

## PERFECT DAY FOR BANANA FISH

Stella painted *Perfect Day for Banana Fish*, 1958, one of the earliest works in the exhibition, while he was a senior at Princeton University. Its prominent placement in this exhibition, in relative isolation on its own wall, heralds the goals and direction Stella pursued throughout his career.

Unlike the previous generation of American abstract expressionists (Robert Motherwell, Barnett Newman, Jackson Pollock, and Mark Rothko, among others), who worked their way from figurative art toward abstraction, Stella committed himself to abstraction from the start. His predecessors were trailblazers and therefore Stella felt no compulsion to repeat their discoveries.

His pivotal paintings of 1958 reveal the influence of works he saw first-hand or in art magazines, including Jasper Johns's *Flag*, 1954 (the design of an American flag painted on the canvas so that the image and the painting melded together), which was shown at Leo Castelli Gallery in January 1958, and Henri Matisse's (1869-1965) masterpiece *The Red Studio*, 1911, in the collection of the Museum of Modern Art.

Matisse's *The Red Studio* is a mini-retrospective of some of his best-known early works, in that they are scattered throughout the painting in no particular chronological or stylistic order, which calls attention to the fact that artists do not necessarily develop their work in a logical or systematic way. By covering the white canvas with red paint, Matisse established a uniform, flat, abstract surface. He defined a few of the furnishings and objects in his studio, with thin lines that reveal the painting's white canvas support. Other objects, including the depictions of some of his earlier works, are painted at oblique angles and appear to recede into the painting's flat ground.

Like *The Red Studio*, *Perfect Day for Banana Fish* includes large expanses of flat surface color that subdivide into smaller abstract units. Stripes, inspired by Johns's flag paintings as well as abstract paintings by Motherwell, Newman, and Richard Diebenkorn (1922-1993), among others, appear at the top of Stella's painting, while a lopsided blue rectangle at bottom center commands the viewer's attention. The slight angle on the rectangle's right side creates an illusion of spatial recession in the painting's flat surface that recalls similar effects in Matisse's painting. And, as in *The Red Studio*, Stella left a narrow breathing space around the edges of some of the shapes (here abstract rather than representational) that reveals underlayers of paint. The rectangle, the stripes, the broad color field, and the narrow gap between shapes in *Perfect Day for Banana Fish* embody the DNA of most of Stella's future work. Viewers may see these elements reappear in various guises in subsequent paintings in this exhibition.

The title of Stella's painting is from J.D. Salinger's "A Perfect Day for Bananafish," an enigmatic short story first published in *The New Yorker* in 1948, featuring a young, traumatized World War II veteran. Before committing suicide with a pistol, the veteran recounts a fable about the "tragic life" of the greedy "bananafish" gorging themselves to death on bananas. The titles of Stella's works frequently allude to those of books and stories but the paintings are rarely literal representations of these tales. In this instance, the title might simply be a reference to the dominant banana-yellow field. This title, however, is linked to some of his other painting titles from 1958 that wryly comment on the emotional content the abstract expressionists proclaimed as the subject of their paintings. Although artists of Stella's generation are conventionally regarded as distancing themselves from such ambitions, Stella, in fact, is sensitive to the emotional impact an artwork can have on a viewer and, at this early stage of his career, was likely exploring whether or not he could achieve such a profound effect with his work.

## FREEDOM OF EXPRESSION

This exhibition is part of the museum's Regeneration Series, recent and forthcoming exhibitions designed to explore the wide-ranging impact of World War II on artists in Europe and the United States. Stella's works are grounded in the postwar philosophical shift that positioned artists as masters of their existence, an attitude that was popularized through the zeitgeist of existential philosophy, phenomenology, and the study of perception.

Stella belongs to the first wave of American artists to emerge after World War II, along with Dan Flavin (1933-1996), Jasper Johns (b. 1930), Donald Judd (1928-1994), Roy Lichtenstein (1923-1997) Robert Rauschenberg (1925-2008), and Andy Warhol (1928-1987). During this postwar period, the Soviet Bloc permitted only Social Realism in the arts, and in the United States Senator Joseph McCarthy's crusade to root out Communism targeted avant-garde artists, writers, performers, and intellectuals.

*Freedom of Expression* was the title of the exhibition of Princeton University's art students in the spring of 1958 that included Stella's work. The review of this show by Thomas A. Carnicelli in the *Daily Princetonian* noted, "It is to the credit of [Princeton University] art instructor Stephen Greene that he has allowed his students full freedom of expression while inducing in them a real concern for artistic control."

To this day, Stella contends that art offers at least the illusion of ultimate freedom, but that to a certain extent, his own point of entry into the continuum of history determined his motivations and goals as well as his outlook in life. Stella's contemplation of the tug-of-war between determinism and free will is reflected in the references he makes in a number of his titles for works to the eighteenth-century philosopher Denis Diderot, author of *Jacques the Fatalist and His Master*, a tale that challenges the conventions of narration and pits the preordained against the exercise of free will *Paradoxe sur le comediene*, 1974 (gallery 5). Diderot found it difficult to reconcile his overall conviction that the rules of the universe determined the progress of humankind with his moral belief that incentives could bring about positive change in people for the social good. The principles of Modernism—namely, the prevailing philosophical position that humankind was constantly advancing—potentially limited Stella's options. In the U.S., abstract expressionism was recognized as an advance over representational painting and the international art style after World War II was overwhelmingly abstract. Stella knew he was fated to work within this narrative, and that the rules of modern art effectively preordained the end result—pure painting on a flat canvas. Stella, nevertheless, has constantly exercised his free will within these parameters to experiment, produce paradoxes, and bring about change in his work.

