HIDDEN HARMONY. THE KING'S GAME

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Giorgio de Chirico's work reveals itself through the architecture hidden in its inner lines. Geometry is a means of analysis that allows one to delve into the complex spatial systems set in place by the artist. With this method of research, the structure of the composition presents itself as a true phenomenon by providing us with a visual narration of the resulting image. It is not a story that is told or evoked; it is the actual manifestation of the inner workings of the image in its encounter with the mind. By observing the image's inherent structure, the spectator gains access to the very heart of the creative act. In this research method, which employs geometry and other spatial systems such as the Golden Ratio, the first elements to be taken into consideration are the four margins of the canvas, the corners, as well as the horizontal and vertical medial axes. To "set" the image within its frame, de Chirico makes certain compositional lines converge on these cardinal points. By measuring the degree of angles created by the convergence of lines within the image, interesting congruencies and symmetries also come to light. Polyhedral shapes such as the cube, tetrahedron, cone and the pentagon are elements that are clearly visible in the paintings. In an intuitive analysis that aims to reveal the intrinsic structure of the image, other less clearly marked lines can also prove to be fundamental. Once brought to light, these structures act as a vehicle of deduction for a journey across the immense metaphysical act manifested in de Chirico's painting.

This study examines two of the Maestro's paintings: *Les Jouets du Prince (The Playthings of the Prince)* of 1915 and *Les Jouets Défendus (The Forbidden Toys)* of 1916. De Chirico painted these two works in Ferrara where he was stationed as a soldier during WWI. Two additional sections, *Reprise of the Theme* and *Origin of the Theme*, take a look at the re-elaborations of the *Les Jouets du Prince* theme undertaken by de Chirico late in life, of which four versions are known, as well as a painting of 1914, *Le Mauvais Génie d'un Roi (The Evil Genius of a King)*, a pertinent precursor of this theme.

The participants in the "king's game" are: a philosopher, a prince, a painter and a king; the rules, those of geometry and logic, put into play in an active, reflective and deductive investigation. Intrinsic structures will come to light and pre-existent hierarchies will settle into a new order. In their hands, these four players hold the reins of metaphysical space and *time*.

Les Jouets du Prince, autumn 1915 (55.5 x 25.9 cm)

Les Jouets du Prince is one of the first paintings de Chirico executed after his arrival in Italy due to the war and his subsequent stationing in Ferrara in mid June 1915.¹ The perspective plane that occupies the central area of the painting is the playing field upon which the principal elements of the composition interact. On this surface, horizontal lines of varying degrees of inclination run towards the left, while vertical lines race perspectively towards the dark red facade of a Renaissance building at the back right. The base of the building is hidden below the horizon line marked by the outermost edge of the perspective plane. In the foreground of the painting, an Indian teepee is perched in unstable balance upon the front edge of the perspective plane, where it teeters above a dark area in which pieces of pavement and strange tubular objects (most probably sugar sticks) are heaped together. Neither of the two "houses" possess a firm hold on the terrain: the teepee appears as if it were about to slide off the front edge of the plane while the red building at the back, which does not even sit on this surface, looks as if it might be lost from sight behind the vertically tilted plane.

