

The Past and Current State of Geometric Abstract Art

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Abstract

Following an introduction to abstract art this thesis study focuses on the geometric abstract art which emerged with the onset of abstract art in three time periods.

In the first section which encompasses a time frame of approximately forty five years between the onset of abstract art in the beginning of the 20th century and the end of World War II it is discussed how artists like Kandinsky and Malevich made a difference by breaking off from the convention and thus contributed to the existence of the geometric abstract art.

In the second section which covers a time frame between the emergence of a new world order following World War II and the post modernism in 1980 the development phase of geometric abstract art is reviewed. Art movements such as Op Art, Minimalism and Colour Field Painting and the leading artists who enabled the development of abstract and geometric abstract art as a reaction to the totalitarian regimes of the pre 1945 period is examined. Also Turkish artists associated with geometric abstract art following affinity of Turkish art world with West after 1950 is reviewed.

In the last section between 1980 and present the contemporary international and Turkish artists who do geometric abstract art is examined. It is pointed out that geometric abstract art at present is preserving its existence via internet and similar technologies and media applications in addition to conventional methods.

Keywords Abstract; colour field painting; geometric; internet ; Kazimir Malevich; minimalism; media applications; op art; Wasily Kandinsky

INTRODUCTION

Throughout art history, artists in every period have tackled a specific issue. For example, while artists in early 15th century acted on their passion to imitate nature, while up north, the Dutch dominated images through the meticulous observation of external details.

Meanwhile, in the mid-20th century, artists abandoned the external world's painterly domination and ceded their imitation of natural appearance with a common and powerful urge. In this context, the term "abstract" was found fitting to define expressions that are "not objective" and "not figurative". On the other hand, the image of a square is as much an "object" or a "figure" as a face or a landscape painting. Thus, "abstract" as an adjective is confusing, even paradoxical. Because an "abstract" painting is quite positively a concrete painting. It draws the attention to its direct, sensuous, physical surface much more strongly than the painting of a sunset or a portrait. "To abstract", as a verb, means to draw out of or away from. Whereas the noun "abstraction" is something already drawn out of or away from (Harrison & Wood, 2016, p. 468).

Today, abstract art requires no defense. However, it still is not the kind of art that people can enjoy without some examination and sacrifice of prejudice. Because the value of a work of art lies in its composition of colors, lines, light, and shade, while any resemblance to natural objects may not wholly destroy these esthetic values, it may easily defile their purity. Therefore, because resemblance to nature is at best superficial and at worst confusing, it may be excised. This would lead to a large-scale impoverishing of painting – a disappearance of numerous values, such as sensuous, documentary, political, sexual, or religious subjects and their connotations. Ultimately, the pleasure derived from the technical skill involved in the imitation of nature would be eliminated and the artist would become almost impoverished. But the abstract artist, in their art, would choose impoverishment over defilement.

Abstract art has two main traditions. These two trends, or traditions, of the last fifty years towards abstract art have historically emerged from Impressionism. The first of these is organic, or lyric abstraction. The other is known as geometric abstraction. Organic/Lyric abstraction consists of round or curving forms, often encountered in nature. This tradition is intuitional and sentimental rather than intellectual. Organic or biomorphic in its forms rather than geometrical. Its lines are curved more than linear. It is more decorative than structural and more romantic than classical in its glorification of the mystical and the irrational (Harrison & Wood, 2016, p. 417).

Geometric abstraction, on the other hand, is a type of abstract art that utilizes geometrical forms placed in a non-illusionistic space and combined into non-representational compositions. It finds its sources in Cezanne and Seurat's art and theories. It passes through the wide rivers of Cubism and finds its course in the various geometrical and Constructivist currents which had been developed in Russia and the Netherlands during the war years before spreading to the World. This tradition depends upon austerity and logical calculation. In this aspect, it may be described as intellectual, structural, architectonic, geometrical, linear, and classical (Harrison & Wood, 2016, p. 470).

The two traditions often merge and may appear in a single artist. The geometrical lineage is represented by the painter Mondrian and Constructivists Pevsner and Gabo; while the non-geometrical, curvilinear lineage is represented by the painter Miro and the sculptor Arp.

RESULTS

From the on-set of Renaissance to the mid-19th century, Western visual arts set out to create a three-dimensional illusion through the use of perspective to represent the visible external reality. With the invention of photography and the first cinema film, painters distanced themselves from reality to express their inner worlds, thoughts, and sentiments. Abstract art, which may be defined as an artistic style that makes no attempt to appropriately recreate a known image, demands the viewer to personally interpret the work of art. In this sense, abstract art can be said as an intellectual artistic style to inspire viewers without providing them any explanations.

The pioneers of geometric abstraction utilized geometrical forms and solid colors and did so for two reasons: First, to transport the viewer through these shapes to the purest form of reality to bring a new viewpoint to the world. Second, to call attention to the medium of painting, its plastic qualities, and its two-dimensionality.

Starting with its humble beginnings in early 20th Century, the progress of geometric abstract can be evaluated in three parts corresponding to three time periods. These are : Early geometric abstraction period between 1900-1945; the development period of geometric abstract art between 1945 - 1980 and finally the period starting with the year 1980 where we see the emergence of post-modernism till our current day.

As Abstraction continued to develop throughout the 20th and the 21st centuries, geometrical shapes became attractive to abstract artists. It can be said that the geometrical-form-based non-illusionistic and objective visual language of geometric abstraction is the logical result of

cubistic distortion and the redefinition of the agreed-upon practices regarding form and space. One distinguishing feature of geometric abstraction is its curvilinear or rectilinear, continuous shapes. Although this is viewed by some as distant and unsentimental, the artistic ardor it can stir can attract even the most indifferent of viewers.

Early geometric abstraction mainly used primary colors like red, yellow, and blue. Later, different colors with more depth and emotion were also utilized. Geometric abstraction differentiates itself within abstract art with its replacement of natural or man-made objects with non-representational and non-figurative forms. From the discovery of abstraction in Western art to the current day, geometric abstraction has been a source of inspiration for painters as a means of distancing themselves from imitative and illusionistic art and as an alternative to traditional figurative painting.

