition a sense of depth. In architectural structures, corbels that extend out sharply or side wings of a building create the impression of depth, which is sometimes strengthened with the help of mirrors that heighten the sense of depth

in an interior space. The frescoes of Pompeii, when they were applied to the interior walls of a building, sought to create the effect of depth by disrupting the flatness of the wall with the illusion of spatial depth.

In the psychological sense, the notion of depth may be understood very differently. In painting, one can talk about the depth of a gaze or thought process. The term "depth" may also be given a qualitative meaning, i.e., the sense of value judgment. In this case, one can talk about the depth of the conception of an artwork and about the depth of its execution. By extending the same meaning to the entire range of activity of an artist, one can talk about the depth of his creative process. In the same way, individual periods, even entire cultures, may be seen as deep (for instance, Egypt) or, on the contrary, characterized by a superficial sliding along the periphery of phenomena. We refer in this sense to the worldview of an entire culture or of its individual periods.

N. M. Tarabukin

**Diagonal** A diagonal is a line that unites the vertices of two corners of differing sides of a polygon. In painting, the diagonal is often the axis along which the pictorial composition is planned. Compared to compositions modeled following a triangle, cross, or circle, which are distinguished by their stasis or by an internally resolved movement, a diagonal composition is the most dynamic. In a composition that follows an isosceles triangle, the internal movement is inevitably balanced and closed (as in Leonardo), but in a diagonal composition movement often "spills out" beyond the confines of the work's frame (as in Rubens). In the art of the archaic cultural periods, characterized by their static quality, diagonal compositions are nearly absent. By contrast, in Baroque art (for instance, in Tintoretto) they are dominant.

A diagonal can extend from the painting's corner, which is closest to the viewer, and extend into depth (as in Surikov's composition of *Boyarina Morozova*). Or it can have a contrary direction of movement, extending from the depth of the painting toward one of its corners (as in Rembrandt's *Night Watch*). Finally, a diagonal may connect the upper corner with the lower one across from it or vice versa. One example is Pieter Bruegel's painting *The Blind*, which is full of uncanny dynamism. In this case diagonal construction results from the fact that the figures in the front of this cortege of the blind are gradually tumbling down.

N. M. Tarabukin

**Dialectics in Art** Dialectics in art may manifest itself in two ways: historical and formal.

1. In the history of art it can be observed in the way in which historical styles, with their dominant characteristics, follow one another. Periodization of major styles demonstrates that within the stylistic ensemble of a given period, at the peak of its maturity, along with the harmony of its main forms of expression, the domination of the stylistic ensemble of a given period, at the peak of its maturity, along with the harmony of its main forms of expression, the domination of the stylistic ensemble e

nance of completely different contrasting forms emerges, which gradually leads to the regeneration of the style into a new constellation that contrasts with the preceding style in its forms. Such theses and antitheses of a style (which, by the way, don't always lead to a synthesis) have been noted on more than one occasion in the art of the Renaissance and Baroque (Wölfflin, Spengler), as well as rococo, Empire style, and others.

2. Alongside this historical dialectics, one needs to make note of the internal dialectics of any artwork as an aesthetic organism. It goes without saying that every artistic monument is a synthesis of form and content—the morphological method in art history analyzes the dialectical development of every artistic form, within its own confines, through the struggle of objective-rhythmic beginnings with the material-factural ones; of the composition of temporal motifs with the construction of spatial elements; of an image with expressiveness, etc. This organic dialectic always achieves a certain relative synthesis and therefore has a more fundamental methodological significance than the dialectics of styles, which is insufficiently elaborated by science. Connected to this is the socio-technical dialectic of an artwork as an object of production and a product of consumption, connected to the function and role of art in the cultural system of culture.

D. S. Nedovich

**Dilettante Art** Dilettante art refers to artistic creation that lacks professional features. Its distinctive characteristics are the absence of schooling and an approach to art-making mostly as a way of filling leisure time rather than as "work." Dilettante art is the best expression of the tastes of art consumers of a specific country and period. It blossomed particularly during the eighteenth and nineteenth centuries, in most cases through imitation. Within the framework of this imitation, however, it is possible for invention and representation to lead to the anticipation of the development of great art.

Being imitative and in most cases untaught, dilettante art flattens individualistic qualities, making it easy to find common features in its creative tendency. Dilettante art is characterized by its "naive realism," which often leads to naturalism and even to illusionism as a somewhat narrowed understanding of the tasks of art. In turn, this naturalism leads to the lack of a strictly thought-through composition of an artwork. In architecture, dilettantism usually means the violation of the laws of unity and equilibrium; in sculpture, the elaboration of the surface to the detriment of form; in painting and drawing, the violation of the laws of perspective, lighting, etc. In portraiture, dilettante art most often turns to the profile as the most graphically expressive turn of the face; a mechanized projection of the profile onto a surface leads to a mastery of silhouette, which is an especially characteristic format of dilettante art. One observes in landscape an inclination to reproduce nature decorated by architecture, which makes it easier to project space onto a surface; as landscape art is mechanized, the favorite supportive means is the

camera obscura. In genre painting, dilettante art is distinguished by an ethnographic approach: Appearance is recorded in exactly the same way as an object is recorded in a still life. For all of these reasons, we see a general flattening of form in dilettante art. The range of its models is limited by the framework of everyday, mundane objects. Their selection relates to the broad variety of great art in the same way the language of the common man relates to that of a writer-artist. The rationalism and materialism of dilettante art, with rare exceptions, distinguish it from true creation. Dilettante art knows almost no artistic images; religious, historical, fantastic worlds are represented in it only as reinterpretations of the works of major artists. Attempts to create independent images are confined predominantly to the illustrative domain and to conveying literary images through the language of visual art. It is extremely characteristic of dilettante art to choose simple techniques; in sculpture, it is more often soft wax or clay than bronze or marble; in painting, watercolor is more convenient than oil; in graphic art, lithography is more likely than engraving; in engraving, more often etching than copperplate. Lack of technical skills and independent creativity often push dilettante art toward the "fraudulent" reproduction of some kind of difficult technique—usually, for example, an imitation of drawings, and of copperplate or dotted engravings. Dilettante art is also characterized by different kinds of new materials and semimechanical ways of art-making. Painting on porcelain, glass, marble, mosaic, decoupage, etc., belong to this category, as well as works made with the help of stencils, carbon paper, the camera obscura, and so on.

A. N. Grech

**Easel Art** This term is used to refer to painting, sculpture, and graphic arts only in the Russian language. In German, French, and English, the notion of easel art refers exclusively to painting. (Of course, the linguistic meaning of the term "easel art" in each of the mentioned languages has its own nuances.) "Easel art" is primarily a sociological term. In the most general sense, the notion of easel art can be reduced to the following. The periods of holistic, collective cultures tend to create monumental representational art alongside the small-scale applied arts. The former is characterized by six main social traits. First, monumental art appears not as some kind of differentiated, single, isolated type of art but as a total synthetic complex (architecture, sculpture, painting). Second, in its subject matter, monumental art, like the epic, is not individualistic but socially oriented. Third, monumental art is produced only as the result of a directive. Fourth, in every one of its elements monumental art is made for a specific consumer and for a specific place and environment where it will be installed. Fifth, monumental art fulfills its normal function not in a separate, isolated dwelling but in a structure of social significance, be it a temple, a room for popular gatherings, etc. Finally, a work of monumental art is not an aesthetic thing in itself but an artistically designed object for practical use.

Easel art presents the next stage of dialectical development of monumental art and constitutes its antithesis, its dialectical negation, opposed in its content and in its social aspirations. Appearing simultaneously with the era of money capitalism, easel art displaces monumental art as systematically as money capitalism displaces subsistence farming. With the era of market capitalism the transformation of monumental art into easel art takes place simultaneously along all six directions described above. First, the synthetic complex of monumental figurative art (architecture, sculpture, and painting) gradually diversifies and the unified complex falls apart: Architecture, sculpture, and painting begin to function as isolated art forms. Second, collective social themes are replaced with themes of an individualistic, private character. Third, the production of artworks according to a directive is increasingly replaced with the production of artworks for the market, for sale as goods. Fourth, the producer of art no longer knows the specific setting, environment, and consumer for whom a given artwork is made. Fifth, representational art is moved from structures of social significance to isolated, self-contained, private dwellings. Finally, sixth, with the loss of comprehensiveness and of other traits of monumental art described above, representational art is transformed from the artistic design of objects with utilitarian purpose into aesthetic "things in themselves"; separated from the total complex of an interior or the outer decoration of a building, an individual statue or painting becomes merely an aesthetic object, deprived of any usefulness save artistic expressivity. If during the era of money capitalism easel art encompasses only painting and sculpture, then as the socioeconomic basis of European society develops from trade capitalism to manufacture and industrial capitalism, the domain encompassed by the "easel" transformation becomes wider and wider, and the transformation itself deepens. During the time of the flourishing of industrial capitalism at the end of the nineteenth century, the "easel" transformation begins to encompass small forms of decorative art; objects of interior design, ceramic objects, lamps, etc., acquire such a strongly pronounced aesthetic character that they lose their direct utilitarian meaning and distort the functional form. In relation to individual types of art, this transformation has the following specific traits: Tafelbild—a painting on board; peinture de chevalet—easel painting; "framed painting" (developed in European art starting in the fourteenth century). Yet easel painting becomes a clearly defined social category only starting in the fifteenth and sixteenth centuries, when painting completely emancipates itself from mural painting and, having passed through the stage of the altar triptych, gradually comes to the form of a domestic painting with a secular subject matter. Along with the social-economic reasons mentioned above, mass distribution of easel painting during subsequent centuries stems from the fact that easel painting responds best to the requirements of an individual, separate consumer in the form of an icon, portrait, or decoration of an isolated

dwelling and other similar goals of an individualistic "chamber" culture, with its need for the fullest expression of an individual's subjective taste. Starting in the 1890s, European art had a widespread tendency to revive monumental painting (Hodler, Puvis de Chavannes, Hans von Marées, Moris Denis; in Russia, artists of the "World of Art" group and others). Yet these often exclusive, subjective, and strained attempts, under the conditions of random individual directives and the spontaneous nature of the capitalist market, could not be resolved. Completed in the estates of the capitalist elite, wall paintings essentially remained aesthetic decorative compositions or aggrandized easel paintings that carried subjective psychological content. Isolated from strangers' eyes during the lives of their owners, they also had to remain inaccessible to viewers subsequently, since they could not be transported to a museum and remained in buildings that themselves could rarely be used as museums.

Easel sculpture appeared in the wake of easel painting, starting at the end of the fourteenth century, under similar social-economic conditions. Emancipating itself simultaneously from the exterior and the interior surface of the walls of Gothic cathedrals, carved doors, church altars, etc., sculpture realizes its easel form only when plastic form completely separates itself from the surface and completes its volume, obtaining a *round*, portable form, along with all the qualities that distinguish easel painting from the monumental one. In addition to the new construction of form, which was now made to be perceived from multiple viewpoints, the emerging sculptural plastic form is characterized by the transition from simple stone to wood and marble. In the first instance, this results in the softening of monumental expressivity and the possibility of polychromatic painting of sculpture; with marble and other expensive materials, the heightened aesthetic requirements are satisfied owing to the fact that sculpture was henceforth meant to be perceived not only from multiple perspectives but also at close range.

Easel graphics emerged much later than easel painting and sculpture. Strictly speaking, easel graphic arts appeared only at the beginning of the sixteenth century, when the first copper engravings were made, produced not as illustrations for books but as self-sufficient artworks (Dürer and others), endowed with all the special characteristics of easel art described above; the only difference being that instead of the architectural wall, as we saw in painting and sculpture, easel graphics are characterized by their emancipation from the book. If during the first half of the seventeenth and eighteenth centuries, easel graphics developed under the aegis of perfecting the technique of engraving and its varieties, as well as the invention of new means of printing and types of graphic arts, then, beginning in the second half of the eighteenth century and during the nineteenth century, the field of easel graphics broadens with the addition of a new domain: drawing. Until the second half of the eighteenth century, draw-

ing was only a preliminary sketch for painting, a kind of "recording" of the artist's original idea; beginning in the second half of the eighteenth century, however, drawing begins a parallel and completely independent aesthetic life, with a whole range of specific traits and with certain advantages over painting. Perhaps it is the completed easel drawing that, starting in the second half of the nineteenth century, brings about the era of "small scale" easel painting—for never before was it so ubiquitous.

It is the completed, independent "easel" drawing that brings about the displacement [svdig] in representational arts of the end of the nineteenth century that characterizes all the arts of that era and may be defined as a transition from a great genre to a minor one. The revolution, with its idea of creating a new, collective society, naturally posed the problem of returning easel art to monumental forms, and of moving from individualistic works of minor genres to socially driven works that are generalized in their subject matter, synthetic in their construction, and popular in their functional significance. Along with these first practical attempts, the problem of returning to monumental forms from easel ones received its most complete, although still somewhat one-sided, theoretical expression in the work of the sociological group of the leaders of the so-called Left Art (LEF), in particular in the work of Boris Arvatov and others.