The teepee has the polygonal shape of a truncated pyramid, the base of which is hexagonal, while the top is a quadrilateral structure. A large dark blue star, coloured stripes and geometric forms are traced on the surface of the tent. The star is in line with the painting's vertical medial axis at the intersection of the horizontal medial axis, marking the geometric centre of the canvas (fig. $1)^2$. Looking at the painting without the help of figure 1, it is very difficult, if not impossible, to ascertain that this point is actually the geometric centre of the canvas. Visually, it seems to be lower with respect to the painting's total height. It is even more difficult to discern that the line that constructs the right-hand side of the star is actually vertical, let alone parallel and equidistant from the sides of the canvas. Thus, we enter the dynamic field of the de Chirican line: geometrically verifiable yet empirically enigmatic. Strange black marks, lines and even a "written phrase" are traced on the slanted sides of the tent.³ Only the front of the teepee, turned slightly to the right, is illuminated. The light emanating from this area is strong and white. The coloured decorations on the teepee's shaded left side appear to glow in the darkness and the white area – soaked in shade – takes on a strange faraway look. The building in the background is also remote, kept at a distance by the power of perspective. Geometric shapes mark the distribution of space on its facade. It seems as if only half of the building is visible, although there are no indications of the missing part or of its actual size. The building appears to be a mere piece of stage setting, propped up by the black background. The strong white light in the foreground appears to be pushing the tent backward, preventing it from tumbling forward into the open area in front. The entire representation is set between the dark background and the light which enters the scene frontally. The image emanates a sensation of an absence of gravity, as if the various elements of the scene were somehow fastened

¹ Natura morta is dated September-October and Ritratto di Carlo Cirelli, October 1915.

² The consecutively numbered images pertaining to this analysis are found in the Italian text L'armonia nascosta. Il gioco del re in this periodical, see pp. 91 ff.

³ An attempt to decipher this writing has not produced any definite results. Consultation with various scholars of ancient languages has excluded the following alphabets: Ancient Hebrew, Ancient Greek, Coptic, Linear A and Linear B. It is possible that the script is actually a written form, or a code, invented by the artist. It seems that the writing runs from right to left and then back to the right again. A letter on the central black vertical line on the front of the teepee seems to be doubled and positioned inversely.

together, floating in dark, immense space. The background of the scene is not one of de Chirico's typical green metaphysical skies⁴ descending sharply on the horizon. There is no train puffing on the horizon or flags fluttering in a distant wind: the context of this representation seems far from earth, situated somewhere in the cosmos.

The teepee's instability is accentuated by a perceptible turning motion in which it seems to be taken up, like that of a spinning top. The various stages of this movement are indicated by the black lines traced on the sides of the tent. Two of these lines, one located on the shaded left-hand side of the tent and the other on its front, come to a point on the upper margin of the canvas with the lines that construct the tent's sides (fig. 2). The two bottom corners of the canvas are at the base of this construction. The black line at the centre of the tent's facade intersects, on the lower margin of the painting, a line that descends along the left side of the red building, creating a pivot point at the base of the painting. Due to the various degrees of inclination of the lines traced upon its facade, the tent seems to be taken up in a circular rocking motion. It appears to be spinning on an axis that is not perfectly perpendicular, which causes the rotation occurring at the base to be greater than the rotation at the top.

The decorative zigzag motive on its base creates a visual rhythm that accompanies the teepee's apparent rotating motion and in doing so, provides an indication of the direction of this movement. Various lines in this area play a part in this construction: the contour lines of the teepee's base, those created by the folds of its sides, as well as the decorative blue stripe. The prolongation of these lines forms angles, the vertexes of which coincide with the lower edge of the canvas (fig. 3). The two central angles (C and D) both measure 40°. Their vertexes are positioned symmetrically with respect to the painting's medial axis and are thus equidistant from the corners of the canvas. The two external angles (B and E) both measure 22°. Due to the conformity of their size and the positions they occupy along the base of the canvas, these four angles are perceived as forming two equal pairs. Each pair is composed of a small angle and a large angle (BC and DE). The BC pair is positioned to the left of the painting's medial axis and the other pair, DE, to the right. The instinctive perception produced by this juxtaposition is of two pairs of angles symmetrically positioned with respect to the painting's medial axis. But the real positioning of their vertexes implicates the observer in a dynamic visualisation in which the BC pair is ideally reflected on the medial axis reproducing itself in DE to the right of this axis. Although a perfectly symmetrical result is expected, it turns out that the points do not, in fact, correspond: point E has slid further to the right. This offbalancing carries our attention toward the right margin of the canvas.