DISCUSSION

Early Geometric Abstraction : 1900-1945

Impressionist painters such as Monet, Renoir, and Sisley abandoned the traditionalist style of the academy to create looser and gestural works. Post-impressionist painter Cezanne took this a step further in his use of geometrical forms to expose the essential structure of objects. This technique, used by Cezanne, closed the distance between the Cubists, and the Impressionists before him – carrying abstraction further via the simplification of geometrical forms.

In the early 20th century, Cubist painters, Picasso and Braque, contributed to abstraction with their use of intersecting lines and tones of browns, grays, and beiges to create quite geometrical visuals. Works that combined abstraction and geometrics created by the Russian painter Kazimir Malevich, a pioneer of the Suprematism movement, used simple shapes like squares, rectangles, and circles to reveal, as Malevich put it, “the primacy of pure feeling in creative art”, avoiding figurativism and emphasizing the supremacy of feeling – thus declaring the realistic depiction of external visual world meaningless.

Movements and Artists That Influenced Geometric Abstraction

Wassily Kandinsky

Wassily Kandinsky freed art from its traditional function of creating copies of the visible world. While there are many other painters in the early 20th century who concerned themselves with the elimination of the image and putting the color and the form at the forefront, Kandinsky was the most logical and consistent artist of abstract expression.

The influence of Suprematism on Kandinsky's art is clear, with his increasing use of diagonal and geometrical elements in his paintings, and his increasingly unhierarchic compositions. However whereas the Suprematists emphasized the structural aspect of painting through the use of radical and precisely designed elements and materials, Kandinsky found the expressionistic, true essence of painting in its composition (Becks-Malorny, 2007, p. 126).

Suprematism / Kazimir Malevich

Suprematism, which is led by Kazimir Malevich is the first art movement wherein painting lost its function as a tool for figuration and became an unknown component of reality. Viewed as a total refinement of art, Suprematism reduced form into its essential qualities – geometric shapes, the simplest of which being the square – and eliminated the distractions of descriptive color.

When Kazimir Malevich painted *White on White* in 1918, it was the most revolutionary work of art of its time, transforming the art form as the world knew it. The piece refined the medium in a quite abstract manner hitherto unseen, taking the supremacy of pure feeling or perception in the pictorial arts a step further than its predecessor, the 1915 painting *Black Square* (Widewalls, 2018).

El Lissitzky / Constructivism

Lines, solid color fields and geometric shapes were so emphasized that they assumed an appearance of constructs not of the painter, having been placed onto the canvas. These works of art, with the influence of Kazimir Malevich's Suprematism on El Lissitzky's work, were the results of the progression from painting into architecture.

Malevich's clusters of solid-colored geometric forms that float over a white background made an influence on El Lissitzky. However, the revolution needed a kind of art less ethereal than Suprematism to help achieve its goals. Constructivism developed as an answer to the revolution by applying Suprematism's uncomplicated grasp of dynamism onto wider fields such as graphic art, theater, industrial design, and architecture.

De Stijl / Piet Mondrian

Mondrian's iconic grid paintings consisting of three primary colors and white, divided by horizontal and vertical black lines, formed the foundation of his work, which he called non-representational and neoplasticism. These represented the purest form of geometric abstraction. De Stijl group which emerged following the publication of an eponymous journal in the Netherlands in 1917 incorporated ideas from contemporary philosophical and non-representational painting trends (Farthing, 2017, p. 406).

This new approach, described by Mondrian in 1919 as a type of abstraction and later christened "Neoplasticism", would ignore pictorial details and find its expression in the abstraction of form and color, and in the straight line and the clearly defined primary colors.

Bauhaus / Josef Albers

Principally a school of art and design, the Bauhaus was founded in 1919 by the architect Walter Gropius in the German city of Weimar. Students here would receive an education as an artist, a draftsman, and a scientist. Instructed by artisan and artist masters instead of the usual professors, they worked as apprentices and could later attained the titles of journeyman and young master. The school created a fertile environment for interdisciplinary innovation with their courses in many fields ranging from murals to furniture, and textile design to theater. Josef Albers (1888-1976) who rose from apprenticeship to young masterhood in Bauhaus is known for his series titled "*Homage to the Square*", which focused on the simplification of form and the interplay between shape and color.

Theo van Doesburg, who was a guest-instructor in the Bauhaus, criticized the school for its tendency towards craftsmanship over industrial production. Also Moholy-Nagy emphasized the technical aspects of material processing and insisted that his students create balanced designs focusing on color and texture as much as the distribution of weight and space. In time, this natural balance became a fundamental aspect of the Bauhaus style (Farthing, 2017, p. 415)

The Development of Geometric Abstract Art : 1945 - 1980

Geometric abstraction maintained its formal and conceptual tradition though the 1950s, even though the tradition largely relocated from Europe to the United States in the early-1940s. While many European artists continued to work within the existing principles of the geometric abstract tradition, the tradition itself eventually turned into explicitly American-based content following the Paris-to-New York transition as a result of World War II.

Through artists such as Josef Albers, Glarner, Moholy-Nagy, and Mondrian, who had relocated to America starting in the mid-1930s, there was increasing exposure with the European geometric abstraction traditions.

The culture and arts scene in the late 1950s was austere, meaning cold or impersonal instead of passionate, and this was the style of choice for post-abstract expressionists such as Frank Stella, Helen Frankenthaler and Alex Katz. This art style rejected the expressionistic aspect of abstract expressionism and aimed to abstract for the sake of abstraction. The representatives of this art style could be grouped in two categories: scientific and formalist.

Movements and Artists in the Developmental Period of Geometric Abstract Art

Op Art

Emerging in the 1960s, this art movement utilized optical illusions and was thus called Op Art, short for *Optical Art*. The artists of this movement primarily aimed to merge graphic art with science to form an art movement that created visual illusions.