## BLACK PAINTINGS

Three of Stella's expressionistic Black paintings from early 1958 are included in this exhibition (*galleries 1, 2, 4*), but Stella chose not to include any examples of the more carefully delineated Black paintings he completed later that year that brought him almost instant success at the age of twenty-three. The celebration of these later paintings has overshadowed most of the artist's equally brilliant achievements since then. Stella's identification of his Black compositions as the ultimate resolution in an illustration he drew for a 1960 lecture at Pratt University, New York (in collection Addison Gallery of American Art, Phillips Academy, Andover, Mass.) fanned the widely held conviction in art circles that he had solved all of his pictorial problems with these paintings. The monochrome black palette, the unmodulated paint stroke, and the lean diagram all led to labeling Stella a minimalist whose goal was formal purity. This lingering characterization makes it difficult to reconcile his early paintings with the exuberance of his later maximalist works. Eliminating the later, more formal Black paintings from this exhibition directs viewers to focus on the multitude of potential solutions to the many pictorial problems Stella confronted at the onset of his career, and on the new challenges he embraced and resolved along the way.

Stella considers *Delta*, 1958 (*gallery 4*), his first Black painting. This canvas started out looking like *Grape Island*, 1958 (*gallery 2*) with its alternating bands of color (black and red in *Delta*'s case). Aiming to minimize the spatial fluctuation in *Delta*, Stella overpainted the red stripes with black until they were totally redacted. The resulting canvas, with its drips and its *pentimenti* of red and other colors peeking through layers of black, is grounded in the abstract expressionist tradition of action painting.

With the Black paintings, he solved the problem of what to paint—stripes or bands; and how to paint them—by switching his technique as well as his perception of pictorial space. After the breakthrough with *Delta*, he began composing diagrams for new paintings in which the white lines (the blank paper) between the black stripes were sharper and more pronounced. Because Stella worked as a housepainter to support himself, he applied some housepainters' techniques to his paintings and achieved the more defined edge of the bands in his sketches. Rather than painting free-hand, he employed pencil and a yard-stick to transfer the diagram to the canvas and then applied black house paint to the bands methodically, as he did when painting houses. Working out the pattern in advance freed him to concentrate solely on applying the paint to canvas rather than making constant compositional decisions while painting.

While the dominant black bands attract the viewer's attention, it is the pencil-thin white gaps between these bands that breathe life into these works. With his Black paintings, he imagined that he was zipping space together with white lines, much like abstract expressionist Barnett Newman, whose paintings with single vertical lines connect the broad expanses of their color fields. Stella began considering each band as an individual painted gesture connected with the others by the white lines. He restricted the palette, value and paint thickness in these paintings to a minimum. The symmetry in Stella's Black paintings is based, for the most part, on mirror-imaging. As both sides of the painting are identical, viewers can comprehend the whole schematic right away, while the repetitive, regimented bands, create a rhythmic pattern that marches the eye outward as well as back into the painting.

## MITERED MAZE PAINTINGS

Jasper Johns's radical paintings of the American flag (1954-55) and targets (*Target with Plaster Casts* and *Target with Four Faces*, both 1955) made a major impression on Stella as a student at Princeton University. Although Stella explores the stripe motif in early paintings such as *Grape Island*, 1958, the large rectangles that occupy this painting's center and those of other early works call to mind the bullseye in Johns's target paintings. These rectangles create a focal point that draws the viewer's attention to the center of the composition. Paintings like *Grape Island* show Stella grappling with unifying the stripes and a focal point rectangle into a single image. Although the symmetry in this painting connects the rectangle and stripes on a single plane, they still read as two separate components.

Over the years, Stella devised several solutions to this formal problem, among which are his Mitered Maze paintings of the 1960s, such as *Cinema de Pepsi Sketch 2 (Black)*, 1966, and *Cinema de Pepsi Sketch 3 (Red)*, 1966. These paintings create the optical sensation of movement and speed while simultaneously directing the viewer to look deep into the center point of the maze. As the width of the stripes remains uniform throughout rather than narrowing toward the center, viewers end up battling their own perception: No sooner does the space recede than it begins popping out like an aerial view of a pyramid. To complicate things further, the regular schematic pattern coupled with Stella's precise modulation of color and tonal values has the effect of collapsing space altogether into a single flat plane.

While the initial impression of the Mitered Maze paintings is of a succession of decreasingly smaller squares, the only complete square is formed by the edges of the canvas itself. If the viewer focuses on the painting's diagonal lines caused by the stripes when they turn a corner, the square canvas appears to dissect into four triangles.

The Mitered Maze paintings and the related Concentric Square paintings (*galleries 2, 7, 8*) are early indications of Stella's maximalist impulse. In his initial stripe paintings, he took a reductive approach: monochrome palette, minimal form and gesture, and the elimination of extraneous parts of the image. By contrast, Stella crammed the Concentric Squares and Mitered Mazes with a maximum number of stripes and a broad spectrum of fluorescent colors. In the simple geometry of these paintings, Stella succeeds in creating a single, unified, flat image composed of multiple dynamic elements.