D. Aranovich

**Expression** Expression is one of the most important artistic categories. Every artwork is an expression of an artistic will to form—an individual will as well as a social one—that depends on a range of factors (historical, psychological, and others) to determine its specific characteristics. Every style develops its own typical ways and means of expression, which change according to artistic media as well as in relation to various compositional elements. This change of expression especially impacts individual motifs and images favored by artists of different periods. Thus, for example, there is great interest in the evolution of expression in the motif of running and flight in the art of antiquity, or in the typology of Saint Sebastian in Gothic, Renaissance, and Baroque art. Expression, however, is not only connected to the image embodied in art; it may also be significant as an immediate element of creativity, even if the latter is nonobjective. In this case the origin of expression takes precedence over the origin of representation and displaces it, affirming itself as a self-sufficient element of the creation of abstract forms. Such is the viewpoint of **Suprematism**, with its primacy of expression as the artistic will of the subject over the objectivity of natural forms. The category of expression received a special meaning in the aesthetic philosophy of Benedetto Croce and in contemporary art in the Expressionist movement.

D. S. Nedovich

**Facture** "Facture" is a Latin term that refers to how an object has been made. Thus already in the original sense of the word, facture is characterized as the processing of a work. This underscores the productive-technical character of facture, its connection to the craftsman's working of the material. Indeed, facture is the very means by which a master works on the material of an artwork. An artist uses materials available to him in order to gradually achieve the desired formal expression by employing technical processes that are suitable for the given type of material; he uses one or another tool (brush, chisel, pen) and, with customary movements, approaches the desired form. Therefore an artwork carries traces of its working, similar to the creator's handwriting, at every stage of its creation. The sum of these traces constitutes the artwork. When a monument is completed, facture is visible in it in its final form. Thus facture is both the process and the result. Since technical devices of art-making allow the use of a broad variety of ways to achieve it, facture may be quite varied in the work of different artists and movements. That's why it is extremely telling for the creative process and serves as very important evidence of the hand and working manner of an artist or a school. On the basis of a given facture, it becomes possible to attribute unknown and doubtful works. Naturally, facture presents one of the main and at the same time one of the most contradictory elements of an artistic whole. It is closely connected to aesthetic form and more than anything else reveals its expressive qualities. Sometimes a distinction is made between outer and inner facture (Markov). This is hardly necessary, since facture almost always manifests on the outside. In painting, it is the way a brushstroke is made and pigment is added; in drawing, it is the way a pencil is handled; in sculpture, the way the surface is finished; in architecture, the way motifs and details are used. The use of "allo-factural" combinations ["inofakturnye" sochetaniia] in the newest art also belongs to this category, including the use of new materials that give the work a sharp character and originality of contrasts, such as the tin and glass of counterreliefs. In the latter case, facture visibly approaches the constructive side of form, underscoring the specifics of its construction. Generally, in the system of elements of an artistic totality, facture serves as a material-formal element—it serves as an organic connector between the material of art and its form, and is a sign of spatial organization of the thing. Therefore, in morphological art history, facture plays a primary and widely recognized role. Its role in sociological art history is less well studied. Nevertheless, there is no doubt that here, too, studying different examples of facture should bear fruit in the study of important historical styles.

D. S. Nedovich

**Formal Method** Formal method is a current of art history that operates on the premise that the scientific study of art should be based not on the study of an art-

work's content but on the analysis of its form. Although the historical manifestation of formal method is most closely tied with formalist tendencies in aesthetics as well as in art itself, the main merit of the formalist school consists not so much in the fact that it promoted a formal approach toward artistic events in general but that, in large part, it created contemporary art history as an independent scientific discipline, having provided it with rich and sophisticated devices for formal analysis. All the newest art-historical schools, which reject the narrowly formalist viewpoint and are trying to develop, for instance, psychological, philosophical, cultural, or sociological understandings or explanations of art, broadly use the achievements of the formal method—namely, the tools of formal analysis—as a necessary, indispensable tool of the scientific study of art. From the viewpoint of formalist art history, a work of spatial arts is above all a contemplated unity of patterned spatial relations. Formal analysis studies:

- 1. those visible elements that constitute an artistic totality;
- 2. a law or principle that governs how they are unified.

An artist realizes his visual idea by using a distinct, purely artistic selection and a mode of working on all the material of his living visual experience. Elements of this visual experience—such as the form and volume of things, their illumination and color, the principle of connections between them, and the articulation of space—acquire different connections and meanings as part of an artwork than they had in the domain of reality. They come together according to special, purely artistic laws, which may or may not coincide with the laws that define our practical or scientific experience. Art history, therefore, has the right and the obligation to study these elements independently of the way they are studied in other sciences, such as mathematics, physics, and psychology. In the various spatial arts themselves, space has different structures: In architecture, it is a dynamic environment that expresses and records an entire system of moving images; in sculpture, it is a neutral void, which enables the contemplation of a three-dimensional material body; in painting, space is illusory and is projected onto the surface with the aid of special expressive signs that are drawn on the surface of a painting. Moreover, every artist and every period establish their own way of structuring space, which often contradicts our habitual, practical perception of reality (take, for instance, so-called reverse perspective). In the same way, when analyzing the character of the combination of elements, formal analysis establishes special laws for individual arts (in architecture, for example, the juxtaposition of spatial volumes and physical masses is emphasized, while light and color play a secondary and ancillary role) as well as for individual masters and periods (thus, for instance, the predominance of geometric or organic forms, of flat or deep construction, of free or strict composition, of color over form or vice versa, etc.). One can distinguish two tendencies in the formal method: normative and historically descriptive. The first tries to derive from formal analysis the law of individual arts and artistic buildings and determines those visual principles to

which painting, sculpture, tapestry, etc., should correspond. The second limits itself to describing individual solutions of certain formal problems and thereby, on the one hand, searches for criteria for a historical morphology of styles, and, on the other—by treating the forms it studies as the expression of a certain individual historical content—goes beyond the confines of a formal method in the narrow sense of the word.

The emergence and development of the formal method in the study of spatial arts is inalienably connected to the history of art and artistic worldviews. Starting in the last quarter of the last century, one may observe a certain reaction against naturalism and Impressionism. Representational arts begin to move away from the mimetic reproduction of external reality toward the principle of an autonomous creative design, and what is valued in an artwork is not so much what is depicted but rather how the artist treats what is depicted. In aesthetics and criticism the slogan "art for art's sake" is advanced in opposition to the previous, positivist understanding of art as the product of social conditions and a tool for social good. If Impressionists searched for a more accurate way to convey a visual impression, in France they were followed by a series of movements (Symbolists, Cézanne's school, Fauvists, and finally Cubists) who understood painting as a constructive unity of formal relations that have an independent artistic significance independent of the verisimilitude of the way they represent a given content. Yet new formal movements received their theoretical justification and application only in Germany in connection with the revival of Kant's philosophy, on the one hand, and the development of art history on the other. In Germany, the adherents of the new formalism were Konrad Fiedler and his friends the painter Hans von Marées and the sculptor Adolf von Hildebrand, the author of the famous book *The Problem* of Form in Painting and Sculpture (1893; a Russian translation has been published), which became the bible of a whole generation of artists and art historians. This socalled Munich school built its theory of art on analogy with Kant's theory of cognition: Our experience and our cognition appear as a result of the superposition of active a priori rational forms of our consciousness onto the formless material of our sensations; in the same way, an artist gives form to his impressions with the use of a priori contemplative forms. In our daily life we use a "passive" mode of vision as a means for understanding "modes of existence." By contrast, an artist uses his "active vision" in order to turn "forms of existence" into "forms of influence" that, as contemplative forms, follow the same strict laws as the rational forms of our logical scientific cognition. Science is a way of giving shape to reality for our reason, while art is a way of giving form to reality for the eye. The very moment of giving form is predominantly artistic: What is being given form—the represented, "the functional" (according to Hildenbrand's theory)—is, in its very nature, extra-artistic. In addition to fanatical followers among artists, this study has given birth to a whole movement of formal-normativists (for instance, Cornelius,

Elementargesetze der bildenden Kunst) who tried to formulate the principles of visual representation as abstract and generally required rules for artists. As this theory was taken on by art history, which in its own development had arrived at similar issues, it became clear that art historians and knowledgeable collectors had for a long time felt the need to establish a scientific basis for the intuitive stylistic judgment they had been using, supplementing but above all verifying the archeological and archival data that is necessary for dating and attributing monuments. Moreover, art history, in sync with the general development of historical sciences, was shifting from the study of individual artists to the history of styles and needed a specific principle for understanding artistic evolution. The Munich school gave it both with its principle of formal analysis. Wölfflin, Riegl, and Schmarsow laid the foundation of this new school of art history "without names," a "natural history of art." The evolution of art and the change of styles began to be understood as an immanent development of artistic and formal principles, which, for instance for Wölfflin, are rooted in "a priori" laws of vision and their change, while for Riegl they are rooted in "Kunstwollen." Regardless of the fact that for this movement artistic evolution is a distinct, autonomous, and, so to speak, supra-historical dialectics of formal principles (Wölfflin and Riegl established the dialectic of a whole range of "polar concepts" or contemplative categories of artistic forms, such as linear versus painterly, visual versus haptic, tectonic versus architectonic, etc.), all these scientists, since they were historians, inevitably went beyond the limits of formalism. Wölfflin, for example, connected the laws of optics with period psychology, while Riegl's Kunstwollen is unthinkable apart from the notion of culture or cultural consciousness in general. By way of formal method, then, the history of art became part of general art history (or, rather, that generation of formalist historians became the founders of art history as a science); while, at the same time, the art forms being analyzed increasingly became interpreted not as abstract principles but rather as forms of expression of an artist, school, period, or of a certain kind of spiritual or social content. As a result of its transformation, the formal method came to the service of new, non-formalist directions in aesthetics and art history (without in the least losing its initial meaning as the principal method of study) and now stands in a very close connection to those cultural and artistic phenomena that are united by the term "Expressionism." Taking the dialectics of artistic form as a point of departure, many recent thinkers see art as the clearest expression of life, culture, and worldview and use its history in order to make broad historical generalizations (Worringer, Spengler, Dvorák). In the same way, the foremost Western sociologists of art (Hausenstein, Kühn) methodologically work at the juncture with the formalist school.

The best compendiums of the theory of spatial arts are: Waetzoldt, Einführung in die bildenden Künste (1912) and Tietge, aMetēode der Kunstōissenskhēapht. . . . 4 The first

4. This phrase of unknown meaning is rendered in Greek letters in the original.

attempt at a general art history compiled in the spirit of new art history is *Handbuch der Kunswissenschaft* founded, by Burger. See also Konnerth, *Die Kunsttheorie Konrad Fielders* (1909); Wölfflin, *Die klassische Kunst* (1899), *Renaissance und Barock* (1888), *Kunstgeschichtliche Grundbegriffe* (1915); Riegl, *Stilfragen* (1893), *Die spätrömische Kunstindustrie* (1901), *Die Entstehung der Barockkunst in Rom* (1908); Schmarsow, *Grundbegriffe der Kunstwissenschaft* (1905); Worringer, *Abstraktion und Einfühlung* (1908), *Formprobleme der Gotik* (1912); Spengler, *Der Untergang des Abendlandes* (1922); Dvorák, *Kunstgeschichte als Geistesgeschichte* (1924); Hausenstein, *Der nackte Mensch in der Kunst aller Zeiten und Völker* (1911), *Rokoko* (1912), *Die Kunst und die Gesellschaft* (1916), *Opyt sotsiologii izobrazitel'nogo iskusstva* (A Study in the Sociology of Visual Arts, 1924); Kühn, *Die Kunst der Primitiven* (1923); and Boris Bodgaevskiy, *The Tasks of Art History* (collection of the Russian Institute of Art History, 1924).

A. G. Gabrichevskii

Intensity Intensity is a constant attribute of sensation along with its quality; by this some psychologists note that transformation is not simply a quantitative increase or decrease of a given quality: Thus, for instance, when a color's intensity increases, its shade changes, and therefore the very quality of color changes. An increase in the power of a sensation depends on stimulation, but the intensity of a sensation doesn't change proportionally with an increase in the level of stimulation. Rather, it moves according to leaps, lagging behind increases in stimulation. According to Fechner's formula, the strength of a sensation equals the logarithm of the stimulus.

The field of basic emotions describes the experience of sound and color harmony as intensive, as opposed to extensive experiences, such as the ones of form and rhythm (W. Wundt).