If we direct our attention higher up in the painting, we see that the eight half-lines that form angles B C D E intersect the left and top sides of the canvas. Two of these lines intersect the upper corners of the canvas, and from this position seem to orchestrate the entire geometrical construction, like the strings of a puppet. The rhythm created by the sequence of the vertices of the angles along the base of the canvas and the strings that guide them from above make the teepee slide, as it spins, towards the right.

⁴ See J. de Sanna, on the inside flap of the front cover of «Metafisica» 3-4, Le Lettere, Florence, 2004.

Let us take a closer look at the two lines indicated above that intersect the upper corners of the canvas, together with the two lines in figure 2 that intersect the lower corners of the canvas. These four lines describe two large X's that extend themselves majestically over the entire composition, clearly revealing the convex structure of the representational space (fig. 4). Various paintings from the Parisian period present convex spatial structures.⁵ In Les Jouets du Prince, the convexity is created by the relationship between the polygonal construction of the teepee and the four physical margins of the canvas. These two X's enable us to visualise the expansion of space occurring on the right-hand side of the canvas, as if the teepee were opening this space up as it moves in this direction. The difference in the level of the centres of the two X's, the one on the left higher than the one on the right, helps to further model the spatial effect, as well as providing an indication of the direction of the tent's trajectory. Although not fully traced, the ideal lines that intersect the sides and corners of the canvas mark points of reference for our eyes which, as they move "rebound", creating a sensation of movement within the image, driven by vision itself. In an article written by the artist in 1919 entitled On Metaphysical Art subtitled The Eternal Signs⁶, de Chirico speaks of the function of "other lines" in metaphysical painting: "As far as its appearance is concerned, metaphysical artwork seems to be serene; yet, it gives the impression that something new is about to happen in that very serenity and that other lines, beside those manifest, are about to enter into the rectangle of the canvas. Such is the revealing symptom of 'inhabited profundity'."7

Compared to the scenic power of the teepee in the painting's foreground, the Renaissance building at the back is immobile and stable. This red building is secluded and remote; the geometry that delineates the space on its facade is formal, not dynamic like the constructive geometry of the teepee. The sensation of stability is greatened by the fact that we see only part of the building. It is easy to imagine it continuing outside the representational space without limit in the two directions defined by the perspective plane below it and the right-hand margin of the painting, a fact that bestows it with an even greater sense of weight and stature. The state of immobility that characterises the building, stops time and acts as a counterpoint to the fluency of time rendered by the apparent movement of the teepee in the foreground.

The right-hand side of the teepee exhibits characteristics that are difficult to decipher (fig. 5). The lines that form this small triangle converge exactly at the junction point between the tent, the red building and the horizon, creating a focal point between the various elements of the composition. Inside this triangular shape there is a double cross composed of a vertical line and two smaller horizontal lines of different lengths. This same sign is found at the top of the teepee and at its base, with a variation. The body of the teepee could be complete without this "side". A thin white line appears to mark its right-hand margin. Furthermore, given the angle from which the light enters the scene, this side of the tent would not be in shade, therefore its dark colour makes it more readily perceived

⁵ Id., Metaphysical Mathematics, in «Metafisica» 3-4, p. 163.

⁶ The original title in Italian is "I segni eterni". The word "segni" would be more accurately translated as "lines" or "marks".

⁷ Article published in «Valori Plastici» Rome, year I. n. 4-5, April- May 1919, pp. 15-18; also published in *Il meccanismo del pensiero*, edited by M. Fagiolo dell'Arco, Einaudi, Turin 1985, pp. 83-87; and in *Commedia dell'arte moderna*, Abscondita, Milan, 2002, pp. 29-30.