## TRIANGLES

Stella's early paintings are based on elementary geometric shapes—the square, the rectangle and the triangle. The triangle appears as early as 1958 in *Luncheon on the Grass* (location unknown), *Yugatan* (gallery 2), and the first Black painting, *Delta* (gallery 4). The title, *Delta*, refers to the Greek alphabet's fourth letter—the triangular "D"—and also to the shape of the landform created from sediment that collects at the mouth of a river (e.g., Mississippi Delta).

Stella continued to use the triangle to add dynamism to his work: the points of its corners draw the eye in specific directions, while the repetitive V-shaped bands produce a rippling effect that accelerates the viewing process as the eye confronts them. Triangles also pose pictorial problems, as their diagonals naturally lead to a vanishing point, a construct of linear perspective that modern artists aimed to eliminate from their paintings. Moreover, in a canvas with a square or rectangular format, the triangle leaves swathes of leftover space. Stella took on the challenge of resolving these problems: to avoid false perspective, he anchored the diagonal lines by extending them to the painting's edge, and by creating shaped canvases, he eliminated leftover space.

Triangles intercede in Stella's canvases in numerous ways, as seen in the Running V and Notched V series of shaped canvases (1964-65) and in the painting *Valparaiso Flesh and Green*, 1963 (gallery 1), a parallelogram-shaped canvas formed of two distinctly colored triangles. In his Black paintings (1958-1959) and Mitered Maze and Concentric Square paintings (1962-63), both triangles and diamonds (two conjoined triangles) subtly materialize when viewers shift their focus away from the squares to the diagonals. Triangular solids penetrate the squares of his Irregular Polygons (1965-67) (galleries 1, 6), and in his dimensional Cones and Pillars series of 1984-87 (gallery 9), the triangles metamorphose into full-blown cones.

## BENDING THE RULES

The rules of modernism provided parameters within which Stella worked throughout his career. These tenets were established in the 1950s by the influential American critic Clement Greenberg, who identified "formal purity" as the aim of modern art. Art historian William Seitz, an advocate of Greenberg's ideas and one of Stella's instructors at Princeton, promoted specific rules for creating modern paintings: edges must be clean, shapes rectangular, and color primary and uniform in tone. Seitz cautioned artists that they could break these rules only if they found ways of counteracting the disorganization and contradiction that may be the consequences of their deciding to take these risks.

Stella's empirical approach to pictorial problems helps explain why his early reductive paintings were not a dead end. He challenged the modernist belief that a painting had to be rectilinear by making dynamically shaped paintings, observing that throughout most of art history paintings were created as wall decoration for churches, palaces, and domestic fresco paintings, whose irregular contours were determined by the architecture of a specific building. Stella created his visually powerful Copper paintings (1961) (*gallery 2*), which followed those of his metallic Aluminum paintings of 1960-61, with this in mind: rather than just hang on a wall, each painting interacted with and was thus integrated with the wall to become part of it.

The titles of the Copper paintings refer to towns near the depleted copper and silver mines in Colorado's San Juan Mountains. Stella contoured the wooden stretchers of these paintings to echo the pattern of their stripes. Although the shapes of some of the Copper paintings look like capital letters—H, U, L, T, Z—and a cross, they are in fact formed by Stella's postulating how much painted surface he could eliminate from the conventional rectangle of a work and still maintain its identity as a visually compelling painting. The metallic copper paint and his process of elimination metaphorically links the Copper series to the activity of extracting minerals from a mine to their ultimate extinction. While the Aluminum series looked cold and industrial, the Copper paintings' warm glow suggests the sumptuous flickering light of gold leaf in the Medieval art he studied at Princeton.

The shaped canvases tested Stella's faith in himself as he challenged the rules of modern art. His contemporaries argued that these works encroached upon the characteristics of sculptural wall relief and proved that Stella had reached the limits of painting as then defined. As they saw it, there was no way Stella could develop it further. Stella asserted, on the other hand, that his shaped canvases were paintings and not wall reliefs, noting that one of the reasons he used deep stretchers was to make "the picture more like a painting and less like an object by stressing the surface."

If "pure painting" was not Stella's ultimate goal, what drives his constant experimentation and change? In the early 1980s, he declared he believed in painting that is illustratively full, substantial, real, and visually compelling. Recently, he revealed that seeing Rogier van der Weyden's *Crucifixion Diptych* (c. 1460, Philadelphia Museum of Art), when he was a student at Princeton University, sparked one of his initial artistic aspirations to make paintings that conveyed the extraordinary visual impact of this early Netherlandish masterpiece. We can see the direct influence of this painting in Stella's many diptych-like paintings that are divided into two equal parts, his preference for flattened pictorial space and broad areas of brilliant color, and frequent use of the dynamic V-shape that echoes the upward thrust of Christ's arms. This revelation charts a new way of understanding Stella's art: realizing the visual power of painting was a more important goal for him than following the rules of Modernism, and this desire consistently propelled his art and the dynamics of its development.

## IRREGULAR POLYGONS

Stella likes putting forms together. In his early, minimal Black paintings, he imagined connecting one stripe to the next and binding the symmetrical halves of paintings together, like two panels of a diptych. His titling of one of his Black paintings, *The Marriage of Reason and Squalor*, 1958 (Museum of Modern Art), composed of two mirror image patterns, reflects this tendency to unite parts of his works to create a whole. The joining of differently shaped parts also created new forms. The two connected striped triangles of *Valparaiso Flesh and Green*, 1963 (*gallery 1*), for example, form a parallelogram while its two colors and opposing stripes force viewers to see either two triangles or one parallelogram.