Finally, Jonas Cohn defines aesthetic value as purely intensive. He distinguishes between two kinds of aesthetic value: a value needed to serve an external goal and a value measured by the internal qualities of a given object. In the latter case, one values something for its own sake, and the degree and measure of the value rest entirely within the object; Cohn calls this kind of value "intensive." Since it is pointless to say that an object is beautiful in order to serve some kind of purpose, it is clear that aesthetic value is a purely intensive one.

P. S. Popov

**Introspection** Introspection (*Selbstbeobachtung*) is a subjective method for studying psychic phenomena by observing one's own states of consciousness. The term "self-perception" is also used (*Selbstwahrnehmung*—Müller). Kant and Cohn have pointed out the shortcomings of this method: When a person is experiencing something, as soon as he takes on the task of observing himself, he has already stopped experiencing anything. One should not imagine that the psyche is divided into two halves, as

it were, one that observes and the other that experiences. Recently Narziss Ach wanted to improve the method of introspection by turning it into "systematic experimental introspection." He required that the experimenter exhaustively question the subject in order to obtain a complete description. Müller objected to Ach, pointing out that, as a result of sustained questioning, the picture of what is being experienced is itself distorted. Reflexologists strongly criticize the method of introspection, as do some leaders in objective psychology (for instance, Watson and, in our country, Bekhterev): They consider introspection the remainder of an old and increasingly obsolete metaphysical psychology. On the significance of the method of introspection in the psychology of art, see the discussion of the subjective method in the entry on **creativity**.

P. S. Popov

Isolation The term "isolation" and its related terms isolé in French and isolato in Italian are rooted in the Latin insulatus, a word derived from insula, meaning "something that turned into an island," "he who isolated himself like an island" (in Apuleius's writings regio insulata is a region that turned into an island). The original usage of the term isolé was limited to social characteristics and meant "secluded," "detached"; in the eighteenth century the term was introduced into the studies of electricity. That era also saw the promotion of the idea of a free individual (especially an *aesthetic* individual) and his juxtaposition to the rest of society, allowing us to speak about the notion of an isolated person. In addition to writing about "an individual's freedom of aesthetic experience," Schiller, for example, wrote about "the isolated quality of an aesthetic experience." The essence of aesthetic isolation consists in separating or removing an aesthetic experience and object from the realm of practical life. Although the term "isolation" came into regular use only during the time of Münsterberg and Hamann, the basic ideas of the theory of isolation, albeit defined somewhat differently, can be found much earlier. The earliest kernels of the theory of isolation are found in Kant's theory of disinterested aesthetic pleasure (1790), which shuns utilitarian or practical use. It is not accidental that Jonas Cohn, a Kantian, sometimes speaks about isolation when he describes aesthetic values. Spencer's statement (1855) that "the aesthetic character of a feeling is habitually associated with separateness from life-serving function" encapsulates the essence of the theory of aesthetic isolation. This statement is well in line with, for instance, Hamann's pronouncement (of 1912) that "such a sequence of tones can be considered aesthetic that affects us in an isolated manner, when considered by itself, while a non-aesthetic one prompts us for practical activity." In the theory of isolation one can emphasize either the isolation of an aesthetic object from the connection it has to real life (Münsterberg) or the isolation of an aesthetic experience. Hamann contrasted his isolation theory with the theory of aesthetic illusion or appearance (Schein). The latter nevertheless suggests an interest in reality, since what we call apparent or illusory "can only be some-

thing we were convinced was real, but subsequently grew disillusioned about." Recognizing something as illusory already suggests an interest in reality, while aesthetic experience is completely isolated or dissociated from it. Appearance and illusion can also constitute part of everyday life without inducing any aesthetic experiences, and therefore need to undergo special modifications in order to become aesthetic. Hamann ascribes this transformative power to isolation. In his work, Hamann enumerates a wide range of "isolating factors," which contribute to the aesthetic isolation. Among them are the picture frame, the theater stage, the pedestal of a statue, and "an idealization" (i.e., drawing on unfamiliar modes of life). The fact that a number of works of art don't meet Hamann's requirements (Rodin's sculptures placed directly on the pavement, without a pedestal; works of Venetian painters, etc.) obliges him to speak about the "dangers" of extra-aesthetic influence present in these cases. This suggests that when Hamann speaks about art and aesthetic experience in general, he refers to the art of a certain period and the aesthetic experience of a certain social group. Boris Arvatov (Art and Class, 1923) points out a link between capitalism on the one hand and the character of artistic work and aesthetic theories on the other: "The capitalist regime created conditions in which it is impossible to create art within the confines of everyday life, which is defined not by the free will of the organizing class but is regulated by the spontaneous laws of the market. An artist was not able to create together with people, create life itself; instead, he escaped from life in order to create an illusion of harmony in solitude." From this perspective, the theory of isolation is a theory that reflects only the state of art in the bourgeois society of Western Europe and legitimizes this state of affairs as a "universal" principle.

A. G. Gabrichevskii

**Material** Material is the medium that serves the artist as a means of concretizing his creative ideas. Material is what an artist works on. This general term is used in three senses: physical, representational, and thematic. In the physical sense, materials for a painter are paint, canvas, primer, pencils, paper, adhesives, varnishes that are used for painting, etc. A sculptor's materials are clay, metal, stone, wood, etc. In architecture, materials are extremely varied, ranging from wood, stone, brick, iron, glass, reinforced concrete, and even paper, the pressed sheets of which have recently started being used to create buildings, mainly in America. In the context of representation, material is the aspect of an artwork that represents an object. The face of a sitter is the material for a portrait. The material for a landscape is mainly the fauna of nature, etc. In the context of subject matter, material is the medium of the ideas that determine the subject-matter of a work that is being developed in its narrative [v siuzhete]. From this viewpoint, art may belong to the religious, historical, social, or other aspects of culture. The more substantial the material (for example, in architecture), the more an artist is subjected to its power, and not every composition may be realized in every material. What can be

created in bronze, for instance, does not always allow being repeated in marble (as seen in the deforming supports used in marble copies of bronze originals). In painting, all the qualities of materials must be taken into account to create longlasting works, for when paints of different chemical composition are mixed, sometimes they can affect one another in a negative way. The quick fading of canvases painted by contemporary artists is sometimes explained not only by the low quality of factory paints but also by the artists' poor technical knowledge of the materials they are working with. Material has an aesthetic significance in an artwork. Paintings made in oil, tempera, watercolor, encaustic, etc., produce different aesthetic impressions. Material plays a defining role in decorative arts. It is material that forms the ground for differentiating between types of decorative art: porcelain, bronze, etc. The style of a folk toy was often determined by the wood from which the toy was made. When a master forces one material to take the forms of another one, this leads to a negative aesthetic impression. In the theory of art, material becomes an important factor that determines the method of research following Gottfried Semper's Der Stil in der Tektonischen Kunst [Style in Tectonic Art]. In the artistic practice of recent years—in the "leftist" movements, starting with late Impressionism (Pointillists), via Cubism, in nonobjective Suprematist painting and sculpture—material acquired a decisive significance, determining the entire artistic conception of a work.

N. V. Tarabukin

**Nonobjective Art** Nonobjective art is an art for which the combination of colored surfaces, lines, and volumes is self-sufficient [samodovleiushchim], and which does not seek to reproduce the visible world (objects). Nonobjective art results from an analytical and formal view of the world, a stance that originated with Impressionism. The term "nonobjective" is a purely superficial, thematic designation of several artistic movements. One can use nonobjective or abstract forms for several sometimes directly opposite goals, such as:

- 1. the destruction of an object and the use of abstract forms in order to achieve maximum expressiveness, of expressing emotions (as in Expressionism);
- 2. the combination of abstract forms in order to convey movement and the dynamism of contemporary life (as in Futurism);
- 3. the combination of abstract forms to serve formal research. Here one should distinguish: spatial research (Russian Cubism), reduction of pictorial forms to their essential elements (see **Suprematism**), and construction of three-dimensional things from flat surfaces (see **Constructivism**).

N. V. Iavorskaia

**Object** In the area of artistic creation one needs to distinguish two possible uses of an object—namely, the object *in* art and the object *of* art. In its first, most wide-

spread meaning, it is the object of representation, i.e., an image of a person or a thing rendered by an artist. Such a representation of an object entails a greater or lesser degree of naturalism employed by an artist who embodies his perceptions of external nature in his own manner and with a specific material. Still life is the simplest and most typical object of such naturalistic art. In a still life, the object (for instance, a key against the background of a flat wall in Maes's work) often evokes a range of everyday, extra-aesthetic associations. At the other pole of naturalism lies the abstract art of so-called nonobjective, i.e., non-naturalistic, forms. This **nonobjective art** of the twentieth century brings us to the second meaning of the term—that is, the object of art—known as the conventional forms of expression of an artistic will. If in the first case the object serves as the narrative subject of art, in the second sense it is its inner content. Terminologically it would be most convenient to call this second category of the concept "objectivity," which would correspond to the German *Gehalt*.

D. S. Nedovich

**Ornament** Ornament is the decoration of a given surface with the necessary condition that the significance of the surface itself is preserved. As a consequence, ornament refutes the illusory aspect of a composition and all its means: spatial construction, atmosphere, and others. In principle ornament is built on a surface; when a curved surface is ornamented, it is ideally separated from it through the so-called unfolding of the ornament.

The principle of surface composition in ornament makes geometric and floral forms its most frequent subject matter. More rarely, one encounters animals and human beings (along with objects created by them) as part of a volumetric plasticity, for plasticity in principle contradicts the essence of ornament. Subordinating the volume of real objects to the essence of ornament may lead to stylization, under the influence of which animal ornament turns into a teratological one. Stylization is the most common property of ornament, although not necessarily an indispensable one.

One should distinguish between flat means of reproducing an ornament—graphic, pictorial, inlaid, and others—and sculptural means, where cut convex or concave forms are used. Whenever one of these means of reproduction destroys the ornamental surface, makes the viewer forget about it, there we find a work of either painting or sculpture.

The composition of an ornament, therefore, is defined by its distribution over the surface that is being decorated. Such distribution is expressed in a systematic movement of forms, which constitutes their rhythm and is usually easy to perceive. Complex and hardly perceptible rhythms of an ornament are rare; one example would be medieval Scandinavian ornament in its different varieties. Sometimes one can isolate a unit of rhythm from an ornament, which is called the motif of an ornament; this can be accomplished only when the motif is perceived as an artistic whole.

If the unit of rhythm that is being isolated is only an element repeated in the practical interests of creating an ornament, it is called a report [panopm].

There is, necessarily, a temporal dimension in the perception of ornamental motifs in their rhythmical sequence that brings it close to the temporal arts. This, in turn, derives from the fact that ornament, which should preserve the surface it decorates, has almost no spatial environment of its own. One therefore finds an affinity between ornament and music—namely, the sequential alternation of motifs as a kind of melody; the combination of different motifs as a harmony; and a complex combination of alternating motifs with each other as a counterpoint, a composition in the full sense of the word.

The theory of ornament has been developed more than once in Western European science, but only in relation to some of its elements—namely, its motifs—and, more rarely, in what concerns their combinations.

With regard to the character of the sequence of motifs, one distinguishes discontinuous and continuous ornament. With regard to the presence or absence of limitations to the movement of motifs, ornament can be classified as closed or infinite. In closed ornament, the movement of motifs does not exceed the limits of an actual or an imagined frame. In an infinite ornament, the movement of motifs continues without interruption or in all directions along the surface, or at least in two opposite directions. The artificial superimposition of a frame onto an infinite ornament evidently makes it closed. Symmetry is a particular case of ornamental rhythm. A symmetrical composition of motifs, juxtaposed as if in a mirror reflection, is called heraldic style, as is typical in the East; in this case, animal motifs are extremely common.

Explaining the genesis of ornament is a surefire way to understand the origins and essence of art. One has to admit that geometric ornament is the most ancient in humanity; floral and animal forms were introduced later. An attempt to explain the origin of geometric ornament from textile technology cannot be considered successful. Similarly, geometric patterns on the most ancient excavated pottery cannot be said to imitate painting, if only for the reason that the very shape of pottery stems not from painting but from carved-out fruit. The most ancient clothing was made from animal skin rather than fabric, and the most ancient dwelling was a cave rather than a wattled hut—and yet geometric ornament existed already at that time. The fact that some wild tribes made complex geometric tattoos without having any weaving techniques also speaks against the mechanical origins of geometric ornament. The simplest example of rhythm in the necklaces of savages proves the same point.

Instead, one should suppose that weaving technology is derived from something characteristic of human consciousness: rhythm, which also produced geometric ornament.

Along with the element of rhythm, an ornament also essentially contains an aspect of abstraction, expressed in a drawn line that delimits the form as well as in the direction of movement, i.e., an ideal line, which is absent in concrete things.