The artists of this movement primarily aimed to merge graphic art with science to form an art movement that created visual illusions. They utilized geometric forms, lines, homogeneously painted surfaces and spots in specific logical and mathematical order and patterns to create effects that made it difficult for the eye to adapt as a non-figurative art movement. Op Art utilizes optical elements that paralyze and scramble normal perception processes.

For these artists, the subject became unimportant – they created works of art that they variegated using a base color and the combinations they produced based on the intensity of the color (Tuğal, 2018, p. 114).

Victor Vasarely

The notion of a democratized artistic production where artworks would be repeatedly reproducible instead of unique and one of a kind also manifested clearly in works of Victor Vasarely's who was generally accepted as the starter of the Op Art movement.

Vasarely greatly valued the public function of art and the artist's contribution to social progress. His aesthetic point-of-view was that art should permeate into daily life and be freely accessible to all. He attempted to create a spontaneous experience of art by focusing on optical effects (Holzhey, 2018, p. 8).

Furthermore, Vasarely was of the opinion that the notions of unparalleled genius, unique and inimitable beauty in art were outdated and antiquated.

Bridget Riley

Bridget Riley is one of the most important figures of the Op Art movement. Having found inspiration in the optical and illusionary work of post-impressionist painter George Pierre Seurat; Riley developed her own unique style in the 1950s. Her works appear flawless, disciplined, austere to the point of grace, and deceptively impersonal (Riley, et al., 2019, p. 79). The Optical effect plays a large role on Bridget Riley's methods and the perception her paintings create. The aesthetic aspect of her contribution to the world of Optical Art is Bridget Riley's ability to transform her art's perceptual reaction into something else. This is an expression of emotion, or, in more correct terms, a detailed visual copy of her mood.

Beyond her technical perfection and creativity, Riley's paintings convey a surprising kinesthetic effect. The viewer can notice the motion, vibration, and the eerie imbalance that lies within a crystalline perfect structure.

Richard Anuskiewicz

One of the founders and most staunch defenders of the Op Art movement, Anuskiewicz's works were adorned with energetic colors arranged in opposing geometric compositions that formally explore light, color, and their effects on human perception.

Anuskiewicz was interested in the optical changes that emerged through the application of colors of different intensities in the same geometric composition. A large portion of his works

were visual examinations of structural and chromatic effects, featuring forms similar to his instructor Josef Albers' square forms.

Combining his fascination with the nature of perception with his research into the visual and psychological effects of color, Anuskiewicz created paintings where the vivid colors and the geometric forms appear to almost jump off the canvas. What separated Anuskiewicz from his contemporaries was not only the perfection of his work but also his serious approach and humility while he created these works.

Minimalism

In art, Minimalism is known as Minimal Art, ABC Art, or Literalist Art. Advocating for extreme austerity and an objective approach, the emergence of Minimalism as a movement happened in New York in the late 1960s in the fields of visual arts and music. Minimalism can be defined as emphasizing an idea by reducing it to a minimum number of colors, values, forms, lines and textures.

In visual arts, it emphasizes the concepts of material and color in the simplification of the ordinary form in parallel to its emphasis on geometric forms. In other words, the point of origin for Minimalism is arguably a search for material, forms and methods that don't overtly display the personality of the creator as a reaction to the "*pretentious abstract expressionism*" (Tasarımseyri, 2020).

Minimalist paintings generally have sharp and bold edges, with transitions between the color fields. They feature two dimensional spaces and repeating geometric forms. The color fields consist of solid, unchanging single colors. The colors are used directly, without mixing, with a limited palette.

According to Minimalist artists, Abstract Expressionism was too personal, affected, and fanciful. They rejected the notion that art had to be the personal expression of its creator. Instead, the artwork had to only concern itself.

Sol LeWitt

Sol LeWitt was a legendary American artist whose works helped bring about the Minimalism and Conceptual Art movements. LeWitt's works were visual elements where conceptual processes transformed into surfaces and volumes in two and three dimensions, built unconsciously through intuition (Cross & Markonish, 2009, p. 27).

According to LeWitt, the planning and decision-making process for a conceptual artist should be completed before the production process of the artwork, with the execution of the work being a mere formality.

LeWitt questioned the basic relationship between an idea and the artwork that resulted from that idea, and thus transformed the process of creating art. He stated that Conceptual Art had no aspects that were either mathematical or intellectual, instead stressing that turning an idea into a work of art involved intuition considering the many uncertainties. To him, the idea preceded the resulting artwork.

Agnes Martin

Agnes Martin's style was based on spiritualism and influenced by the ideas of Zen Buddhism. According to Martin, painting was a world without objects, uninterrupted and free of obstacles (MoMA, 2020).

Known for her geometric abstractions, Martin's paintings feature pale stripes of color drawn with pencils, working off an Abstract Expressionist approach to prevent the sparse density of Minimalism. Martin did not pursue perfection. On the contrary, she was influenced by Taoism and other Eastern philosophies, viewing art as a reflection of the natural order.

Agnes Martin praised Mark Rothko for having reached zero so that nothing could stand in the way of truth. Following that, Martin took up a reductive style to be able to create a perception of perfection and to emphasize the superhuman reality. She became known for her style which featured lines, grids, and very light colors.

Martin is known partially as an Abstract Expressionist and partially as a Minimalist, her reclusive lifestyle was an inspiration for artists and practitioners of many different fields.

Ellsworth Kelly

Ellsworth Kelly was an American painter, sculptor and print artist often associated with hard-edge painting, Color Field painting, and Minimalism. His work demonstrates an unassuming technique that emphasized line, color and form – similar to John McLaughlin and Kenneth Noland's. Kelly often used bright colors.

Kelly stated that he preferred to take an object using it as it is, as opposed to creating a painting, which is an interpretation of a real or fictional entity. His outlook summarizes the divide between traditional art and post-war and contemporary art (Garrard, 2007, p. 157).

Ellsworth Kelly's brightly colored works with simple shapes were contributive to 20th century painting. After freeing it from the surface, Ellsworth Kelly worked to interlink shape with the space that surrounded it. As a result, shape would have found its own space through the angles, curves, edges, and masses that comprised it, as well as the colors and tones that supported them.