In 1965 Stella arrived at a new formulation for combining shapes in his then most radical paintings, the Irregular Polygons, by imagining inserting one or more geometric form into another. This ambitious series consists of four variations of eleven distinct compositions. The process of creating new polygonal-shaped canvases is most clearly observed in the Moultonboro compositions, such as *Moultonboro II*, 1965 (*gallery 1*), where a triangle appears to be invading a square.

More complex compositions include *Sunapee I* and *Sunapee II*, 1966 (*gallery 3*), composed of multiple conjoined distorted rectangles. Whereas symmetry unifies his earlier stripe paintings, the Irregular Polygons are characterized by their asymmetry, a quality they share with the early-twentieth-century Russian Constructivist paintings of Kazimir Malevich (1878-1935), whose geometric abstractions were among Stella's inspirations for this series. Malevich was able to animate his geometric forms in space, much as the zig-zags of the Sunapee paintings look like they are taking wing. Rather than fill these paintings with stripes, Stella seems to revisit the optical delight of the expansive color fields of such pre-Black paintings as *Perfect Day for Banana Fish* (*entrance to gallery 1*), 1958, that was influenced by Matisse's *The Red Studio*. Stella deliberately left a white breathing space surrounding the color zones, which he also associated with the Matisse painting (and which has been a consistent element in his work since 1958). This gap was key to keeping the Irregular Polygons from looking like mechanical, hard-edge paintings. In the Irregular Polygons, each field is partially framed by an eight-inch-wide band in a complementary or contrasting color. With this series, Stella forged an arbitrary profile that was similar to that of European mural paintings, in which architectural features, such as windows, doors, and moldings, intrude into the imagery. Looking back on these paintings today, Stella feels they reveal the inevitability of his move toward constructing paintings.

These paintings also mark a shift in the relationship between the artist, his work, and the viewer. Where previously Stella used symmetry, line, and focal points to dictate how the viewer should look at his paintings so that the image was revealed in an instant, the multidirectional Irregular Polygons, for the first time, liberate viewers to choose their own paths.

## VITRUVIAN MAN

*Agua Caliente*, 1970 (*gallery 4*) and *Deauville*, 1970 (*gallery 1*), were titled for well-known thoroughbred racetracks; their elongated, oblong shapes suggest the circuit of a racing path. In these two paintings, the thin line that was subordinate to the stripes in earlier paintings, is the center of attention. The enormous scale of *Agua Caliente* and *Deauville* marked an advance in Stella's experimentation with perception and with the integration of his paintings into architecture. Making these panoramic works also challenged him physically and artistically.

Most of Stella's early paintings correspond to the human figure. One can imagine, for instance, superimposing Leonardo da Vinci's diagram, *Vitruvian Man*, c. 1490, over Stella's Concentric Square or Mitered Maze paintings of the 1960s (*galleries 2, 7, 8*) so that the figure is at the center with arms and legs jutting outward along the diagonals that radiate from the corners (Stella struck a similar pose in a 1960s photograph). Even when Stella escalates his paintings to architectural scale, they correspond to the human body as the principal source, which is also how classical architecture is ordered. The symmetry and proportions provide a sense of unity and wholeness.

The Racetrack paintings relate to the human body in a different way, in that Stella determined their width by the limits of peripheral vision. As with all of his paintings, Stella expects viewers to glance at these paintings from a single spot, where their central vision is sharpest. These paintings's wide expanse, however, requires the use of peripheral vision in order to glimpse their outer extremities where the focus begins to blur. Nevertheless, viewers grasp that the painting appears basically the same no matter where they position themselves to view it.

Stella created these canvases by moving around the painting with brush in hand, applying the paint over and over on its concentric track until the image was complete. At a time when his contemporaries such as Donald Judd and Dan Flavin created machine-made work, Stella continued to paint his enormous canvases by hand with the help of a friend. He began this series in 1970, coinciding with the presentation of his first retrospective at the Museum of Modern Art, New York. Stella was the youngest artist at that time to receive a MoMA retrospective. This honor came with risks, as the exhibition's curator William Rubin noted in his conclusion to the catalogue: "Stella is now thirty-three years old, an age at which many major painters have not yet found their styles. His endurance faces many challenges, not the least of which is the quality of his own past."

Undaunted, Stella tackled new problems, as demonstrated by the Racetrack paintings. To a certain extent, they are a return to the simple geometric forms that preceded the interlacing curves of the Protractor series and Saskatchewan paintings of the late 1960s, which marked the finale of the MoMA installation (*gallery 7*). Introducing curves into his geometric compositions changed everything, as they created the illusion of pictorial space, which Stella struggled to limit. With the Racetrack paintings, he discovered that he could push the curves to the edges of the canvas by shaping it, thereby minimizing the sensation of depth. The curves also redirect the viewer's gaze back to the center of the painting.

The Racetrack paintings—*Agua Caliente* and *Deauville*—were dispersed to various collections before they could be exhibited together; this is the first exhibition that reunites two of them. In 1972, Stella also produced a series of prints based on these paintings. Eventually, he learned to stop worrying about curves creating illusionistic space and increasingly embraced three-dimensionality in his work.

## WHAT YOU SEE

Throughout his career Stella has been fascinated by the study of perception. In his estimation, painting based on the way the eye really sees three-dimensionality through binocular vision produces a more dynamic composition that is preferable to compositions based on the mechanics of Renaissance one-point perspective. His famous statement, "What you see is what you see," made in 1964, could be rephrased as "What you see is *how* you comprehend what you see."