Rhythm and abstraction, along with the possibility of choice, i.e., freedom, as aspects of consciousness lie at the root of the most ancient geometric ornament as forces that produce it. Elements of nature emerge in the development of ornament only on Egyptian soil, where a flower form emerged that was later named palmette. A fairly free stem in ornament was invented by Aegean culture. The geometric, stylized floral ornament with acanthus leaves from antiquity received its schematism from the East and its organic unification of vegetable forms from Aegean culture.

Eastern ornament remains true to nonorganic schematization even when the so-called organic forms are reworked into the so-called arabesque. The complex rhythms of a Muslim geometric ornament always remain rigid, which cannot be said about Scandinavian ornament.

The Gothic period often turned to a naturalism of the plant world. Byzantium, on the other hand, preserved its loyalty to the simplest geometric forms and acanthus-leaf motifs. The Renaissance and all subsequent styles rely on the tradition of antiquity, which became especially established in "grotesques," light ornaments found in the ruins of Roman antiquity and popularized by Pinturicchio.

In the seventeenth and eighteenth centuries, a special ornament in the rococo style, asymmetrical in its rhythm, was formed under the influence of the Chinese art industry.

In Russia, ornament followed the Byzantine tradition and its culture in a broad variety. Despite lively contact with people of the East, Russia had little knowledge of or use for the ornament of Eastern origin. The latter sometimes came to us even via the West (in the sixteenth and seventeenth centuries). The most original ornament—teratological—was created on the basis of Russian art in fourteenth-century manuscripts from Nizhny Novgorod.

The surface that needs to be decorated plays a role in the choice of the subject-matter, motifs, and rhythm of the ornament; inasmuch as the ornament needs to preserve a significant part of the surface, it preserves the object's significance, decorates it, i.e., affirms rather than negates it. For the same reason, the material from which the object is made plays a more important role in an ornament than in any other art.

Aleksei I. Nekrasov

Painterliness Not all painting has painterly qualities. By painterliness one should understand the particular stylistic characteristics of an artwork of a given artist, an entire school, or even a period. Painterliness is the product of a distinct artistic world-sense that results in an image that appears as if woven from the lightest gradations of color tones, or light and shadow, constructed as a certain harmonious whole. If musical harmony is understood as the simultaneous sounding of several notes, then in painting, which operates with a complex gamut of tonal transitions,

color scheme is perceived as an elaborate structure of color and light. In contrast to such tonally harmonious consistency of color, monumental wall painting often has a "melodious" structure, in which colors are perceived sequentially, one after another. Therefore, painterliness is a formal-stylistic conception of color that operates predominantly with the interrelation of composite, complex color tones. In a painterly work, where the play of light and shadow constitutes the main formal feature, color is most often turned into light. An etching dominated not by the graphic line but by chiaroscuro may be called painterly (Rembrandt). The sculptor who creates a subtle gradation of light and shadow in stone may be called painterly in his sculptural images (Rodin).

Painterliness is not characteristic of the wall paintings and icons of the archaic stages of culture. During the late classical and especially Baroque periods, however, painterliness becomes a characteristic style of painting and even of other types of spatial art. Noting the play of light and shadow in Baroque architecture, created by strongly profiled cornices, niches, protrusions, etc., Wölfflin (in *Renaissance and Baroque*) called Baroque buildings painterly (Schweinfurth juxtaposed the category of painterliness with that of plasticity). Ruins, whose contours are softened by time and by a wandering chiaroscuro, become painterly. And in nature, the term describes those aspects where the play of atmosphere and of chiaroscuro dominates.

N. M. Tarabukin

**Painting** As one kind of spatial art, painting creates an artistic sensory-contemplative unity of spatial relations. Specific characteristics of painting are:

- 1. its flatness, because it gives form to an isolated fragment of material surface;
- 2. the quality of its being inscribed, because this mode of giving form is realized with the help of inscriptive signs;
- 3. its symbolic expressiveness, because a systematic combination of twodimensional signs reveals not only the flat surface but also spatial relations that lay beyond the limits of the surface that is being given form.
- I. As an art on a flat surface, painting affirms flatness not only as a material surface but also as a necessary form of the visually contemplated space. The pictorial surface is usually called "ideal" because it is both matter and form that define the structure of a painted image. In respect to this flatness, painting should be distinguished from other types of flat delineation in spatial arts. In tectonic (architecture and applied art) and plastic (sculpture in the round and relief) arts, a plane is always the surface of a material thing and is evaluated as a property or function of this thing; in painting, on the other hand, material flatness corresponds to an ideal and serves as its expression.

Furthermore, the pictorial surface does not constitute part of a thing, but a pure plane that is delineated on all sides as an autonomous fragment of a plane—

the vehicle of a totality of two-dimensional spatial forms that is in itself closed. This delimitation is for the most part quadrilateral, and it expresses the two elementary spatial dimensions, vertical and horizontal, and separates the flat artistic unity from its surrounding extra-artistic space. This characteristic is shared by painting and relief, since both are, in essence, types of autonomous planar arts.

II. As an art of inscription, painting should be distinguished from other forms of non-autonomous inscription in spatial arts. In tectonic and plastic arts, inscription carries supportive ornamental functions, it defines the form of a surface and symbolizes an interrelation between parts of a thing that is evaluated artistically as a given and already outlined in three dimensions.

Within the field of the autonomous arts of inscription, it is customary to distinguish painting from graphic arts. The more abstracted nature of graphic arts has been pointed out (Klinger, Christiansen), as has the functional connection to books and illustrations (Klinger, Walter-Warren). What should be considered more essential, however, is the fact that while painting gives form to the surface with the help of color, lines, and chiaroscuro, color is the primary factor in determining the form of a drawing; by contrast, graphic arts primarily use line and chiaroscuro, employing color only nominally. In the light of such a distinction, it seems expedient to use the word "painting" or "graphics" more broadly, as Koestlin has proposed, in the sense of autonomous arts of inscription in general referring to inscription in color or black-and-white (as well as the French term *les arts du dessin*, which goes back to theoreticians of the Renaissance).

III. The symbolic expressivity of a pictorial inscription should be distinguished from those types of signification that are present in different forms of writing, whether representational (pictography) or abstract. If pictographic signs in their very form are related to visible content, then what is essential in both kinds of writing is, on the one hand, the self-sufficient meaningfulness of each individual sign and, on the other, the fact that their combinations are not defined by visible conceptual conventions. In painting, by contrast, the sequence and laws of combining inscriptive elements are defined by a certain visible content; this content is primary, given as a totality, and the meaning of individual signs is understood not independently but contextually, based on the place the signs occupy within the visibly observable totality.

This totality is the pictorial image, which, even though it is captured in a twodimensional systematized unity of inscribed signs, nevertheless has a very complex extended structure, defined by the sensory-visual qualities of these signs, as well as by the functions that give them meaning. Nearly all theoreticians divide the sensorial characteristics of pictorial elements into three groups: line, chiaroscuro, and color. The interior pictorial space is divided into rows of flat surfaces that are logically interconnected, so that the primary role may be played by fragments themselves, i.e., by maculae distinguished from each other by form and color, or divisions between them, which are evaluated and expressed as outlines and can take on such an autonomous significance that they are understood as pure lines plotted against a neutral background.

Since maculae are the primary elements, they are evaluated from the view-point of their greater or lesser lightness or darkness, or from the viewpoint of their individual color quality, their tonality. In this way, the sensory-visual unity of a pictorial image may be realized through a unity that is based on line, light and shadow (chiaroscuro), and color. The light-and-shadow range of maculae may be systematized according to either the principle of the quantitative presence of white and black or the principle of the qualitative juxtaposition of light and dark; the unification of color elements is done on the basis of laws that are contained in the natural qualities of color (additive, contrasting, warm and cold, etc.).

The construction of a painterly image depends on the symbolically expressive functions of inscriptive elements. These functions are present in every pictorial image as such, independently of the sensory characteristic of its elements, as the latter (line, chiaroscuro, color) may in equal measure be the vehicles of these functions, which boil down to the following three main categories:

- a. flat, or decorative;
- b. representational, or deep;
- c. expressive, in the usual subjective sense of the word.

All three functions can be found to a different degree in each pictorial image; its individual structure is determined by their interrelation and by the dominant role of one or another among them.

a. The flat or "decorative" functions of inscription are of primary importance for painting as a planar art. All inscribed signs, regardless of their pictorial or expressive meaning, express the material surface onto which they have been deposited, and constitute an ideal (pure) pictorial two-dimensionality, which is the vehicle and condition for all the other signifying functions of the inscription. The systematic two-dimensional unity of inscriptive elements is usually called **composition**. Compositional constructions may be abstracted to a greater or lesser degree or, on the contrary, be thoroughly permeated with representational and expressive content. They are, nevertheless, always seen as the expression of planar unity. A line in this function is evaluated as pure line, independently of its three-dimensional representational function and of the element of script. Chiaroscuro and color are subordinated to the purely planar and "harmonious" patterns, independently of whether the degree of illumination and coloring may characterize three-dimensional relations.

b. The significance of representational depth of the inscription is especially important. The main difference between painting and other forms of inscription onto a flat surface is the fact that the signs that are deposited onto the surface are interpreted and understood as an expression—as a projection of a certain imagined space that is situated beyond the flat surface onto which they are deposited. These signs thereby not only affirm the surface of a painting and an ideal surface

but also overcome and break through it; they are simultaneously two- and threedimensional. Their combination creates an illusion of a space that is limited in front by the flat pictorial surface and extends into an infinite depth. Any type of space accessible to our visual experience can be represented on a plane, but this representation itself presupposes the availability of a flat surface onto which the space is projected. The flat unity of inscriptive elements reproduces the visual image that is received by a viewer who stands still and looks directly ahead; painting therefore requires a single viewpoint onto a perpendicular line that has been lowered onto a surface. But while a visual image is always a contingent excerpt always a contingent point of view that presupposes an infinite number of other points of view—the space represented on a canvas, inasmuch as it is a representation of certain infinity, is a strictly self-enclosed unity, because it is an image subordinated to the planar isolation of painting. An artistic representation may be included into a pictorial image only by being incorporated into the patterns that govern a flat surface. The fact of this reduction finds its scientific expression in *per*spective, which is an optical-mathematical science that studies the laws for constructing a flattened visual image and the deformations that space and objects situated in it undergo when we perceive them simultaneously, purely optically.

A represented space can be an exact rendering of a practical visual space, but it may also significantly deviate from it; this deviation is not experienced as a distortion, however, because this space, which exists outside of the practical realm, is still the recipient of an artistically convincing projection onto a surface. In its representational functions, line is a contour of three-dimensional represented objects, and it receives a corresponding interpretation of depth (this includes, for instance, all phenomena of contemplation); light appears mainly as illumination; and color as a local color,<sup>5</sup> as the coloring of the represented objects, which changes depending on the atmospheric forces that affect it (so-called atmospheric perspective).

c. Expressive functions of inscription come down to the fact that every inscriptive element is not only a flat and representational artistic factor but also an expression of the very process of its inscription. From the expressive side, the unity of flatness and depth is interpreted as the unity of a creative act. In this sense a pictorial image is a record of a nonspatial, otherworldly expanse within an expanse that is of this world and temporal.

It is to this category that the aspects conventionally united under the term **facture** belong, both in the sense of *script* and also in the sense of the creative characteristics of a material surface as a site where a form-giving gesture of inscribing meets with specific materials (tools for inscription, density and character of the pigment, characteristics of the canvas, paper, etc.), which manifest their structural properties under the influence of this gesture. A line and a brushstroke are designated as deposits, as the result of one particular way of making this deposit; light and

color are given in their qualitative and emotional character and with those spatial attributes that are built into it (proximity of warm colors, distance of cold ones).

An artistic construction of a pictorial image presupposes the presence of all three aspects and their reciprocal interaction (and equilibrium). Thus, the representation of reality receives artistic and pictorial significance only if it is expressed using the rules of a flat visual image and captures a living creative process. Otherwise what results is pure illusionism, which mechanically reproduces our practical vision. In the same way, figures on a flat surface, abstracted from threedimensional and expressive aspects within this delimited space, come close to a pure ornament, i.e., to the materialization of a flat surface, while artistic objectification of purely expressive factors is attained only by means of including them in a flattened and three-dimensional observable whole. In other words, each of the three aspects, entering into a pictorial image, undergoes a corresponding change and deformation because it symbolizes the other two aspects. The history of painting and the history of its theory and aesthetics alternate between advancing one or another of these functions, each of which also serves as the originary moment in a given epoch. Thus, for most primitive peoples and, in a more perfected form, in the art of the Far East, pictorial inscription is closely related to writing, so that artistic form is determined not only by visual laws but also by some less easily observable semantic and practical factors. The latter very often emerge as fixed, canonical forms of composition and representation, which, nevertheless, receive purely artistic significance. The same applies to the art of Byzantium and the Middle Ages, where, in addition, a large role is played by factors of flatness and of expressivity. In general the arts of these periods are characterized by close ties between painting and architecture, which explains the significance of a flattened decorative motif, as in Egypt, for example.