Ad Reinhardt

A prolific art writer and instructor, Reinhardt was an influential figure in conceptual art, minimal art and monochromatic painting. Known for his *Black* or *Ultimate* paintings, he claimed to be painting the "last paintings" that anyone could paint. Reinhardt's works couldn't be completely devoid of gestures like other Minimalist works. Reinhardt's works which aimed for nothingness could only achieve it conceptually (Garrard, 2007, p. 130). Ad Reinhardt eliminated brushstrokes and bright colors in his paintings in the early 1950s and later simplified his compositions. Through this process, he began using geometric fields consisting of tones of red, blue, or black, that differed only minimally from one another. Reinhardt's aesthetic and conceptual foundation features the austere compositions of Cubism, Constructivism, and de Stijl. While most of his contemporaries were working on figurative studies under the influence of Surrealism, Reinhardt worked in an Abstract style since the start of his career.

Frank Stella

Frank Stella is one of the most influential artists of a generation of artists transitioning from Abstract Expressionism to Minimalism. He is known for the geometric shapes and forms he featured in his paintings and sculptures.

For Stella, abstraction can involve geometries with narrative effects. In other words, abstract painting makes it possible to tell a story through shapes as a result of the interaction between colors and shapes.

The most important element that set Frank Stella apart was his constant search for the new, never repeating himself. Having used geometric and plain forms in his early work, he grew tired of the rectangular sameness of the canvas and sought out new interpretations, starting to make

holes in his canvasses and cutting out the empty spaces around the lines on the canvas. As a result, Stella created the first examples of the “shaped canvas”.

Stella is aimed to take painterly abstraction into its next phase and attempted to do so with enthusiasm and effort. He believes that abstraction has no limits for its expansion or progression. His late period works show no laxity in transparency or progression. These works increasingly grow and surprise (Pearson, 2013, p.74).

Color Field Painting

The second half of Abstract Expressionism is identified as Color Field Painting or Post-Painterly Abstraction. The simplest definition for color field painting is the use of color as the independent and primary means of expression. In 1964 and afterwards, the style came back as a reaction to Minimalism, this time taking on the title of Post-Painterly Abstraction (Kavrakoğlu, 2015). The colors used in color field paintings are among the brightest and most vibrant in art history. Upon close examination, post-painterly abstraction and color field paintings display the canvas in all its nakedness and austerity. Color field painters rejected their colleagues’ animated actions, instead adopting the most extensive possible use of less sentimental but purer colors (Fortenberry, 2014, p. 104). A light, fine use of color, avoidance of textured surfaces, exposing the canvas from underneath the paint layer, a transparent composition that’s austere and unpretentious, gesture and personality-free brushstrokes – in contrast to the previous generation – as well as the use of vibrant colors are the commonalities of these works. Upon close examination, post-painterly abstraction and color field paintings display the canvas in all its nakedness and austerity. The surface of the canvas isn’t simply an element used to create an illusion or a surface upon which the painting was displayed – it is the artwork itself.

Mark Rothko

Unlike most abstract expressionist painters of his period, Rothko opted for a more spiritual and cerebral approach to the application of paint, rather than one that’s physical and sometimes strict. Mark Rothko’s works didn’t solely consist of color, they were almost glowing, organic

pieces. Their blurry edges with soft transitions reflected the power of life through the emotions they conveyed. Similar to van Gogh and Turner, late period works of Rothko hint at an obsession with reaching a certain point – the desire to reach an endpoint that’s as majestic and certain as eternity (Garrard, 2007, p. 42). For Rothko, his “mature” work with which he had become synonymous transcended pure abstraction. Rothko believed that tragic experiences were the sole source of art, and thus aimed for what he deemed were the main elements of experience, tragedy and ecstasy. Throughout his life, his works were meant as an expression of humanity’s universal tragedy (Baal-Teshuva, 2019, p. 17).

Barnett Newman

Barnett Newman was a prominent painter in the abstract expressionism and the color field painting movements. Creating surrealist works in later years, Newman began work in the late 1940s on his “Zip” series, consisting of color fields divided by thin, vertical lines, which brought him renown in the art world and are commonly considered his mature period work. His 1948 painting *Onement I* is the first work for which he used the term “zip”. The zips both divide and unite the painting, defining their spatial structure (Barnett Newman Wikipedia, 2022).

According to Newman, the heterogeneously painted zip unites the two sides of the composition instead of dividing it, ensuring that the viewer experiences the work both emotionally and physically.

A theoretician in addition to his painting work, Barnett Newman was among the most intellectual painters of the New York school. His artistic approach was shaped by his education in the New York City College and his political activism. He believed that art was not only an element of self-realization but also a declaration of political, intellectual, and personal freedom.

Helen Frankenthaler

Helen Frankenthaler was one of the few women artists who had succeeded in becoming accepted in the New York art scene of the 1950s. Adopting Pollock’s technique of placing the canvas on the floor to drip and pour paint onto it, Frankenthaler applied the paint in a fluid manner onto her unprimed canvas. This made it possible for the paint to thoroughly seep into the canvas.

Frakenthaler also used a method of rubbing the painted canvas with a sponge. This allowed for the elimination of visual illusion and three-dimensionality in painting (Elger, 2019, p. 92).

While Pollock, de Kooning, Franz Kline and Robert Motherwell relied on the physical effects of the paint in their works, the colors in Frankenthaler's pieces featured a unique, unprecedented sense of motion. The colors appeared to course through the canvas, finding an order on their own.

Morris Louis

Morris Louis embraced direct contact with the canvas, which was an attribute of the post-painterly abstraction movement. Much like Frankenthaler, Louis also wanted to avoid displaying the painting process and his brushstrokes. Instead, he used a method of folding the canvas to utilize gravity to create stains on it. According to Clement Greenberg, Louis aimed to apply the paint thinly enough to thoroughly infuse the canvas with it so that the canvas could become paint and color itself (Garrard, 2007, p. 80).

In Louis's works there exist no external references, only color. Additionally, these twined columns are aesthetic images that create a painterly illusion, much like Stella's black stripes.