Learning how perception functions was a key objective of post-World War II art education. In order for students to understand perception, they first had to train their eye and mind to reject the conventions of perspective, i.e., objects decrease in size as they recede in distance, and to perceive an image as a unified whole, rather than breaking it up into parts. Flash Labs, exercises in which students seated in dark rooms would draw from memory images flashed on a screen for a brief instant, were set up at Princeton University, where Stella was a student, and at Ohio State University, where Pop artist Roy Lichtenstein studied. (Although Stella did not participate in Princeton's Flash Lab, he was aware of its objectives.) This teaching method had the higher social purpose of instilling in the young, postwar generation the responsibility of rebuilding America. Leading educators, recognizing the power of visual language as the most effective means of disseminating knowledge and as a vehicle of communication, tasked students to use their art as a means to teach the public to see and understand the fallacy of their own vision.

Stella's aim to produce paintings that could be absorbed in a single glance is similar to the goal of the Flash Lab experiments. His initial solution was to create symmetrical compositions of a single, simple geometric form. Later in his career, he came to the realization that the mind could actually take in more visual complexity at once than he had originally assumed, and he began creating complicated compositions of multiple shapes. At first glance, it seems impossible to reconcile the chaotic drift in his paintings of the 1990s with the rational geometry of his canvases of the 1960s. Upon greater scrutiny, one discovers that Stella devised two contrasting systems of organization to stabilize each type of painting; he bridled the fluctuating spatial occurrences in works such as the Mitered Mazes and Concentric Squares of the 1960s and the Diderot series, 1974 (*galleries 2, 5, 7, 8, 9*) by containing them within the simple geometry of the square, whereas he unified the complex arrangements in the abstractions of the 1990s (*gallery 7 and curve*) into a single image by keeping the perceptual space of each shape at a consistent, measurable distance from the viewer. The organization boils down to: complicated space bound within a simple geometric form, or a maximum of complicated shapes counterbalanced by simple pictorial space in which all elements maintain a constant position. Both methods produced works that can be perceived with a single glance.

## PROTRACTOR PAINTINGS

To produce the defined curves in his Protractor series (1967-1971), Stella used the shape of a (half-disc) protractor as a template. This series, titled after Islamic names of circular-planned ancient cities, consists of more than ninety paintings. The series is subdivided into twenty-seven distinct compositional groupings that mix the basic motifs of circles, squares, and fans in a variety of configurations. *Hiraqla Variation II*, 1968 (*gallery 7*), with its elaborate arrangement of rainbows framed within squares or wedges, is among his most complex. Although the concentric bands of the semicircles do not line up, viewers automatically see the two opposing arcs as a complete circle. Stella, however, intended viewers to read each segment separately, but discovered that he could not override their perception.

The Basra Gate paintings, each shaped like a simple, single-protractor unit, were the last format in the Protractor series. In *Basra Gate I*, 1968 (*gallery 3*), Stella continues with the broad color planes he used in the Irregular Polygons, such as *Moultonboro II*, 1965 (*gallery 1*), and *Sunapee II*, 1966 (*gallery 3*). The curved perimeter of *Basra Gate I* anticipates the oblong Racetrack paintings *Deauville*, 1970 (*gallery 1*), and *Agua Caliente*, 1970 (*gallery 4*) in its semi-circular perimeter. As in his early shaped canvases, the painting and support are unified as a single image. The shape of *Basra Gate I*, suggests architectural forms: an arch, a lunette, or a vaulted ceiling. The title additionally lends itself to the architectural reading in its reference to the ancient gates of the ruined palace of Baghdad. In this sense, *Basra Gate I* anticipates the arched shape of *Hooloomooloo 5*, 2017 (*located in atrium*). The latter painting, however, was part of a mural commission for Japan's Kawamura Memorial DIC Museum of Art and therefore its shape was dictated by its placement in a lunette in the building.

## SASKATCHEWAN PAINTINGS

The Saskatchewan paintings, begun the summer of 1967, are tangentially part of the Protractor series (1967-1971), as their curved segments follow the contour of the protractor template. Stella unified figural-ground pictorial space in the Saskatchewan series by painting the areas surrounding and within the quatrefoils as boldly as the pattern itself. The pinched tips of the quatrefoils lock the image to the canvas's edge, which also serves to keep the pictorial space as flat as the painting's surface.

Stella, however, complicated the pictorial space in paintings such as *Saskatoon I*, 1968 (*gallery 7*), by representing the interlacing ribbons as though they were transparent, an effect created by the alteration that occurs when viewing the color of one segment as it intersects with another. Stella's representation of transparency and interpenetrating planes in the Saskatchewan paintings was influenced by his interest in the study of perception. (These phenomena were demonstrated in popular art textbooks of the 1950s and 1960s.) When viewing overlapping forms as in *Saskatoon I*, the viewer assumes that the shapes are transparent and therefore exist spatially on two different planes. The viewer mentally shifts the position of the forms so that they constantly alternate between being on or underneath the surface.

The edges of the square and double-square formats in this series create a tension with the bold quatrefoil pattern at the composition's center. The single squares rigidly contain the quatrefoil within the painting's center, whereas, the double-square format of *Saskatoon I*, introduces an esprit de corps that art historian William Rubin likened to Henri Matisse's *Dance, (I)*, 1909 (Museum of Modern Art, New York). In *Saskatoon I*, the conjoined quatrefoils turn somersaults as they metamorphose into lighthearted circles that look like they could roll out beyond the painting's edge. The lyrical, dynamic ribbons in the Saskatchewan paintings played an increasingly important role in Stella's work.