Another line of development, which can be traced from antiquity via the Renaissance to our own time, is characterized by an ever-growing emancipation and differentiation of individual arts and thus an ever-clearer formulation of theoretical and practical problems in relation to pure painting, and especially issues pertaining to representation and composition. On the one hand, the visually idealized character of the painted image comes to the fore; on the other, its representational three-dimensional nature is dominant. Both tendencies culminate with the observable justification of perspective in Italy of the fifteenth century. Until the end of the nineteenth century, all aesthetics develops and deepens this tendency.

Already from the time of Alberti and Leonardo, the main two characteristics of painting were recognized to be its ideal nature and its unlimited possibilities for conveying visible nature, human actions, and character. An idealistic aesthetic recognizes painting as the most perfect of spatial arts, because it creates appearance (*Schein*), which in itself is one of the fundamental characteristics of the beautiful, and creates form with the help of light, which is a subjective, idealized aspect of

reality. On the other hand, painting can be characterized almost exclusively from the side of its representational qualities, which led to the especially vigorous development of different theories of painting in which the main criterion was the content of the representation; thus most nineteenth-century aestheticians devote a lot of space to differences between history painting, genre painting, landscape, portraiture, etc. Only at the end of the nineteenth century and at the beginning of the twentieth century have entirely new viewpoints been offered, chiefly by artists and art historians. Thus, Impressionists are looking for a scientific-physiological justification for transmitting reality on a flat surface. Fidler and Hildebrandt attempt to build a theoretical cognitive system of pictorial space, and the newest Expressionism insistently advances creative aspects of expressivity and **facture**.

N. M. Tarabukin

**Plan** This word has two different meanings. In architecture, *plan* refers to a projection onto a surface, parallel to the horizon line, of all the points that are being represented. On such a plan of a building one marks the details of the walls and coverings, such as window spans, even if they are located high above ground level, especially the strongly protruding cornices, the shape of arches, and so on. A plan in this sense is a purely conventional representation of a building as a whole, which far from exhaustively describes its distinctive characteristics. Often the term is used for any kind of drawing of a building that gives either a vertical or horizontal cross-section of it in a known scale. But in the proper sense of the word, plan means a horizontal cross-section of a building and mainly a horizontal cross-section of the main part of the building. One can make countless numbers of plans for every building; among them, a few of the most important plans are chosen (by floors, or in general at the height where the construction of the walls is significantly different from the parts that lay below). Distances between individual horizontal cross-sections are measured exactly, so that, situated one above the other at measured distances, these plans may complement each other to form the actual shape of a building. By itself, a plan is merely an architect's abstraction, which poses a danger for an art historian, who may forget the physical building behind the plan. All too frequently, a similarity between the plans of different buildings leads to hasty conclusions about the similarity of the works of architecture themselves, while in actuality their style turns out to be completely different. The widespread use of plans in the history of architecture is explained by the difficulty of rendering the three-dimensional image and body on paper. Recently, protest has been growing against the use of the abstract language of architectural drawings, which not only create a language that is difficult for the uninitiated to understand but often distort the architects' understanding of the main means of expression and of the general possibilities of their art. This protest has led to today's widespread form of "perspective," which combines plans and cross-sections. The plan provides an exhaustive understanding only about certain primordial architectural compositions, which consist of disjointed signs on the surface of the Earth. The plan's history has been studied very little. Undoubtedly it emerged from the custom of marking the course of the walls of future building on the ground. Plans were known to have been used already in ancient Egypt, but the theory of plans was created and scientifically justified only during the Renaissance.

N. I. Brunov

**Plane** A plane in the proper sense is a surface. A plane has a place in perspectival images: One distinguishes the first plane or foreground from the anterior plane or background, etc., depending on how close to the viewer the representation is. In contrast to physical surfaces of objects, an artistic plane presupposes the articulation of a space that is not real but aesthetic. One of the most important methods of painting consists in the artist's ability to precisely create the impression of different planes on the same surface of a wall or a canvas, thereby creating the impression of a particular pictorial space. Thus an artistic plane is a measure of depth of this conventional space. Every system of foregrounds, middle grounds, etc., naturally depends on a viewpoint onto the representation and therefore is one of the illusory aspects of an artistic language. In painterly compositions with depth and volume, conveying different planes is of primary importance, just as it is in the technique of relief. In sculpture, perspectival effects recede in comparison to the conditions of real depth of the background and the protrusion of figures; here physical surface is of no less importance than a representational plane, which has a purely optical value. Different artistic eras uses different systems of planes, either deepening the composition or bringing it forward. Therefore, plane may be one of the indicators of a style.

D. S. Nedovich

Quality In spatial arts, the term "quality" does not denote a logical category but rather takes on the role of an evaluative notion. Criteria for evaluating quality vary not only as to the individual character of those expressing judgment but also as to the era's cultural background. The notion of quality can be used in formal, technical, material, and ideological senses. Evaluation of artwork's formal quality consists in determining how close an artist has come to achieving the goals he has set. Compared to the others, this is a more stable criterion. If it is possible to know and consider all those factors that influenced an artist as he was working on a piece, one could make a relatively objective evaluation of what he achieved. In a technical sense, quality consists in determining how well an artist mastered the medium and the tools of his trade. A craft's techniques change over time, advancing at times and regressing at others. Therefore, evaluation of technical quality is entirely relative. The quality of materials can be subject to the most thorough and objective analysis. Exposed to sunlight, for instance, paint proves to be either durable or not.

In the ideological sense, quality is achieved when an artwork's ideational content corresponds to an established and predetermined norm. This type of ideological evaluation is also relative. It is beyond the scope of narrowly aesthetic criteria. As an era's general cultural concepts change, so too do the criteria for evaluating the quality of various ideologies within art.

N. M. Tarabukin

Quantity Quantity (quantitas, quantum) is a category that encompasses a range of notions (number, size, degree, etc.) and is closely connected to the more general notion of multitude. A distinction was made long ago between an intensive magnitude, i.e., a magnitude of degree (quantitas virtutis), and an extensive magnitude that measures the positioning of stand-alone elements or parts in relation to each other (quantitas molis). This distinction has played a significant role in defining how quantity relates to quality. Qualities were either explained by means of spatial models—i.e., extensive magnitudes (for example, explaining qualitatively different colors through a number of oscillations)—or they became the subject of study in a special mathematical science of qualities and intensities. Already in mathesis intensorum (Eberhard, 1776; Baumgarten, 1783), qualities were treated as intensive magnitudes. Christian Wolff defines degree (gradus) as an amount of quality (quantitas qualitatis). According to Fechner's principle, which he called "the principle of an aesthetic threshold," an impression should be aesthetically prominent: Colors and sounds that are too pale have no effect on feelings. On the absolute quantity (absolutes quantum) as defined by Dessoir; on quantitative estimation, in aesthetics. In contemporary times, the so-called school of pure description considered the quantitative characteristics applied to quality either as expressions of various degrees of quality or as a special kind of nomenclature that allows for a systematization of phenomena (thus numbers that indicate temperature are essentially inventory numbers used to identify qualitatively different states). On the dialectical transition from quantity to quality, see dialectics. The polemics of Romanticism against mechanical natural sciences have repeatedly emphasized the difference between "quality" (including qualitative elements in artworks) and any kind of quantitative characteristics—even today art historians sometimes repeat the views Goethe outlined in his *Theory of Colors*. In opposition to this we can point to Ostwald's recent studies of color in relation to painting. Statistical observations represent yet another example of quantitative observations; starting in the midnineteenth century, they have been systematically applied to the study of social phenomena. One finds them in the field of experimental psychological aesthetics, formal-analytical studies, and in the sphere of the sociology of art, although so far no methodological elaboration has been provided on the ways in which statistics may be applied to artistic matters.

Since the time of Apuleius (second century AD), the division of logical propositions into general versus specific, on the one hand, and negative versus positive, on the other, has been designated as division based on quantity and quality.

Similarly, in poetics, syllabic and metric verse have sometimes been described as quantitative and qualitative, because in the first case one takes into consideration only the number of syllables, and in the second case one deals with the qualitative differences between long and short syllables in a measure.

V. P. Zubov

**Representation** Representation in the broadest sense of the term means any real object (a thing, a human word, a body, a movement) given form by a human being so that it serves as a sign of another real or imaginary object; moreover, the representing object, unlike a conventional sign (for instance, the inscription of a letter), necessarily reproduces, i.e., depicts using forms that are characteristic of its material and structure, a real or imagined visual appearance of the represented object. An Egyptian hieroglyph, for example, not only signifies a concept but also represents a thing or symbol; a geometric drawing represents a circle and its tangent; a photograph represents a locality or a person; War and Peace represents the 1812 military campaign; an actor represents Hamlet; a female allegorical figure on a fresco by Raphael represents philosophy. Naturally, the notion of representation is used ubiquitously in fiction, but in Russian scientific language it has not yet acquired the character of a term and is used in the broadest range of senses. Therefore we can only indicate some of the dominant tendencies of this word use, which varies depending on the given set of issues addressed by the sciences of art, on where the word is used, on changes of scientific direction and artistic viewpoint, as well as on the translation of one or another foreign term, mainly the German Darstellung.<sup>6</sup>

On the one hand, every work of art is a representation, because it is perceived with the senses as a visible sign or a system of signs. In this sense, the sensorial and visual composition of every work of art represents its ideal object, independently of the essence of an art object, its given individual content, and whatever connection one presupposes between its sensory and ideal layers. In this usage, the term "representation" is the least codified as a term and is encountered everywhere alongside the concepts "expression" and "embodiment" (e.g., of an idea). Therefore, with this understanding of the term, the problem of representation coincides with the general problems of the construction of an aesthetic and artistic **object**.

On the other hand, since a work of art creates its own specifically artistic imaginary reality, but this reality as it is perceived directly with our senses is always in a certain relation to the reality of nature, we can distinguish a special sphere of representational forms that ranges from the most precise, even slavish, reproduction of reality to its complete overcoming and negation within the system of abstracted so-called nonobjective forms. In this regard, the term "representation" relates to the problem of representability, i.e., to the issue of the relation of artistic

appearances to the appearances of actual reality—to the question of the relation between art and nature.

Finally, in contemporary art-historical literature a new meaning of the term "representation" has begun to crystallize: It is understood as the very fabric of the sensorial-visual system in its uniqueness, defined by the everyday optical characteristics of the material of a given art form, and independent of the representation of actual reality or of an ideal object. In this sense, the problem of representation is part of the sphere of the theory of art, which, for instance, studies the distinct qualities of spatial, light, and color construction in painting and the specificities of the poetic language of images. Even though this use of the term is accepted only in the sphere of spatial and verbal arts, similar questions are posed by theoreticians of music and theater. Historically one can trace not so much the development of the term as the development of the issues outlined above. Leaving aside naively naturalist and popular views of art, for which representation is always only a more or less accurate reflection of empirical visual appearance, one can argue that until now, the naturalist tendency has also been dominant in the science of art, which has been closely dependent upon the realistic movement of European art since the Renaissance, and which has always emphasized the represented over the representation as such. Realism of the outer artistic form was taken for granted. In the ancient term mimēsis, imitation was understood naturalistically; art served to imitate nature—beautiful nature, but still an imitation, which already in Lessing was synonymous with representation. Even the idealist aesthetic—for which art is an expression of the embodiment and representation of an idea and the transformation of natural reality in creative fantasy—was so confident in the need for a realist representational verisimilitude that the question about the specificity of the construction of an artistic representation as a special problem of the ontology of art did not even arise (an exception to this being Johann Herder's *Plastik*), if we don't count the doctrine of aesthetic appearance (*Schein*), which only hints at the specific quality of external artistic forms without defining appearance more precisely. This is even more applicable to positivist aesthetics, to its psychological and physiological trends, which were even more connected to naturalism (as, for instance, with the theory of illusionism). Only during the last decades of the nineteenth century, in connection with the formalist movements in art itself (Cubism and other schools that followed Impressionism) and in art sciences (Fidler, Hildebrandt), did representation begin to be understood not as a reproduction of visible reality but as its reworking into a specifically artistic form of vision. The essential element was no longer what a work of art reproduced, but rather how and according to what laws the reproduced elements came together into a visual artistic system. This led to a special ontological theory of the arts that studies the autonomous principle of an artistic visual representation, as opposed to representationalism, which henceforth constitutes only one of the layers within the structure of the artistic image (functional forms in Hildebrandt) and which, as, for example, in some forms of Expressionism, is negated both theoretically and

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in practice (Kandinsky). Yet problems of representation are closely interconnected not only historically but also conceptually; for if, on the one hand, representationalism is a question of the theory of styles (realism, naturalism, Impressionism, etc.), then, on the other hand, the place and function of representational forms in an artwork are determined by the way a representation is constituted in the individual arts, i.e., by how it is studied by the theory of these arts.