as a piece of ochre-coloured pavement that "risen up". In any case, this triangle creates tension in the economy of the composition. It acts like an anchor on the tent, as if it were holding the tent onto the plane. The teepee seems to want to break away from this grasp by leaning in the opposite direction. By doing so, it acquires a three dimensionality that the other elements in the composition do not have. There is a very clear temporal element in this painting: it is easy to imagine the tent's spontaneous entrance upon the scene as if it just popped up from a fold in the plane, thus taking on a convex shape. The disorderly heap of objects in the painting's foreground is the result of such impetus. A piece of "pavement" in this area provides a line which intersects, on the lower margin of the canvas, the prolongation of the last of the black lines on the tent's facade (fig. 6). This construction adds to the series of angles described in figure 3, as its vertex falls precisely on point E. Another line, traced along the red stripe at the base of the tepee, together with a line that runs along the double cross figure in the enigmatic triangle on the teepee's side, converge together on the right-hand side of the canvas in point G. These two constructions (with vertices in E and G) join together at the same point on the upper margin of the canvas. The angle with vertex in G has a breaking effect on the teepee's circular motion, holding this side of the tent to the plane, as an anchor would a boat. It is no coincidence that the line running from point G to the top of the image coincides precisely with the double cross on the enigmatic "right-hand side" of the tent. This triangular figure is a mooring from which the teepee endeavours to free itself by leaning in the opposite direction. The vertex G is a cardinal point in a system of circular motion: by carrying the series of reference points B C D E (as seen in figure 3) up the right-hand side of the canvas to point G, the arc of rotation is held within the four margins of the canvas.

The red band at the base of the tent is a hue of vermilion that is much brighter than the other red stripes that wrap themselves around the tent. Its colour is so bright that it reflects on the sugar stick to its right. It marks a strong line that cuts the sugar stick in half, passing through the spiral loop and intersecting the right-hand margin of the canvas in point G, where it creates an angle that measures 86° (fig. 7). The degree of this angle is identical to the angle created by the horizon of the perspective plane and the right-hand margin of the canvas. The two lines are mirrored on an "invisible axis", which happens to be directly in line with the tip of the sugar stick, upon which a spiral is drawn. This point marks the division of the total height of the canvas in the Golden Ratio. These two lines carry out an important function regarding balance within the composition. Without being fully traced across the painting's width, the lines manage to link the front edge of the tent to the plane's posterior limit, therefore providing a stable counterweight to the teepee's instability.

The blue star on the front of the teepee offers a clue concerning the direction of the teepee's rotation. A diagonal line traced on the star seems out of place. Visually, one would like to correct the position of this line by turning the star counterclockwise in order for it to take on a horizontal position. This interpretation reveals the direction in which the teepee is rotating: it is revolving in a counterclockwise direction as it moves from left to right, as we have already seen. As it spins, the tent traces a wider circle, drawing a series of loops on a continuous circuit: de Chirico registers this movement in the shape of the sugar stick in the foreground.

The sequence traced by this circular movement is similar to the astronomical model proposed by

Ptolemy in order to explain a strange motion carried out at times by certain planets. The Greeks, who had a geocentric concept of the Earth immobile at the centre of the Universe, noticed the irregular motion of a number of planets. In the course of a planet's regular path from west to east across the celestial sphere, the planet would stop at a certain point, start moving backwards toward the west, before taking up its easterly direction once more. This phenomenon is called "retrograde motion" and for the Greeks constituted a real problem as such behaviour did not fit into their model of concentric celestial orbits in which the planets were supposed to follow a uniform and circular movement (fig. 8). In order to solve this irregularity Ptolemy proposed a geocentric model of the Universe in which the planets moved along a smaller orbit called an "epicycle", while being carried along a greater orbit called the "deferent" (fig. 9). In reality, the apparently irregular motion was in fact the result of a geocentric vision of the Universe. The Earth, which as we know is not motionless but in movement, has at certain times an orbit velocity greater than that of a given planet. The phenomenon can be visualised as a train overtaking another train travelling in the same direction. If a passenger on the first train is unaware of the movement in act, he will have the impression, while his train is overtaking the other train, that the other train is moving backward. Nicolaus Copernicus resolved the problem of retrograde motion in his seminal work De Revolutionibus *Orbium Coelestium* published in 1543⁸ by introducing the theory of heliocentricity with the Sun at the centre of the Universe and the Earth and planets revolving around it in circular orbits.⁹ The validation of this hypothesis clearly demonstrates the phenomenon of retrograde motion as a visual effect caused by the relative movement of the Earth and the planets. This new awareness of the Earth as a body spinning on an axis and revolving around the Sun was the first big jolt from the static vision of the Universe held by the Greeks.