## POLISH VILLAGE PAINTINGS

Stella's interests are wide ranging. One need only list the books, the philosophy, and the historical and scientific references he incorporates into his titles to realize the scope of his intellect. While Stella discourages connecting the titles of his work with specific meaning, it is clear that they point to broader issues that consume him. Some titles of paintings and series provide clues to his evolving conception of systems, organization, and progress as they apply to the rules of Modernism. For example, his first constructed paintings, the Polish Village series (1970-73), were named after seventeenth-, eighteenth-, and nineteenth-century Polish synagogues destroyed by the German army during World War II. The photographs of these lost structures were published in a 1959 book by Maria and Kazimierz Piechotka that architect Richard Meier gave to Stella as a gift while he was recovering from knee surgery. Stella grasped the underlying implications of the collected photographs, which were in essence *memento mori*. The order of the destruction of these synagogues followed the German army's march to Moscow. Stella's reflection on these photographs as titles for his Polish Village painted reliefs suggests his uneasiness with the basic premise of Modernism. The Nazis's systematic elimination of the synagogues, the Jews, and Jewish culture represented the potential dark side of the philosophy that produced the modernist impulse to formal purity, the elimination of the unessential, and systematized pictorial organization. Stella intimated this ominous connection at the beginning of his career, titling some of his Black paintings with references to the Third Reich: *Die Fahne Hoch!* (Raise the Flag), *Arbeit Macht Frei* (Work sets you free), and *Reichstag*. The Polish Village works mark a turning point in Stella's attitude to the progressive modernist narrative. With them, he broke away from the rational geometric paintings of the sixties and set up a new order based on the more tenuous asymmetrical balance of Russian Constructivism. Also for the first time, he liberated his forms from the two-dimensional picture plane to construct pictorial reliefs that extend off the wall and into the viewer's space. Although comprised of a variety of collaged materials, Stella was insistent that the Polish Village works were paintings.

## NEW TOPOGRAPHIES FOR PAINTING

The first rule of modern art was to reduce painting to its essence: paint on a flat surface. Stella, however, questioned this assumption, noting there are many different kinds of surfaces. He observed that cave paintings, for example, had a natural surface "bumps and all," and that the "assumption that the topography should be the flat surface of the canvas is the same as thinking of the world as flat."

This description of the way Stella perceives the surface of a painting is almost as startling for modern art history as the discovery that the earth is not flat. It is generally assumed that Stella aimed to emphasize the flat picture plane in his early paintings. But right from the beginning he was preoccupied with incorporating space into his paintings without succumbing to the power of illusionism.

Increasingly, he came to the conclusion that the surface could have a varied topography on which he could paint, from the constructed surfaces of the Polish Village series to the cut-out forms of his Cones and Pillars reliefs of the mid-1980s (*gallery 9*) to the subsequent fully volumetric structures that have occupied him since the 1990s.

## PICTORIAL SCULPTURE

Stella's hard-edge geometric paintings of the 1960s and his elaborate reliefs of the 1980s may look worlds apart, but his goal of creating a convincing pictorial space has remained constant. In the series of lectures he presented at Harvard University in 1983 and 1984 (published in the book *Working Space*, 1986), he asserted that the aim of art "is to create space—space that is not compromised by decoration or illustration, space in which the subjects of painting can live." He accomplished this spatial feat in his Pillars and Cones reliefs of the mid-1980s (*gallery 9*) by using schematic drawings of geometric volumes in which radiating lines suggest modeling without his using shading or illusionistic, atmospheric space, and fully three-dimensional forms. The foreshortened ovals drawn at the ends of the pillars and cones convincingly suggest interior volume or mass, while the fully-dimensional components allow viewers the opportunity to glimpse into the hollows of his work.

As the metal collaged cutouts grew increasingly three-dimensional, they literally lunged into the viewer's space. The subsequent Moby Dick series (*galleries 7, 8*) transformed the flat cutouts of the Pillars and Cones into fully realized volumetric waves fabricated from aluminum. He ultimately conceded that he was making sculptures, but he still conceived these works pictorially; they were, in fact, "pictorial sculptures." As a painter, Stella felt free to allow his forms to elude gravity (a condition of sculpture) and to behave as if they had been painted rather than sculpted. The effect is amplified by color that is either inherent in the materials he uses or is applied to their surfaces. Stella reduces the overall mass of his structure by breaking it down into a myriad of smaller details. To build up his sculptures he adds and subtracts materials, twisting and turning them until they achieve the right sense of movement and mass. The materials, themselves, look as pliable and fluid as paint.

Stella's constructions of the 1980s, with their elaborate mounts and exposed hardware, presented a problem for Stella and viewers because it was never clear whether the construction should be seen from the side or only frontally. The boomerang shape and wave form that he frequently used during this period, serve as supports as well as compositional elements (*galleries 7, 8*). In his most recent constructions, Stella is exploring a "new thought" by using metal jigs as supports so that the cast-metal smoke rings and interlacing ribbons can roam free (*galleries 6, 10*).