1. The firmly rooted term "representational arts" [visual arts] itself characterizes the dominant role of representation in spatial arts, which are most closely connected to visible reality, because they are optical arts—because they give form to a real, visible thing and directly (besides the verbal and auditory sign) reproduce the appearance of the object being represented. Yet this term, which is an awkward translation of the German bildende Künste—the forming, imaging arts—is not applicable to architecture, in which representation, i.e., the sensory-visual composition, is not a representation of realities outside of the construction itself, and therefore in which representational forms in the narrow sense of the word are absent. One can only conditionally speak about an abstract play of forms in an architectural mass and space "representing" a particular cultural attitude of a human being toward a thing— Schelling, for instance, points out that architecture as an art is an imitation of itself as a thing. Sculpture, on the other hand, is predominantly representational, for its representational forms come together to create an artistic image. Since, by nature, sculpture in an organic (anthropomorphic) incarnation of the material laws of a massed object, every "nonobjective," nonorganic sculpture turns into a tectonic thing, into an "applied" art, in which the object is not given autonomous form, but like in architecture only expresses the connection between life and the thing. Just as in sculpture, representational forms are constitutive for painting, yet while in sculpture they are defined as organic forms in accordance with the content, in painting representationalism is a formal principle: the presence of an imaginary, three-dimensional space beyond the surface of the painting, one independent of the degree to which it coincides with our practical perception, of the objects that are represented in it, and of the degree to which they resemble real objects. Renaissance theoreticians headed by Leonardo da Vinci were on the right track when they discerned in painterly construction a formal analogy to the act of seeing and in the pictorial surface an analogy to our field of vision. Yet the laws of artistic perspective they established were interpreted by the science of art as laws of optics, physiology, or psychology and were perceived by naturalistic art as normative prescriptions rather than artistic principles. In reality, planar artistic representation is created following specific laws that are purely artistic, and artistic forms are determined not by the real form of the things and space that are being represented, like in photography, but just the opposite: The space and things being depicted are determined by the artistic construction of a planar surface as a thing and by the representational qualities of the inscribed signs. Yet the represented forms—namely, imaginary space—are always present in painting, for their absence turns color and line into ornament, i.e., into a tectonic form that

<sup>7.</sup> The Russian word for "visual" in this expression is *izobrazitel'nye*, which literally translates as "representational" (translator's note).

affirms the materiality of the thing's surface. The best examples in this regard are several Cubist works in which real pieces of material (paper, iron, wood) are attached to the picture's surface and take part in the construction of an imaginary representation, even though they are completely isolated from the pragmatic connections into which they were integrated before and beyond their artistic shaping.

- 2. The problem of representation presents a particular difficulty in verbal arts, where we deal with a special kind of visuality mediated by the word and determined by the latter's structure. Besides its logical and expressive functions, the word in pragmatic speech is nominative. It designates and names visible contents, real things, people, events. In artistic speech, the word loses its practical functions; it is not only a means or a conventional signal. It is considered artistic only when it is not imagined separately from the object it designates and when it is used in its fullness, i.e., when its nominative, logical, and expressive functions constitute a complete, indivisible totality. Yet very often, as in many literary styles (poetic schools of the eighteenth century, the Parnassus school, naturalists) as well as in some mixed, semi-rhetorical genres, especially the novel, the word operates according to its pragmatic functions of informing or describing. What results is a special, nonartistic kind of representationalism, dictated by reality and by the connection between things that are outside and beyond the work of art, and not by the law and structure of an artistic verbal representation. A word is nothing more than a tool for evoking the fullness of visual impression by analogy with representation in the spatial arts. This manner of phony representationalism, which goes contrary to the laws of poetic representation, is often juxtaposed to expression and was in its time brilliantly condemned by Lessing in his Laocoön. In truly poetic speech the thing being named is only included in the realm of poetic reality and poetic representation when it constitutes an image or participates in its construction, i.e., when it is, in its turn, a sign of a special kind of individual poetic meaning. Such is the function of tropes, which turn the immediate visible reality of a named object into a sign, which "represents" a different content: abstract; non-poetic, in the case of allegory (Dante's Beatrice represents theology); poetically illustrative in the case of simile (crows represent brothers-bandits); and unfolding within the sign itself, in the case of symbol (Lermontov's "Sail": that singular and otherwise inexpressible artistic object that was embodied in this poem). In this sense, representation, *Darstellung*—representation as the true nature of a poetic word—is often juxtaposed to communication, which is present to different degrees in certain poetic genres (the least in lyric and the most in epic).
- 3. In theater arts, the problem of representation is complicated by the fact that all the types of representation discussed above—verbal (role), sculptural (the body of the actor), tectonic (material construction of the stage), and pictorial (constructing representation on the other side of the flat footlights)—are moments in the creation of the specifically theatrical action. Since theater uses a real living human body in a three-dimensional, materially constituted space, representational forms within it are constitutive formally as well as in content, whereas, naturally, the fact of actual representation does not at all predetermine the degree of naturalism or stylization of the

acting or stage decoration. On the other hand, the term is used in the theory of the actor as a contrast to emotional experience. While some argue that it is sufficient for an actor to reproduce, "depict," the external forms of a role, independently of whether he himself experiences the psychological processes he is representing, for others (Stanislavsky) what is most important is the complete reconstruction of the state of mind of the person being represented.

- 4. Undoubtedly, in music, just like in architecture, representational forms do not play a constitutive role, all the more so since music's manifest acoustic makeup the ontic forms of a musical composition—may have nothing to do with real natural sounds. Naturally, if one understands the term "representation" in the first sense described above, one can argue that outer forms perceived through the senses represent an artistic musical object, regardless of where we find its essence: a universal will (Schopenhauer), the mathematically beautiful play of a sound instrument (Hanslick), pure feeling (Cohen), etc.; yet the theory of music, which studies the systematic construction of sound makeup, does not consider representational forms at all and does not use the term "representation," unless one considers the term "recitation" as analogical to it. Representationalism, like a stylistic category of music, has frequently emerged in its history, especially during the second half of the nineteenth century, in the theory and practice of program music [Programmusik]; for its representatives music had equal access to poetic imagery (the semantic function of the leitmotif) and to pictorial representationalism (onomatopoeia). These movements were connected to the dream about a synthesis of the arts (Wagner's musical drama), where music was often given a secondary, illustrative role. Of course, the argument between adherents of pure music and program music (Hanslick and Wagner) is not subject to theoretico-normative resolution. There is no doubt that artistically orchestrated sound also has representational functions, which, although they are secondary, may be included in the totality of a musical image without becoming illustrative or turning into base naturalism (Mussorgsky, Borodin, Wagner, Liszt).
- 5. In the domain of choreography it is easy to imagine mimetic representational elements (for instance, ritual or "production-based") that are not completely transformed into special temporal laws—elements of a musical variety in dance and of a dramatic variety in pantomime.
- 6. In cinema in its current state, representational and even mechanically representational forms prevail. Translating pure representationalism into an artistic system of representation can be accomplished, of course, not by working the **facture** of the surface, as it is done in the so-called art photography that imitates painting, but, rather, with the help of special temporal compositional forms that are close to the forms of theatrical action but are not limited by the real unity of time and place.

A. G. Gabrichevskii

**Representational Arts** The term "representational arts" has long been out of favor, and deservedly so. For it is true that its usual application to the entire group of spatial arts, architecture, sculpture, and painting is ambiguous, to say the least.

Furthermore, in literature and theater one has equally valid reasons to speak about representation. Architecture, on the other hand, is not evidently representational at all, or, in any case, it has a very different capacity to represent than painting and sculpture, where the entire artistic development of the past two decades seems to have been directed mainly at overcoming representational tendencies. All the artists of that generation sought less to represent and imitate than to express and build.

But perhaps the problem lies in the fact that an understanding of representation as a reproduction of external reality is too narrow. Perhaps an artist uses an external given only in order to "represent" his idea, the artistic image itself. In other words, perhaps the object of artistic representation is the image itself, which appears as a result of the interaction between outer (representational) and inner (expressive and constructive) aspects. In this case, the difference between the arts would be defined by the function that is carried out by representational elements in the structure of the image as a whole. If one presents the problem in such a way, could it turn out that spatial arts are predominantly representational? In other words, can we claim that the architect, sculptor, and painter are—to a greater degree than a musician or a poet—connected to certain requirements brought upon them by empirical forms of reality in the image being "represented"?

Strange as it may seem, especially in our time, one has to answer this question positively—at least concerning sculpture and painting. Let us try to illustrate this with an example of portraiture in spatial arts, since . . . this problem may be posed only in connection to the question of representation and depiction in general.

Does representation of a concrete individual phenomenon constitute an artistic task in the spatial arts? Or, more precisely, can various modes of conveying a concrete individual phenomenon, such as an individual person, be completely integrated into the structure of a spatial artistic image as constructive representational elements? Even further: Can these aspects dominate and determine all the other aspects, such as the expressive and constructive ones?

Let's start from afar. What is the role of representation in spatial arts? Let's agree from the beginning to understand the term "representation" in the narrow popular sense, as an imitation of visible, empirical reality, and let's examine its place within the structure of a spatial artistic image. First, every work of architecture, sculpture, or painting is above all a material thing created by a person, a thing that, as a result of being worked on, ceased to be simply a thing and became also a "word" that carries expression. Of course, its elaborated form entails an isolation, for its artistically distinct form is the result of its separation from the network of connections and patterns within which it was integrated as a practical object. But we said: *not only a thing*, since an artwork always remains a thing, its material properties are never completely destroyed but are only reinterpreted and emphasized to the degree of becoming expressive symbols. This peculiar thing/non-thing is always understood in a certain relation to the aggregate that we call the outer world: as a thing, in the sense of a certain natural embeddedness; as

a non-thing, in the sense of overcoming and isolation. On the other hand, ... as a certain contemplated visible unit, an artwork is included in the outer world, thanks to the fact that the outer world is itself a certain visible given, perceived through sight. Without any wish to resuscitate the long-obsolete arguments about the superiority of vision as the highest sensorial domain, one can nevertheless assert that the world is given to our vision to the degree that it is visible, or, in other words, that we experience reality optically as a unified picture, as a closed totality with an inner structure, and, finally, that separate sensorial domains are united by a certain expressive connection that enables the representational function of each domain (such as vision) through its relation to the others. Of course, the optical constructions of an artist don't coincide with the requirements of everyday vision; instead, they always destroy these requirements in proportion with their artistic quality. Nevertheless, there exists a fundamental connection between them, regardless of how we define it. It doesn't matter whether we recognize that an artist creates freely within the limits of the laws of everyday vision, or whether he externalizes those deviations from the laws that are the most typical for him personally or for his era, or that he demonstrates laws of pure vision stripped of all practical and calculated distortions, or, finally, that an artist builds an "authentic" space in relation to which the space of our practical existence is merely an individual case. In any case, however much the artist's optical image may differ from and contradict the requirements of our optical perception, no matter how "fantastic" we may perceive it to be, if the image is sufficiently unambiguous and internally unified it can, in principle, count as a modification within the limits of the same visual sphere. The mere existence of a visible whole, therefore, constitutes "representation" in the proper sense of the word, and it is irrelevant whether that whole corresponds to the laws of practical vision or not. It makes no difference what the connection between whole and laws might be; the very existence of a connection leads to an important consequence: There can be no visible "artistic unity" that is completely removed from the so-called optical presentation, if by this term one understands the entire group of possible forms, which don't lie within the limits of the given artistic optical system. Just as there can be no exact artistic reproduction of reality, in which practical representational forms would not be subjected to a corresponding deformation resulting from expression and construction, so too must expressive and constructive artistic formulas always process a certain aggregate of external givens, which already have a certain practically defined form that is not destroyed but only reinterpreted.

Every time that art history has spoken about a new realism's mastery of the world, we are in fact dealing with the development of a new optical system that becomes classical only when the process of reinterpreting all everyday optical givens is completed.

Thus every work of spatial arts remains a thing, even when this thing has been completely overcome and transformed into expression—or, rather, it is precisely for this reason that it nevertheless remains a thing, since its artistic meaning

boils down to the fact of its realization and incarnation. On the other hand, every work of spatial art depicts some kind of visible empirical content, although every-day optical forms have been completely reinterpreted and reformed according to the regularities of constructive and expressive order.