Kenneth Noland

Kenneth Noland's aesthetic approach were essentially concerned with painting, problems in the process of painting, and color.

Starting his career as an Abstract Expressionist, Noland then became one of the first practitioners of the Color Field movement and adopted a Minimalist approach that involved vibrant colors and geometric shapes in the 1960s. To preserve the impact of color, Noland preferred simple abstractions in his works. For him, color was the source of painting. While color was utilized solely for a visual effect by Noland, any ties to European tradition were avoided (Moszynska, 1993, p. 196).

Richard Diebenkorn

Richard Diebenkorn was an American painter whose work spanned different aesthetic periods. He is best known as one of the founders of the Bay Area Figurative Movement with David Park and Elmer Bischoff. Diebenkorn, whose early works were associated with the abstract expressionist movement, moved away from figurative painting in the late 1960s and began intensively working on a series of geometric and lyrical abstract works. These pieces, known as the "*Ocean Park*" paintings, brought him worldwide renown. In many pieces from the *Ocean Park* series, a large portion of the canvas is rendered a single color and painted in pale shades of pastel hues. They also convey minimalist influences. The paintings were sometimes divided into rectangular color areas with black lines, and in some paintings these black lines were covered with color but remained visible (Garrard, 2007, p. 155).

Turkish Artists in the Developmental Period of Geometric Abstract Art

Turkish painting entered a formation process in parallel with the innovative movements in European painting of the first quarter of the 1900s, trying to create its own unique synthesis. However, these synchronization with the West did not materialize until 1950s. From 1950 on the art world in Turkey exhibited a mentality that kept up to date with the artistic movements and innovations in the West, and multifaceted artistic tendencies (Kasapoğlu, 2017). While in the West pure abstraction emerged with Kandinsky's lyric non-figurative paintings in the 1910s, it wasn't adopted in Turkey until 1955 with the first abstract examples that were limited to geometric non-figurative formations. Abstraction in Turkish painting developed in two directions in terms of technique and form. The first was the geometric abstract, which avoided all brush play and textural effects, while the other was the lyrical abstract, which exhibited expressionism shaped by energetic brushstrokes, color dynamism and sought dynamism in the space.

Fahrelnissa Zeid

Zeid's distinctive painting language, apparent in her exuberant and impactful compositions, is too vivid and rich to be confined to a single style. Her artistic approach can be divided into an

early period with its figurative compositions that fit miniature art, a maturity period with geometric and free abstraction reminiscent of stained glass, and a late period consisting mostly of portraits where psychological narrative becomes prominent.

Fahrelnissa Zeid enriched her abstract compositions with spiritual depictions. Her kaleidoscopic abstracts were visions of a mystical world of eternity, which placed her in an important position in the history of world art within the École de Paris of the 1950s (Giray, 2020).

Sabri Berkel

Being one of the first artists to create examples of abstract painting in Turkey, Sabri Berkel's works extended from geometric abstract to calligraphy. In his paintings which he painted over and over again. The geometric abstraction and calligraphy in Berkel's canvas paintings during his maturity period can also be correlated to D Grubu [Group D], the exhibitions of which he participated, and the art scene of the period.

Berkel did not obtain his own elements through an overly involved experiments with the material, but approached it through geometry (Eroğlu, 2015, p. 103).

Cemal Bingöl

Cemal Bingöl's style of abstraction was created through impulses coming from within and progressed in the geometric dimension of abstract art.

This approach can be summarized as reducing art to its basic elements, eliminating any detail, and developing a sense of rhythm to find meaning in simplicity. Generally, the effect of flat and geometric surfaces that complement each other with vertical and horizontal lines are prominently featured. His art can be associated with Mondrian's abstract-geometric compositions or Kazimir Malevich's "suprematist" works (Cemal Bingöl İstanbul Sanat Evi, 2020).

Ferruh Başağa

An important painter of the founding generation of Turkish painting in the Republican Period, Ferruh Başağa turned to abstract painting in the 1940s and became one of the pioneers of abstraction in Turkish painting.

After the 1990s, his work took a more geometric approach, with intertwining triangles of different colors and sizes. His unique geometric abstract style featured a transparency of color that in a sense constituted his own sfumato technique. Instead of using a single light source, he created a softness through a homogeneous light where the violent shadows are eradicated.

Nejad Melih Devrim

Nejad Melih Devrim's art can be divided into two periods, before and after 1946. Devrim is a painter who went from line to color (Eroğlu, 2015, p. 120).

In later years, Nejad Melih Devrim produced spotted abstract works that completely moved away from hard contours and angular forms. These paintings exhibited eye-catching, vivid colors that appealed to the visual perception. Over time, his hard geometric forms began to dissolve, with rhythmic expressions of color spots replacing the line.

Abdurrahman Öztoprak

Abdurrahman Öztoprak believed in nature and strictly adhered to the transformations and movements in nature. He had a depth of knowledge on Western Classical music and thus was always inspired by musical dynamism in his abstract compositions. The basic elements of his are harmony, geometry, and motion within the relationship between the surface and the space. The forms emerge from a center point on a black background, opening outwards and turning towards different directions, penetrating each other, in forms that reflect the subconscious spatial concerns in his paintings. In his more recent works, the geometric stiffness of the forms had decreased and been replaced by an organic softening. (Ersoy, 1995, p. 50).

Current Day Geometric Abstraction : 1980 –

Abstract artists starting from the seventies through today generally thought about minimalism in art and what could be achieved in the aftermath of pop art. Then, all of a sudden, a new generation emerged who did not worry about this in the slightest, and the issues of the 1960s and 1970s became history.

According to the painter, art critic, theorist, and educator Jeremy Gilbert-Rolfe, contemporary artists such as Mary Booschever, Christian Haub, Rebecca Norton, and Miri Phelps contributed to the rich history of geometric abstract art by creating their own visual language that is sometimes inspired by it and sometimes ignores it. Using many concepts regarding color, form and the perfect order, these artists take geometric abstraction to new limits and secure its indispensability in the twenty-first century (Veneciano, 2012, p. 21).