In *Metaphysical Mathematics*, an essay published in number 3-4 of this periodical, Jole de Sanna specified astronomy as an important element in de Chirico's work.¹⁰ In her geometric-mathematical analysis of the compositional structures of paintings executed between 1910 and 1915, de Sanna notes: "Clearly, the artist is working within a lexicon of spatial motifs that exemplify celestial movement by means of proportion and polyhedra."¹¹ It comes as no surprise that de Chirico, after the intense period of work in Paris and the recent relocation to Ferrara due to the war, continued to explore the structure of the Universe and celestial geometry in his metaphysical painting. A question worth asking is whether a parallel exists between the artist's personal situation and the first element related to the Universe that he introduced into his work at the time. Does de Chirico consider his return to Italy a "retrograde motion"? A movement in opposition to the direction his artistic career was taking in Paris at the time? The Greeks called a celestial body that effected this irregular movement a "planet", which means "vagabond" for its apparent "vagrant" movement in the sky. In *Les*

⁸ In 1513 Nicolaus Copernicus anonymously published, due to fear of repercussion from the Catholic Church, a text entitled *Commentariolus* in which he proposed an initial elementary heliocentric model.

⁹ It is interesting to note that it is in Ferrara that Copernicus made the acquaintance of his teacher the astronomer Domenico Maria Novara with whom he made his first observations in 1497, as he recalls in *De revolutionibus orbitum coelestium*.

¹⁰ See J. de Sanna in *Metaphysical Mathematics*, cit., p. 111.

¹¹ Ibid., p. 114.

Jouets du Prince, a thin winding line is lightly traced on the bottom right-hand side of the Indian teepee. A small dot is marked on this line, like a body moving on an errant path: a visual annotation regarding the concept of wandering. Shaped like a question mark, the line is hesitant as if traced more by thought than by hand. In delineating the mathematical structure at the base of metaphysical painting, de Sanna writes: "Pythagoras is the first Wanderer of the West, the archetype of the metaphysical binomial: knowledge-voyage (movement); he designs astronomical space (the *àpeiron* of his master Anaximander) through Number."¹²

De Chirico establishes Ptolemy's astronomical model within the four boundaries of the canvas in order to excogitate his destiny by means of a geometric model. He proposes the phenomenon of retrograde motion, not only as a model problem whose solution required a total revolution in man's way of thinking and seeing, but especially as it supplied man with a working model of the Universe in which he was able recognize his "place". De Chirico endeavours to identify the coordinates of his new position, resulting from his sudden relocation to Ferrara as a result of the war, and more specifically, those concerning this new situation and his artistic production.

Born in Greece of Italian parents, de Chirico had always seen Italy from afar, except for the important although brief periods that he spent in Milan and Florence. This is a moment when he realizes that the cords of his destiny, his identity and Italy are becoming more tightly interwoven. The spiral of political events and the personal decisions that bring him to Italy lead him to a new nucleus of investigation: the identification of the "original horizon" within himself, another entrance to the mystery of metaphysics. He expresses awareness that the destiny of de Chirico, the man, is subject to the necessity of de Chirico, the artist: "As far as I am concerned, I am sufficiently happy in this beautiful and melancholic Ferrara where life's destiny has brought me. For men of fate, all events, even the saddest, and it could be especially these, are necessary for the development of the mysterious forces that dwell within them and that then appear in their artwork; and I now feel that my departure from Paris, the separation from the environment in which I was living, and the materialization of this city of destiny in which I find myself, are all things *fatefully* necessary to my creative self; does this not suffice to be happy?"¹³