We have thus obtained three different meanings of the term "representation":

- 1. representation as a general image—this meaning is clearly too broad and in this sense useless;
- 2. representation as those elements of a visible artistic whole that are significant not only in visual artistic systems, which we conventionally describe as practical. Such an understanding, most typical for all sorts of naturalistic attitudes, is especially dangerous because its use always carries the risk of losing artistic specificity itself; and finally
- 3. the same elements as composing a special layer in the structure of an artwork, i.e., those that received a special reinterpretation and deformation, established a live connection with constructive and expressive aspects, and in turn were reflected in the forms of expression and construction. It is in this sense that we will understand representation, for here one finds a truly essential problem in relation to "representational" arts.

An image created by an artist is always individual. It is one of the main conditions of its artistic quality. But we always distinguish various degrees of individualization: Rembrandt will always be more individualizing than, for example, Raphael. Evidently, here we speak about individualization in a different sense. Individual quality can be moved from one layer of an artistic image to another, and the overall image, because it is artistic, always remains individual in the first general sense of that word. If within the structure of an artistic image we distinguish expressive, constructive, and representational aspects, it is easy to see that it is their interrelation that determines the difference between individual artistic media (in this case, spatial) and discrete works.

V. P. Zubov

**Space** Space is the main premise of the formation of the so-called spatial arts, which consists in affirming the possibility of the existence of forms that are built in three dimensions and in time. In this sense one needs to distinguish between space and formal means of expression in the spatial arts. However, artistic creation may be directed toward the expression of space itself, and in that case, formal means of expression—the means that alone are able to materialize such a construction—recede to the background and space itself becomes primary. In the sense described above, space is an environment where, when artistic will comes into contact with it, form is created.

## I. Means of Spatial Construction

Every formal means of expression has, in addition to the ability to assert itself, the ability to point to space; in that case its autonomous value is reduced to a minimum. A line—direct, endless, or curving in three dimensions—underscores the temporal structure of spatial forms. Surface serves as a boundary of space, which can be read either in front of the surface or behind it, or surface cuts into space, which is especially typical for intersecting planes. Color serves as a differentiating characteristic of surfaces; some colors bring parallel surfaces closer, others add distance between them. By contrast, light and shade give expression to space by connecting individual bodies with each other in such a way that space responds to the light and shade that are filling it. Finally, the volumes of mass and body push out part of space, which, in addition, appears around them.

## II. Types of Space

In contrast to the "formal content" of an artwork's means of expression, space cannot be given in it immediately. However, in spatial arts there exists a will toward space as an immediate given.

In comparison with the formal means enumerated above, however, space is not a new means of expression. Rather, it unites in itself the same means of expression in their effort to express space. The will to make space visible leads to the expression of its part instead of the whole, a "spatial segment" instead of space. The advantage of this concept consists in the fact that it preserves the "emptiness" of space but deprives it of its unbounded quality. Space is calculated based on its boundaries, which are clearly and definitively delineated. This leads to a stasis of the resulting space, a complete exclusion of time and the dominance of three dimensions. Nevertheless, it is clear that space is also endowed with all the signs of a geometric form (geometric but not artistic, though an artistic form may consist in precisely the expression of the physical characteristics of a body), turning into a "spatial body," in which spatial "emptiness" disappears without being in any way different from the materials of any geometric body. A spatial body that is represented in its entirety determines a composition through the principle of spatial addition (Raumaddition), which constitutes a whole from separate spatial fragments. The only chance for art to maintain the visibility of space and at the same time go beyond the narrow boundaries of a spatial body consists in sacrificing the imaginary emptiness of a spatial fragment; space in art thereby acquires a second critical sign . . . : limitlessness.

Movement is born in static "spatial-geometric form." This provides clear proof that the emptiness of that space was imaginary. In motion, the "material" of a spatial body becomes self-reflexive and seeks to destroy the limits imposed onto it. This process is connected to the emergence of a directionality that a spatial body completely lacks. Directionality in any dimension creates the representation of a force that develops in time and that replaces the "space-thing" with a singularity. There

remains, however, a limitation at this stage, for such a segment of singularity has a temporal sign of an infinity but has not taken on the sign of boundlessness. The subsequent path leads toward the multiplication of directions in all dimensions, up to an unlimited number of directions, an unlimited number of forceful singularities. This is most closely related to the struggle between space and boundedness: With the appearance of every new direction, the boundaries of space weaken more and more. The process concludes with the merging of all these directions into a single possibility of motion along all directions, which presupposes the absence of any boundaries, the merging of all force-singularities into one singularity that coincides with space itself, i.e., the spiritualization of space, an understanding of it not as a thing defined from outside but as a force distributed everywhere and containing the potential to create from itself an artistic form within time. The spatial concept outlined above receives evident expression with the use of light and shadow. Shade (chiaroscuro) is that very "matter of space that became self-reflexive." Dynamic transitions between the lighter and darker parts of space make it "visible" and unlimited, but nevertheless material. The unity of space in chiaroscuro leads to the principle of the subdivision of space (*Raumdivision*), since, according to such a notion, there is nothing in art outside of this space of light and shadow, which can be subdivided only by separating its parts conventionally. The aspiration to get as close to space as possible—the premise of spatial arts—leads to the spiritualization of a space delineated by light and shadow; the highest point of this process is diffused light, in which an element of shadow is present in the minimal amount necessary for the light to be visible. The aspiration toward space as an immediate given in spatial arts is distinct from those instances where space is designated symbolically with the use of signs.

## III. Man, World, and Space

Art always seeks to recreate the world according to the internal image of man. From this starting point stems the possibility of three principles of constructing space, the prerequisite for the world art creates. Man may seek to transform the real world into an artwork, in which case the space that lies at the foundation of the real world will serve as the material from which an artist will create the space of art. Another possibility consists in asserting an artistic world alongside the real world, in order to replace the real world. In that case artistic space no longer coincides with the space of the world, next to which the space of art will be affirmed. In both examples, space surrounds the person situated inside it. This "moving" understanding of space is juxtaposed with a "visual" understanding, according to which space is situated in front of a person, who turns into an observer. This juxtaposition should not be confused with the notions of real or illusory space, or of represented space, all of which can be either mobile or visual.

Concerning the relation between space in art and the person perceiving it, one needs to distinguish two categories:

- 1. when the main emphasis is placed on the viewer, and space is imagined as merely a container, as a background for the composition of the frame that has a direct relation to the viewer;
- 2. when space is disclosed to the viewer as an autonomous value. In this instance, two possibilities open up. First, the space may be so distinct from the physical nature of a person that the possibility of direct connection between them is completely out of the question and the person needs to completely renounce the nature of his body in order to enter the world of that space. The second possibility consists in the availability of a gradual transition between the person's body and its surrounding space, which makes it possible for the person to dissolve into the spatial element and thereby connects the two poles to each other.

## IV. The Main Concepts of Space in the History of Art

In prehistoric art, two principles of spatial composition are strongly opposed to each other: positive construction, which takes place on the Earth's surface and affirms the unlimited dynamic space of nature; and negative construction, going into the depths of the Earth and replacing the space of nature with the space of the cave. To these two concepts of space of prehistoric man correspond two styles of figurative art: "impressionist" representations of people and animals, which convey the space of nature; and geometric figures, which replace objects.

A dolmen represents a synthesis of both concepts and is characterized by the lack of correspondence between the outer container and the inner space. A dolmen's composition lies at the foundation of an Egyptian pyramid and an Indian temple, where we find the same main element.

In contrast to the sharp juxtaposition of the geometric body of a pyramid and its surrounding space, in an Indian temple they were intertwined, leading to the loosening of its outer mass. This led, in turn, to its surface being entirely covered with sculptures, which strongly underscored the natural space that surrounds the temple. The basis of pre-Greek arts in the Mediterranean area is constituted by a unidirectional space, which entirely defines the "way to the sanctuary" of an Egyptian temple, with its long corridors of a hypostyle gallery, which run parallel to each other and intersect at right angles; the bands of Egyptian reliefs and painted images, the space of which unfolds only "to the right" and "to the left"; and, finally, the front-facing Egyptian statues.

In the art of Crete, the architectural composition of a labyrinth was created, in which "corridors" meander right and left, up and down, but maintain their unidirectionality. The same concept forms the basis of Mesopotamian architecture, which occupies the middle ground between the principles of a Cretan labyrinth and an Egyptian pathway. In the visual arts of Crete, space is conceptualized in the same way as in Egypt. Nevertheless, in addition to the composition of a frieze, one finds, especially in Mesopotamia, the distribution of objects vertically along the surface of the background, which corresponds to the grouping of architectural forms along the surface of the Earth. If the unidirectionality of Mediterranean art

is connected to cave architecture, the arts of China and Japan are entirely based on the principle of positive space: They dissolve the building and its interior in the garden ensemble and, by extension, in the space of nature. Chinese and Japanese painting constitute a landscape that renders a random excerpt of nature, for which the painting's frame constitutes only an outer delineation. A viewpoint from above is characteristic of this art, as if the viewer were looking down from a mountain. The so-called reverse perspective derives from here.

In Persian and Muslim art, space is spiritualized. A light, dynamic space is created, distinct from the space of nature by its high degree of spirituality, which leads to the dissolution of the material in the minute flickering of the space delineated by light and shadow (chiaroscuro). It is from this that the nonrepresentational imagery of the Muslims stems, and their painting mainly consists of ornament.

In the art of antiquity—Greek, Roman, and Byzantine—in the medieval art of Western Europe as well as in the new European art, one observes an evolution from the spatial body toward a painterly space defined by light and shadow.

A static "spatial box" that is filled with figures and brought together with other similar spatial bodies is increasingly fused with them by means of an evergrowing composition of chiaroscuro, in which boundaries between individual spaces, which had filled the remaining bodies, dissolve. Space changes from a dynamic space to a visual one. Painting becomes predominant in all the arts, and the viewer is presented with many pictures juxtaposed with one another—the principle of many pictures [mnogokartinnost]. This stage of artistic development is evident in the Byzantine art of the sixth century and especially in Baroque and roccoo art.

N. I. Brunov

**Standard (Template)** The skill to always use one and the same means for conveying a representational form of artistic ideas is called a standard. In the technical sense, it is developed when an artist is transformed into a craftsman. Every form of craftsmanship is essentially standardized. Art, on the contrary, is theoretically revolutionary. In the artistic-ideological sense, a standard is established when an artist's creative growth stops. When a standard unites ideological and technical aspects, all development of artistic individuality stops, existing possibilities stabilize, and there is no search for new ways—both in the work of an individual artist and in the work of an entire school, and even an entire culture. The reasons for the appearance of a standard vary. Often a standard is established under the influence of the fading powers of a single individual or an entire social organism, or when interest in a given form of labor fades.

A standard arrives as a result of external causes. Thus, in the work of the old masters, a standard often emerged under the influence of many commissions. The notion of a standard needs to be distinguished from narrow technical

adaptation, which implies a mechanical repetition of the same form and is called a stencil [trafaret]; it also needs to be differentiated from the cultural-historical concept called tradition, which encompasses the transmission of the best examples from one generation to the next. Tradition doesn't destroy creative power, nor does it suppress individuality. Tradition is often an inevitable precondition for further artistic development and is therefore a progressive factor, while a standard is a regressive fact.

N. M. Tarabukin

Statistical Method The emergence of the term "statistics" in the contemporary sense of that word is connected to the name of Adolphe Quetelet (1835). During the first half of the nineteenth century, the statistical method became widespread in a broad range of disciplines of knowledge, including physics and mathematics (Ludwig Boltzmann, Rudolf Clausius). Naturally, the statistical method also played an essential role in the field of aesthetics. The creator of experimental aesthetics, Gustav Theodor Fechner, used statistical data as early as the 1870s. His three main methods—of selection, of attitude [ustanovka], and of application—rely on statistical data. In the first case, statistical calculation is performed on the objects that the subjects had chosen according to aesthetic value; in the second, one counts similar objects, made by the subjects themselves; and in the third, one does statistical counting of objects that have the same shape, proportions, size, etc., as those encountered in daily life. All three methods of data collection allow the experimenter to establish that in the psychology of creativity statistical data serves the goals of characterology, highlighting one or another aspect of creativity (see, for instance, the psychographic works of Margis). Statistics plays an equally important role in social psychology during the study of the reader, listener, and viewer—it allows us to make important observations about taste, the popularity and success of artworks, etc. During the past few decades, there have been repeated attempts to use statistical methods to analyze the formal specificity of artworks and determine those properties of an aesthetic object that give the highest aesthetic satisfaction. First of all, there are those elements that are easy to count (for instance, rhythmical and metric characteristics of a poem or a verse). It is considerably more difficult to count sounds or images. Here, in order to arrive at accurate conclusions, one needs to collect data not only about the recurrence of certain sounds in a poem but also about their recurrence in all kinds of speech, including pragmatic speech. According to critics, many earlier observations about "the orchestration of a verse" were derived from a faulty premise that all speech sounds are encountered with equal frequency and therefore all deviation from this "norm" is an artistic effect.