The extent in which geometric abstract art can maintain its influence in the context of artists of today who transfer images they pick out from advertising, television and cinema and use them in their ideologically oriented works is a question to be asked. Despite the abundance of media images in the contemporary cultural environment, geometric elements still appear everywhere and maintain their influence.

Contemporary Geometric Abstract Artists

The artists who have adopted geometric abstract style from 1980 to the present day can be defined as contemporary geometric abstract artists. These artists were examined under two categories, international and Turkish artists. Although similar selection criteria have been taken into consideration for the artists in both groups, there are some differences between the groups in these criteria. For international artists while evaluating their approaches to geometric abstract art and their works, the sorting was done based on their production processes' beginning and end dates, which usually corresponds to the death of the artist. Another criterion is that they are renowned and a known quantity in the international art scene. Although the fact that they are now known worldwide does not mean that they will necessarily be remembered in the following decades or centuries, there are at least numerous textual or visual sources about these artists that can be consulted compared to other lesser-known artists who make geometric abstract art. Similar criteria to international artists were taken into consideration in determining Turkish artists working in geometric abstract art. First of all, the fact that they have recently gained

recognition for their works in a geometric abstract style has been decisive. The important consideration to be here is the recognition in the Turkish art scene, not the international one. This is the difference between the determination of international contemporary artists who create geometric abstract art and the criteria for determining Turkish contemporary artists.

Dan Flavin

Flavin's illuminated sculptures, where he found his own unique style, reflect a meticulous formal and conceptual observation of space and light. These works were created by arranging retail, store-bought fluorescent lamps into different geometric compositions.

Although Flavin's works contain elements of both sculpture and painting, they are not associated with any one of them entirely. Dan Flavin's lights transformed into a third medium that surpassed painting and sculpture and were conceptually influenced by the creations of the previous generation.

Harvey Quaytman

Harvey Quaytman was a painter known for his large-scale and dominantly monochromatic geometric abstractions, including layered and hard-edged compositions inspired by Malevich and Mondrian. Quaytman was very interested in patterns from Islamic art and used a flat-tipped calligraphy pen in his writing as a reflection of his ancient geometric observations and his deep curiosity about the permanent interactions of geometry in space (Ashton, 2014, p. 16). Although his later works, which consisted of geometric compositions in a constructivist style, differed quite a lot from his previous work, Quaytman continued to create a motion effect through symmetrical and asymmetrical interactions.

Al Held

Al Held was an abstract expressionist painter known for his large-scale hard-edge paintings. Held's artistic approach varied throughout his career. While his abstract expressionist style in the 1950s evolved into geometric abstraction in the 1960s, it later came to include a geometric space with three-dimensional depth and vivid, warm colors.

The basic elements of Renaissance art such as volumetrics, light, symmetry and glossy surfaces in general were constantly present in Held's art and became more prominent in the monumental, complex and luminous appearance of his late period works (Armstrong, 1991, p. 5).

Held's post-1980 and arguably recent period works were quite large-scale works featuring architectural elements. Some of these were huge murals, such as in the 1983 painting "Mantegna's Edge".

Frederick Hammersley

Frederick Hammersley was a painter known for his easel paintings in which he explored the interaction between color and geometric shapes. Hammersley divided his work into three main categories: "hunches, geometries and organics".

His "geometries" series of works produced from 1959 to 1964 and later from 1965 to the mid-1990s featured hard-edged geometric forms. Although they consisted of more rigid forms than his hunches, they still featured a certain amount of motion.

In contrast to the abstract expressionism in the 1950s and 1960s in New York, Hammersley and his West Coast contemporaries focused on clear lines, carefully constructed geometries, and aesthetic considerations. Hammersley's paintings ranged from precise geometric designs to shapes in different tones.

Ron Davis

Ronald Davis is a versatile American painter who has produced works in many fields including geometric abstraction, lyrical abstraction, hard edge painting, shaped canvas painting, color field painting and 3D computer graphics.

Davis developed a painting technique using geometric shaped canvases with colored polyester resin and fiberglass.

Davis' works aim to heighten the experience of color, form, and surface for the audience by creating awareness about these factors and make a distinction between real and perceived space in today's plastic world (Wood, 1971, p. 13).

Francois Morellet

François Morellet was a French contemporary painter, sculptor and light artist who played an important role in the development of geometric abstract art. His early work was associated with minimalism and conceptual art.

Like Dan Flavin, who used neon and fluorescent lights in his work, Morellet created geometric forms in his art through neon tubes.

Morellet, who obviously inclined towards the provocative, brought new and radical changes to geometric abstraction through his obvious, simple, rigorous and yet absurd systems. His visit to the Alhambra Palace in Spain, in 1952 had a lasting influence on his art. The juxtapositions, the superimpositions, the interferences, and the fragmentations all lie side by side with the lines, the grids, and the angles, recalling the endless geometric motifs of Islamic art (Gross & Hoban, 2019, p. 48).

Carmen Herrera

Although her art was in an internationally valid geometric style, Carmen Herrera, a Cuban American artist who adopted the abstract and minimalist movements, was trapped between different cultures: a mixed practitioner of Cuban, French, and American origins who was not embraced by any one of those countries' art communities. Herrera stated that she wanted to be seen only as a painter, not as a Latin American painter or a woman painter or an old painter (Miller, 2016, p. 6).

Robert Mangold

Since the beginning of his career in the mid-1960s, Mangold, an American minimalist painter, has produced abstract works with architectural elements, combining classical elements of composition, form, line, and color and applying thick and thin pencil lines onto large color surfaces. His works create the sense that they are inspired by architectural structures or bear the mark of an architect's hand, looking more like objects than visual images.

Mangold's shaped canvas paintings feature vague color changes and clear lines that create a challenging yet thought-provoking effect on the audience.

Robert Mangold has developed a pictorial language based on geometry and asymmetry in shape and form. His sophisticated colors and curvilinear forms evoke Ancient Greek pottery and Renaissance frescoes.

Sean Scully

Sean Scully is an Irish American painter, printmaker, sculptor, and photographer who was a pioneer during the transition from Minimalism to Emotional Abstraction in painting. In his later works, Scully abandoned the reduced vocabulary of Minimalism and brought metaphor and spirituality back into his works.