## PAINTING IN THE 1990s

Stella returned to painting on canvas with a new approach in the 1990s. Large-scale paintings such as the Hooloomooloo paintings (*curve and atrium*) and *Organdie* (gallery 7), were based on paper collages Stella assembled from cut-out printed images of etched and computer renderings of smoke rings, printer's registration marks and notations, and enlarged colored dots produced by the printing process of color separation. Stella built the collages for his late paintings on top of a row of deep panels ranging in dimensions and displayed in intervals across the wall. Consequently, the collages project approximately three to four inches in front of the wall and cast shadows against the surface. Stella bends and curves his materials so that they produce a multitude of volumes, which cast their own shadows. The collage is then photographed so that it can be enlarged and projected on the surface of the canvas so that scenery painters can duplicate the collage's every detail in the painting. The finished work is a marvel of deception that tricks the eye into believing that it is a high-relief construction, not a painting on a flat canvas. Stella admits to feeling uncomfortable about adding shadow and trompe l'oeil to his paintings and wishes he could create depth without them, as it goes against Modernism's anti-illusion rule. Technically, no rules were broken as the painting is of the photograph of the collages and its preexisting shadows. With this technique, Stella succeeded in pumping recessional depth into these paintings, which in his mind is the "one absolute and necessary element for successful pictorial illusionism. That's what it takes to make most people believe that a painting looks real."

## CHAOS THEORY

In the 1980s, Stella became increasingly fascinated by the potential of Chaos Theory to provide a new thought for him to investigate. While traditional science addressed predictable phenomena like gravity, electricity, and chemical reactions, Chaos Theory developed an alternative set of ideas as a way to account for things that are basically impossible to predict or control, like turbulence, weather, the stock market, our brain states, etc. In Chaos Theory small changes can lead to dramatic effects. These phenomena are often described by fractal mathematics, which captures the infinite complexity of nature. A fractal itself is a never-ending pattern that replicates across different scales and can be observed throughout nature, such as in seashells, the rings of trees, and hurricanes.

Fractal geometry offered Stella a new and different way to think about shape and dimensionality. Using the infinite patterns of fractal geometry freed him from scaling his work on the basis of human proportions, as they remained unchanged whether monumental or microscopic. Since the beginning of his career, he had used man-made tools of measurement and engineering such as protractors to fashion his patterns. In the 1990s, however, he redirected the course of his work by moving away from rational, geometrical forms and adopting natural motifs, such as waves and smoke rings. Stella's observations of how smoke rings behave encouraged him to pursue using organic forms. As he puffed on his cigar and blew perfect O's into the air, he watched the rings break up and form new smoke rings. This system of bifurcation, which operates under the laws of Chaos Theory, intrigued Stella, who set out to capture the ephemeral smoke through photography. These photographs were then outlined in his studio with 3D computer-imaging techniques to produce diagrammatic renderings of smoke rings, which for the next two decades Stella has incorporated into his prints, paintings, sculptures, and architectural designs. Based on how natural forms grow, Stella's current works appear to bloom organically rather than through the rigid arrangements of rational geometry.

## FROZEN GESTURES

For Stella, frozen gesture is the truly magical effect of painting. In the abstract paintings of Willem de Kooning, Jackson Pollock, and Robert Motherwell, the painted gestures are evidence of the artists's movement and action. In the 1980s, Stella produced gesture in his works by stamping it out in a single stroke without the obviously autographical marks of abstract expressionists paintings. He found a way of doing this by using techniques he learned during years of printmaking when he made prints from plates formed of poured molten metal. The print of this "frozen gesture" is at once painterly and literal: an image of a fluid poured form that is fixed in a state of suspended animation.

Using poured metal as a printing device was liberating for Stella, who realized that it confounded real and depicted motion. For Stella, "the poured metal is a very satisfying, successful way of creating a stamped-out version of the painted splash, a way of getting back to and then going forward with the gestures of abstraction that de Kooning and Motherwell used so convincingly." Works such as *Hacilar Level III*, 2000 (*gallery 5*), were made by pouring molten metal onto sand to create a single gesture, a process similar to that of making poured metal plates. Alternatively, he used cast aluminum or a 3D printer as ways of stamping out the wave, smoke ring, bent bamboo, and spiral motifs that simulated the dynamic action of the abstract expressionists's brushstrokes.

## ADVICE TO ART STUDENTS

In early 1960, not long after Stella's initial success with his Black paintings (1958-59) and just two years after graduating from Princeton University, he gave a talk to art students at Pratt Institute in New York in which he shared his own training as an artist. He especially emphasized the importance of visiting museums and galleries to see masterworks from all time. He described his self-education as follows:

*After looking comes imitating. In my own case it was at first a largely technical immersion. How did Kline put down color? Why did Guston leave the canvas bare at the edges? Why did Helen Frankenthaler use unsized canvas? And so on. Then, this is the most dangerous part, I began to try to imitate the intellectual and emotional process of the painters I saw....Fortunately, one can stand only so much of this sort of thing. I got tired of other people's paintings and began making my own.*

Stella continued traveling throughout his career to see art. Artist Sidney Guberman, Stella's biographer, recounts a visit to the Barnes Collection in Philadelphia in June 1969 during which Stella remarked after studying Matisse's *Joy of Life*, 1909, "He really did it. It's all right there."

Stella's Norton lectures delivered at Harvard University and his writings on art from the 1990s (published in *Frank Stella at 2000: Changing the Rules*) reveal that his interests encompassed all of art history, not just the modern masters. In a recent *New York Times* interview he emphasized the importance of travel to sustaining his career. "Seeing great art in different destinations gives me the motivation to keep going and holds me to the highest standard professionally." He further noted, "if you're a practicing artist, you have to see the great art of the world, whether that art is by recent artists or by ones from past cultures. It's not enough to just look at pictures of art because that will only take you so far. You won't feel the breadth of the Sistine Chapel unless you see the Sistine Chapel in person."