There exists no systematic study about the application of statistics in aesthetics and art. In order to understand the methodology of analyzing statistical data, one has to use general works on statistics. The main feature of every statistical

study is the counting of individual elements, which are always presented in reverse: In order to become the object of study, an element needs to be isolated from all the connections with the whole. The function of statistical method is defined in different ways. For Quetelet and his school, statistical data served as a means to establish laws in social phenomena. According to other authors, statistical data serves only as a means of characterizing and describing: Data cannot establish mathematical laws, since it depends entirely on the researcher's methods of grouping the material, his choice of the units of data, etc.—in other words, statistics presuppose a scientific analysis but don't justify it.

V. P. Zubov

**Suprematism** Suprematism is a term derived from the word *supremus* (highest), created by Kazimir Malevich to denote the system of painting he defended. As one of the modes of **nonobjective painting**, Suprematism is the logical conclusion of the analytical path of painting. Suprematism leads painting to the fundamental geometric figures—the circle and the square. It treats color as the painted surface and is expressed thanks to various devices for using **facture**, for instance, black on black by Rodchenko and white on white by Malevich.

In its original phase, Suprematism conveyed a sense of movement of flat surfaces by superimposing surfaces and thus expressing known spatial relations. Later Suprematism came to embrace a complete destruction of space and created surfaces painted in a single color out of fear of destroying surface as such.

If in Suprematism the main problems of painting (space, volume, color) did not find their degeneration, then, on the contrary, the technological premises of painting came to the forefront. Hence Suprematists' special attention to facture.

Suprematism emerged and spread widely, predominantly in Russia (Malevich, Rodchenko, Rozanova, Kliun, and others); Russian artists exerted an influence on other countries as well.

N. V. Iavorskaia

**Surface** [ploskost'] Surface is one of the means of expression of the spatial arts, mainly characterized by its two-dimensionality. An ideal surface has no thickness at all. In those cases when a surface is constructed from real materials (for example, in architecture), one observes a constant thickness of the surface, which is a distinctive characteristic, for instance, of a known kind of wall. Because this thickness is constant, attention is diverted away from the material and mass of the wall and directed entirely toward its geometric form. A surface is an element that is utterly essential for the composition of space and of bodies in the spatial arts; equally important is the significance of a surface as a self-sufficient formal element. Surface is especially asserted by the ornament that fills it because the viewer's

attention moves from the ornamental motif, repeated many times, to the ground it covers. As a boundary between what is real and what is represented, surface plays an especially important role in painting. Either the surface of a painting coincides with the image on it, or it pushes the image forward and serves as a background for it, or the image itself breaks through this surface and recedes from it into depth. The well-known composition of spatial planes positioned parallel to the picture plane, which is so characteristic of classical antiquity and the Renaissance, shows to what degree the foreground of a painting or a relief may affect the entire spatial construction of an artwork.

N. I. Brunov

**Surface** [poverkhnost'] Surface is not a means of expression of spatial arts; it is only a known characteristic of a mass. A surface is part of a mass that touches space, in a way similar to the role a surface [ploskost'] plays for a geometric figure. In contrast to the latter case, where one observes a complete dissociation of a body and the space surrounding it, the surface of a mass is connected to this space, which it penetrates to a degree. The main function of a surface consists in providing physical characteristics of a mass. A surface may be real or imaginary, and it may be represented with the use of chiaroscuro. In painting, one can speak about the surface of represented objects, the surface of the entire image, and the surface of a painting [faktura]. In all three cases one speaks about the same thing, if only because one does not refer to real objects or a real surface of a painting beyond its connection to an artistic image.

N. I. Brunov

Thinking in Images General artistic theories of thinking in images are closely tied to the general psychological tendencies of a given period. Thus Renaissance writers, who were under the influence of the intellectualism of antiquity, were inclined to interpret all kinds of imagistic thinking (fantasy) logically, approximating thinking in images to allegorical thinking, i.e., to logical thinking that uses empirical examples or sensory signs. Even Baumgarten, the creator of a new aesthetics, tried to justify a peculiar "logic of fantasy." Only at the beginning of the eighteenth century were affective-emotional aspects of creative thinking differentiated from logical thinking. Scholars began to look for the origins of imagistic language and tropes in the affective imagination (*imagination affectée*—see views of Blackmore and Lowth and Gauguet). The Swiss (Braitinger, 1740) pointed out the emotional effect of images on the presentation of one or another kind of truth. From this viewpoint, the goal of poetry is to arouse affect with the help of images. Throughout the nineteenth century, thinking in images and its relation to poetry was repeatedly the subject of special attention (the Romantics, Humboldt, Steinthal). Later, in Russia,

with the work of Potebnia, poetic thought was equated with thinking in images. According to Potebnia, the difference between the imageless (prosaic, scientific) work and a work with images is based on a forgetting or ignoring of the image (or imagination): In this way the expressions "free of ground" and "free of foundation" have the same prosaic meaning, although their images are distinct ("osnova" [ground] is a type of thread in the textile industry). From this perspective all thinking (mundane and scientific as well as poetic and mythical) includes an imagistic element. The whole difference is that in prosaic thinking we look beyond the image or through it, as it were, giving it no attention, while in poetic thinking individual aspects of an image preserve their self-sufficient meaning. Built on the material of verbal arts, the theory of thinking in images encountered great difficulties when it was applied to other arts (architecture, music). Although here, too, one speaks figuratively about architectural thinking, musical thinking, etc.

Further development and refinement of the theory of thinking in images took place under the influence of formalist art-historical thinking, on the one hand, and experimental psychology, on the other. Along with the imagistic aspect of poetry (and in opposition to it), the formalist school emphasized rhythmical and sonic aspects. As a result, it became impossible to reduce poetry to imagistic thinking, and a division was established between poetic imagery and visual representations, which had been confused in the old theories. On the one hand, a poetic image and trope are not always evident, and on the other, visual representations, which accompany thought processes, are not poetic at all. Thus, for instance, the poetic image of "green-curled forests" doesn't inevitably evoke a clear visual representation.

In the last decade, the general question about the role of visual images in the thought process has been subjected to rigorous study in experimental psychology. Visual representations, or images, have been given less attention than in the old psychological discipline. (Binet, for instance, points out that evoking images is only a small part of the whole thought process. See also the experiments of the Wurzburg school.) Distinguishing between the visual, auditory, and motor types of observation of the character of images while reading (heard word, written word, specific image)—all these general psychological observations in the sphere of thought have influenced the aesthetics of observing the course of visual images while reading literary works, as well as analogous work on the perception of musical compositions, pointing to the different role that visual, auditory, and other similar images play in various artistic styles and eras (and in the work of individual authors).

V. P. Zubov

The Unconscious Since the time of Leibniz, psychologists have noticed that consciousness does not entirely encompass the psyche, that it is only one aspect of it;

there exist mental states that remain nonconscious—dark, unclear, unnoticed states of our inner life. There exist rustlings, hints, instinctive movements, moods, inclinations, etc., which we are not consciously aware of but which constitute the general background of our mental life. Not all psychologists consider it proven that unconscious mental events exist: Some scientists deny the existence of the unconscious (Benn, Brentano, Bumke), and others consider these events reducible to physiological processes (Morton Prince, Ribot); there are also psychologists who are inclined to explain all psychological experiences by the existence of the unconscious life of the human "ego" (Kaiserling, Freud and his school, Geiger). The unconscious was given a purely metaphysical interpretation by such thinkers as Schopenhauer and E. Hartmann. According to them, not only the individual psyche but the entire universe is founded on something essentially unconscious, a certain blind world will.

The unconscious is sometimes called the subconscious (Lewis's term), because subconscious events are located under the threshold of consciousness; this sphere is also designated as the "subliminal ego" (Meyers). The notion of the unconscious is used by psychiatrists when describing multiple-personality disorder; such is Janet's teaching about the existence of automatism in consciousness—he supposes that it is this psychic automatism that determines the existence of disassociated psychic elements.

The best-known school of thought about the unconscious is that of the Viennese scientist Freud. For Freud, all our unfulfilled wishes and forbidden desires are displaced by consciousness into the unconscious. These repressed complexes regulate our life from the innermost depths of our soul; the conscious "ego" is only a surface film atop our intimate inner life. Dreams, language, slips of the tongue, myths, and poetry express our forbidden wishes, which are in turn driven, according to Freud, by our sexual desires. Freud gave such an explanation to the art of Leonardo da Vinci; he subjected Shakespeare's Hamlet to a similar interpretation. In recent years the art of Russian writers—Lev Tolstoy (by Osipov) and Dostoevsky (by Neifel'd)—has been analyzed from the Freudian viewpoint. Several authors consider the activity of the subconscious as offering the best explanation of occurrences such as sudden revelations, intuition, and spontaneous insights, like in a dream. It is in this intuitive way that many discoveries of different kinds, for instance in science, have been made. For metaphysicians such as Schopenhauer, the essence of art consists in the involuntary contemplation of the eternally perfected ideas and the unconscious will that has generated them. For the followers of Schopenhauer (such as Wagner), the epicenter of creativity lies in the unconscious, understood as something cosmic.

Regarding art-making, Schiller wrote to Goethe: "The *I* of the poet-artist creates the unconscious in close connection with what has been consciously thought through." Goethe responded: "I think that everything created by a genius, as a genius, appears unconsciously." Jean Paul, Schelling, Hebbel, and to a certain

extent Volkelt and Lipps shared such a view on the role of the unconscious in art. Nevertheless, the latest research in the sphere of literary heritage and the archives of a range of authors demonstrate how extensive the work of poets and writers was in order to choose their characters, rhymes, rhythm, and other aspects of their artistic creations.

P. S. Popov

**Utilitarian Constructivism** Utilitarian Constructivism (its theoreticians: Arvatov and Gan) arrived at the complete negation of art. The widespread influence of utilitarian Constructivism during the first postrevolutionary years should be explained by a difficult economic situation, when all artistic forces had to be directed toward direct organization of life. As a consequence, artists went into production. Painting was replaced by photomontage as a more convincing means of agitation.

The significance of Constructivism lies not in its individual manifestations but in its main principles, which are the principles of the new style and which had a productive impact on the development of the new style in architecture (Corbusier, Andre Loursat, Vesnin, and others).

N. V. Iavorskaia

Volumetric-Spatial Construction Volumetric-spatial construction in painting is where visual form unfolds on a surface. Volumetric-spatial (v-s) construction may be created by an artist only as an illusion. For instance, even though an Egyptian artist's representation of a pond in Abd el-Qurna in the form of a plane solves a spatial task, it does so not in a v-s transcription but in a flat and conventional manner. Children and contemporary neo-primitives draw in a similar manner. But if an artist decides to stay within the limits of a real representational format from the position of the viewer's perception, he needs to resort to an illusory construction of volume and space—for a three-dimensional object can only be represented on a two-dimensional surface by creating an illusion of v-s construction. Perspective serves as a means to create the illusion of a v-s form. By defining the horizon line, the main point of convergence, and the angle of vision, the artist makes the lines that recede into the pictorial depth (orthogonals) converge in that main point. But linear perspective, developed to perfection in the fifteenth century, could not fulfill the more complex tasks of v-s construction. Light-and-shadow (chiaroscuro) became the second means for v-s constructions; with its help the artist "models" representational form. The art of the sixteenth century and Baroque art supplement these two means with a third one: the medium of atmosphere. With the help of complex nuances of color, which convey a refined spectrum of color tonalities, painters created v-s images filled with life. V-s construction can be created on the basis of the laws of color perception.

When contrasted with one another, different colors protrude or recede. Thus red and yellow protrude in comparison with earthy colors and light blue. Green protrudes in juxtaposition with light blue, and so on. In the canvases of European perspectival painters, perceptions of v-s forms move from the pictorial foreground into their depths. The viewer feels as if he were standing inside the painting's frame. In the paintings of Eastern artists, the viewer may be elevated as if in a hot-air balloon at a significant height above what is represented. He sees everything a little from above and from the side, whereby he "measures" space, i.e., orients himself within the limits of the v-s construction not only in one direction (from the foreground to the background) but in all directions, as if along the radial lines of the pictorial surface. In ancient icon painting, there existed socalled reverse perspective, where v-s construction unfolded from the inside out, i.e., from the depth of the painting toward the viewer. Cubists and Futurists did not limit themselves to spatial coordinates but introduced a temporal element into painting, representing the object not in a static state but in motion, and therefore unfolding it on a flat surface from all sides and from various viewpoints. Such a task leads anew to representational forms that are not realistic from the point of view of visuality, and to various spatial "displacements" [sdvigam] in the painting's composition. Depending on the artist's worldview, and on the tasks he gives himself, v-s construction takes very different forms, but theoretically it can be reduced to the main categories described above.

N. M. Tarabukin

Translated from the Russian by Masha Chlenova