Scully's trip to Morocco had a great influence on the development of his early work. The brightly colored textiles he saw almost everywhere while traveling around the country ignited his artistic passion. The horizontal stripes and deep earth colors seen in his maturity period works are a result of this interaction.

Sean Scully carefully approaches the choice of materials, while his art advances through the idea of the goodness of humanity. At the center of each of his meticulously produced works lie many touching, emotional fluctuations (Sean Scully Wikipedia, 2023).

Helen Miranda Wilson

Helen Miranda Wilson is an American painter whose best-known works are her paintings where she featured abstract and geometric forms from the previous period.

Wilson's works evolved into abstraction from a representative style throughout her artistic career. They seem to have been aesthetically influenced by the works of Paul Klee, Ellsworth Kelly and various unnamed carpet and bedding manufacturers. Wilson's early work consisted of landscapes, still-lives, and interiors.. After 2000, Wilson adopted a geometric abstract style and was influenced by folk arts like textile and carpet weaving. One of her best-known works is the “Stripes” series, each piece of which consists of tape forms that she paints in a different unique color (Helen Miranda Wilson Artsy, 2021).

Mary Boochever

At the heart of Mary Boochever's work is a desire to create a world beyond the physical and historical existence of humankind by causing the audience to think. Those who view her work become aware of infinite possibilities and the notion of eternity. Boochever's master articulations that enhance spatial experience are mainly achieved through barely noticeable and almost unidentifiable color transitions.

Through visually expanding and contracting color spaces, the traces of thinly painted layers give form to spaces that exist between clarity and ambiguity, and dissolution, completeness, and possibilities (Stoops, Vanderhyden, Shapiro, & Gilbert-Rolfe, 2013, p. 7).

Focusing on color theory during her art education in Germany, Boochever's artistic style in later periods reflects her awareness of the traditions of subversion in abstract painting, including the variations in geometric abstraction developed by artists such as Mondrian, Albers, Marchin, Ryman and Gilbert-Rolfe.

Peter Halley

Peter Halley is an American painter and an important representative of the Neo-Conceptualist movement. Particularly known for his works involving geometric forms with neon colors, Halley has often used barred windows, prison cells, communication lines and grids that evoke streets in his works.

Halley transformed his geometric abstractionist approach into architectural symbols he called "Prisons" and "Cells", wherein he combines Malevich and Albers's square with straight lines. In other respects, Halley's pictorial language was not only influenced by the structure of the city, but also by the networks that spread across all areas of our world under media control.

In many ways, Halley's work can be viewed as a reaction to the art of the preceding period and to the cultural climate of the 1970s and 1980s.

Philip Taaffe

Philip Taaffe is an American painter who blended his oeuvre with visual elements from different cultures. A fan of Matisse's cut-outs, and synthetic cubism, Taaffe produces abstractions that require extensive processes.

Taaffe is dedicated to doing something outside of what has already been done. In his works, he transforms the visual reality of the image by using a wide variety of mechanical methods of reproduction and visual transfer (Yau, 2018, p. 7)

Philip Taaffe's works consist of technically and historically complex layers. Combining icons, design, motifs from art history and his personal experiences, he produces works with intense, weaving patterns. Each painting consists of a different technique and medium, including practices of oil painting, acrylics, linoleum, engraving, scrubbing, photo-based screen printing and collages.

Byron Kim

Byron Kim is an American artist who produces works in the minimalist style. He is mostly known for his work on ethnic identity. Kim's works in the early 1990s were monochrome paintings which reflected the skin hues of his friends and family members. These paintings, named "Synecdoche", consisted of 400 small monochrome paintings and are Kim's best-known works.

Kim concluded that abstraction was the consequence of an artistic past in which context became increasingly unimportant. Thus, the process starting with the Renaissance and leading to the conquest of nature and to the presentation of abstract art as sublime and absolute was instrumental in Byron Kim's adoption of an approach that he called the abstract sublime. Kim's abstract sublime works in essence seem to stand somewhere between the representative and the abstract as well as the conceptual and the purely pictorial.

Although Byron Kim can be described as a painter who produces abstract works in general and geometric abstract works in particular, his works are not entirely formalistic and devoid of content (Faruqee, Tsai, & Consey, 2004, p. 20).

Contemporary Turkish Artists Creating Geometric Abstract Art

Utku Dervent

Utku Dervent has been constructing his paintings through the relationships between form-space and light-color for many years and questions the possibilities of basic concepts such as integrity-harmony-balance in his geometric abstract works. In the symmetrical layout approach featured in his works, Dervent, the influences of whose past studies in the field of interior design and decoration and his architectural education stand out, uses his architectural training to reconstruct abstract painting from within the framework of geometric possibilities within a structure extending from plurality to uniqueness (Utku Dervent Tiyatrolar, 2021).

Utku Dervent's works come from a tradition of painting as a geometry of emptiness and fullness or as a rational arrangement. Nevertheless, going beyond solid horizontal and vertical line overlaps with pure color spaces, these paintings manifest themselves in the form of an expressionist articulation of transparent and textural areas.

İsmail Ateş

In İsmail Ateş's works, geometric elements acquire an organic feature through the soft gradation of colors in the context of space. Color has a geometric meaning and functions as a transcendental element at a high level. So much so that it is as if these paintings turn Kandinsky's paintings into spiritual symbols. In his paintings, Ateş attempts to reflect life through light and color transitions based on geometric forms and delicate balances. His geometric patterns and abstract images go beyond time and space.

The aesthetic and geometric point of view that stands out in his works can be experienced through the method of induction. Ateş completely abandoned the figurative approach seen in his early works. By using linearity together with chiaroscuro, a surface style with a depth style, and light with darkness, Ateş brings to life the dialectical approach at the origin of the universe (Özsu, 2019, p. 7).

The relationship of form and the harmony of color in Ateş's compositions exhibit the characteristics of Eastern art. In this context, geometric and architectural elements have an important place in his paintings.