Stella never photographs or makes sketches of the artwork he sees. Rather he captures the experience in his memory. The lessons he learned by looking at artworks influence him consciously and unconsciously. For instance, he was thinking of Kasmir Malevich's early abstract painting *White on White*, 1918, of an off-kilter white square on top of a white square canvas when he shaped his painting *Hollis Frampton*, 1963 (*gallery 4*) around a square opening that frames the white wall support. The composition and festive palette of *Fawn-breasted Bowerbird*, 1976 (*gallery 4*) resembles the Matisse painting *Joy of Life* that he closely observed during his visit to the Barnes Collection in 1969, although Stella indicated that he had Picasso's surrealist paintings of bathers on barren beaches from the 1930s in mind (which referenced the Matisse painting). Both *Kagu*, 1976 (*gallery 4*) and *Saskatoon I*, 1968 (*gallery 7*) capture the exciting centrifugal force of Matisse's *Dance (1)*, 1911 (Museum of Modern Art, New York), while their interlaced ribbons can be traced to his interest in Medieval Hiberno-Saxon illustrated manuscripts, Jackson Pollock's drip paintings, and Islamic art. Most recently, Stella has remarked that Rogier van der Weyden's *Crucifixion Diptych*, c. 1460 (Philadelphia Museum of Art) set the high bar for achievement at the beginning of his career, while van der Weyden's *Descent from the Cross*, c. 1435 (Museo del Prado, Madrid) with its complex horizontal composition challenged him later in life.

As reported by Inna Babitskaya in 2013 (*Malden Observer*), Stella is convinced that his art education, which combined art history and studio classes, influenced the way he has worked his entire career, as "he can't work without thinking." The inclusion of his working archive in this exhibition gives viewers the opportunity to observe Stella's thoughts as he works.

## WORKING ARCHIVE

Stella contends that artists need to work at developing their art. His working archive includes the many sketches, drawings, collages and maquettes on view here for the first time. These objects shed new light on his thinking and experimentation, as well as how his work has changed over his sixty-year career. Stella's arrangement of these objects for this exhibition allows viewers the unique opportunity of mapping his journey as an artist and associating elements in his working archive with finished works in the exhibition.

Several drawings on the north wall of gallery 14 show Stella at his freest, displaying the wit and playfulness that are fundamental to his creative process. They also embody his empirical approach to modern art by revealing the variety of potential solutions to the many questions he poses about surface support, shape, color, and space.

Other works on the north wall represent the rigor of his process of creating diagrams for his paintings and prints, his use of graph paper and drafting tools, and the calculations he made for color sequences. Of particular note is a group of drawings made in 1978 with opaque stop-out (correction fluid) where his experiments with curved lines produce the illusion of three-dimensional space (FS78.81 to 78.86). These drawings prefigure by more than a decade his foray into creating fully realized sculptures. The looping lines closely resemble the curves and lattice-shapes of recent wall reliefs, such as *K.144*, 2013 (*gallery 12*).

Stella began conceiving his paintings within series in 1960. A curious small painting on sandpaper from 1960 (FS60.001, east wall, *gallery 14*) provides insight into the significance of this new development. This painting's pattern of dark blue parallel lines—whole and broken—is based on one of the 64 hexagrams of the ancient Chinese *I Ching* or *Book of Change*. Although *I Ching* was traditionally used as a form of divination, Stella was intrigued by how it calculated all the sequences that could be formed by combining these two opposing lines. By working within series, Stella likewise could calculate the compositional permutations, whereby he generally knew in advance how many works would constitute a series and what each painting would look like.

The arrangement on the east wall also charts the evolution of Stella's approach to the surface of his paintings. Throughout his career, he challenged the convention that a painting was made of paint on a flat surface and consequently, the topography became increasingly multi-dimensional. The progression starts with the small painting on rough sandpaper followed by the maquettes for the Polish Village series of 1973, which represent his first constructed paintings, i.e. (FS238.002). These lead to the foam core maquettes for metal wall reliefs of the 1970s in which Stella made cuts into the flat white surface in order to push and pull shapes in front of and behind the picture plane.

The notations on these shapes indicate the colors Stella planned to add to the surface of the final work's corresponding metal cutouts. Rather than paint on the flat white surface of a canvas where he had to battle pictorial illusion, the metal cutouts of his wall reliefs made it possible for Stella to paint on shapes that occupied real space. He further developed this method of working by bending and twisting paper board into fully formed waves for the Moby Dick series of wall reliefs (*galleries 7, 8*) and the cylinders and cones for his Cones and Pillars (*gallery 9*). Viewers can peek inside these works, rather than just confront the flat painted surface. His recent 3D printed models, such as FS2007.004-005, serve as the design for the surface supports of Stella's constructed paintings and sculpture. His large-scale commissioned work and cast reliefs and sculptures also necessitated the production of models for fabrication at foundries.

In the 1990s Stella experimented with a new process for making paintings. He pasted paper cutouts of computer generated images together as collages (*gallery 13*). Also during this decade, he explored creating architecture based on organic growth patterns and spirals (*models on tables in gallery 14*). He was drawn to architecture because it offered an opportunity to experience form without pictorial restrictions. Ignoring the architectural principle that forms follow function, he suggests an architecture in which "function follows form," thus creating real space for the viewer to occupy.