Ahmet Özel

In Ahmet Özel's art, we see the plastic elements as predominant, and the mythological side of the universe design, which forms the infrastructure and plane of his paintings. While the meaning of the plastic elements in Özel's paintings is reinforced, it constitutes an understanding aimed at abstracting his creative approach. The layers formed by the positioning of different colored forms on top of each other and side by side, and sometimes vertically and diagonally, determine the composition of the picture.

Spaces in Özel's works are an illusion and a product of his abstract approach. The images in his paintings are elements that do not have logical content, and sometimes they depict the sky, sometimes the elements of nature, or nothingness.

Özel deals with the concept of 'healing', which he has attached to his own painting work in recent years, through amorphous bodies he calls shamans, healers and angels. By transforming the "Inner Sun", which represents real life energy, into a plastic form, he identifies himself with this symbolic being. In particular, he focuses on the discourse of Caucasian mythology that grasps him at the depths of his being and aims to reach the elixir of life of the shamans he created, and the miraculous atmosphere created by him in his paintings (Ahmet Özel Dadakitap, 2019).

Mesut Karakış

In the process of producing his works, with regard to the movements or artists that influence or inspire him, Mesut Karakış states that the painting itself is more important than who made it. Whether the painting is abstract or figurative, he is attracted to its forms, colors and technique rather than its subject and narrative. In painting, composition, forms, colors and the construction technique are very important elements for him. As a result, all the paintings that interest him in this sense inspire Karakış. Anselm Kiefer, Jackson Pollock, Mark Rothko are the names that influenced him the most with his paintings.

Having a formalist approach, Karakış states that his paintings do not have any narrative or story. He is an artist who seeks to make original and psycho-visually powerful paintings.

Karakış defines his painting technique as unique and outside traditions. Accordingly, Mesut Karakış divides his painting process into two stages:

1. Saturating the surface

2. Opening the surface

In Mesut Karakış's recent works, paintings in which the pictorial style predominates and the psycho-visual effect focuses on color have come to the forefront. While organic shapes and geometric grids also featured in his early compositions, he states that he brought color to his current works.

Seçil Erel

The idea of an invisible world outside the world we live in is a phenomenon that has influenced and interested Seçil Erel. Despite having a very classical and figuratively based education, Erel is an artist who focuses on the point where abstract painting meets conceptuality.

Erel, who was influenced by abstract expressionist and abstract constructivist artists in her early works, was also inspired by masters such as Michelangelo and Monet.

There is always reason behind all the works of Seçil Erel, who tries to convey her experiences and the state of being in her life in her paintings through a number of mathematical structures. For example, in her paintings from 2008 and 2009, everything was based on a system, and while this was a more defined phenomenon for her at the time, it now has a broader meaning.

The environment in which Erel grew up, the coexistence created by being exposed to Eastern and Western cultures at the same time, and a sense of confusion brought about by the education she received on very different movements in academia came together with the changes in his life and were reflected in her paintings.

Seçil Erel, as a person, an artist, a woman and a mother, reflected her own self in her recent period works and has started to carry her works that were previously in geometric abstract style to a different place by freeing her thoughts.

Nejat Satı

As a contemporary artist, Satı states that he is interested in human cell structures, wounds and erosions of biology. Nejat Satı, who produced works in which he dealt with color in a minimal way in his series titled "Structure" in previous periods, turned to the abstraction of cell organism images and bodily wounds in his recent works.

To Satı, who does not associate his works with a particular movement or style, his works have a much more personal effect. Social events and the developments around him trigger Nejat Satı's work and are reflect on his work. Stating that the aesthetic aspects of his works are especially strong, Satı says that he often experiences ebbs and flows regarding making these aspects repulsive. In his own words, he loves the Joker, not Batman.

Satı states that while producing his works, he leaves the act of creating to its own flow without following a certain process and acts on his feelings and emotions at that moment. On the other hand, since he is a contemporary artist, he adds that he prefers plastic and contemporary elements as materials and mediums. In this context, Nejat Satı belongs to the generation of contemporary artists who transform the traditional art of painting by using technological innovations.

Bahar Artan Oskay

The works Oskay created between 2009 and 2013 establish a correlation between bringing an explanatory vision to the works of art and deforming them, applied at any point in the historical process.

Bahar Artan Oskay interpreted the works of the great masters of modern art while examining popular culture in her early works. From Mondrian to Matisse, from Picasso to Gauguin, she interpreted and appropriated the works of artists in a wide range of subjects and brought popular art into the discourse from an original point of view. In her later periods, the interpretation of popular works of art produced a series of works on the issue of how popular images create awareness in contemporary life and how they turn into works of art through in-person interaction

Oskay is now in the process of interpreting her own art and, under the influence of the inevitability of artistic change, cutting, destroying, and recomposing her old paintings in ways whose outcomes are unforeseeable. In the process of destruction, the coincidental close-up images Oskay procures reach abstract art through figurative abstraction. Consequently, in Bahar Artan Oskay's paintings, the abstract itself becomes part of the abstraction.

CONCLUSION

Abstract art has been a type of art that has continued to entrance abstract art audiences since its inception more than a century ago and has maintained its visibility in exhibitions, galleries, art fairs, and biennials. The abstract art movement has two main branches: geometric and organic/lyric, both of which continue to develop.

At the beginning of the 20th century, many contemporary artists continued to produce works in the field of geometric abstract art, which was pioneered by movements such as Cubism and Futurism. Today, the movement produces works created by combining homogeneous colors in a style supported with geometric forms. The differences of today's artists is that they move towards a more minimalist style and use different materials and technologies to do so.

As with gestural and expressionist painting, geometric abstract art remains an important element of the visual language. Geometric abstract art, which represents the representational and non-objective and the highly psychological and spiritual, dominated the 20th century. In the field of contemporary art, the search for purity in geometry and colors reflects its historical heritage. The fascination with geometric art is manifested not only in the visual arts, but also in the fields of graphic design, and crafts.

Looking at all these, it is obvious that abstract art and geometric abstract art as a major branch of it will continue to have an impact in the future years.

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