The lines traced across the perspective plane in *Les Jouets du Prince* could be regarded as lines of latitude and longitude reaching towards new worlds. The teepee becomes a sailboat, tracing its path toward the unknown. While the painting's geometric structure brings to mind the phenomena of retrograde motion that compelled Copernicus to place the Earth in orbit around the Sun, the iconography chosen by de Chirico resounds with the discovery of America. The Renaissance building in the background represents the old country while the Indian teepee, an emblem of this discovery, raises itself in the foreground like a vessel propelled to the edge of the known world. It is very interesting that de Chirico places the unknown, the indecipherable – such is the dark area above which the tent vacillates – in the foreground of the composition. I think this placement is significant with regard to

12 Ibid., p. 116.

¹³ Excerpt of a letter to P. Guillaume dated Nov. 1, 1915. The letter is published in the exhibition catalogue *La pittura metafisica*, Palazzo Grassi, Neri Pozza Editore, Venice, 1979, p. 117.

a change in direction of the artist's research. De Chirico has an intuition that infinity does not reside uniquely over and beyond the horizon, as evoked in the *Italian Piazza* series, but also – and maybe even more enigmatically so – that it resides on *this* side: in the profound mystery of his being. The artist removes the quality of external distance from the concept of infinity, proposing himself as the vehicle of a new inquiry, towards the unknown within himself.

Les Jouets Défendus, 1916 (55.5 x 25.9 cm)

Les Jouets Défendus was executed shortly after *Les Jouets du Prince* and is the same size as this painting. The word "toys" in both titles causes some perplexity. In the first painting the toys belong to a prince, while in the second, they are indicated as "forbidden". Are we dealing here with a question of power, privilege or peril? In the following analysis, all three of these characteristics will be examined and the prince will be identified, complete with name and historical period. And the "toy" will reveal its true function, that of a model. In this, the absolute geniality of the artist comes to light, as this model is the manifestation of something that has never before been made visible.

The absence of strong perspective lines in *Les Jouets Défendus* accentuates the vertical set-up of the composition. The elements that compose it are positioned around a small pile of coloured boxes in the foreground of the painting. The space is intimate and close. The composition's numerous vertical lines guide the eye downward. These lines describe geometric solids that look like books, a red stick on the right, and a dark blue area in the centre in the shape of a "V" upon which two bands of thin white "spiral" motives, like fine embroidery, are traced. This dark area presents peculiar characteristics: it is a flat, geometrically bordered space that is not recognizable as an object. At first sight one may take it for the back of two books, but looking more attentively, this image vanishes. The borders that define the area are precise, like that of a cookie-cutter, but the space within them is equivocal. Is it a blackboard on which fine spiralling lines are drawn with chalk? Or a window opened on a starry night sky? The inability to "fix" this shape as the representation of something causes its visual substance to be perceived simply as line and space.

In *Les Jouets Défendus*, a geometric scheme is traced on a flat surface directly behind the objects in the foreground. When lengthened, two of the lines on this plane intersect at the right-hand margin of the canvas in H (fig. 11). The point that this intersection marks creates an initial geometric link to the painting *Les Jouets du Prince* (the structural analysis of which is given in the first part of this text). In de Chirico's work, specific structures have been found that serve a purpose beyond the painting itself. These elements are part of a system in which iconographic elements or geometric forms indicate correspondences with other paintings.¹⁴ The fact that these two paintings are of the same size and have similar titles makes one question whether geometric correspondences exist between them. Such parallelisms establish the coordinates of a system based both on geometry and logic, by which one can achieve a more extensive vision and understanding of the artist's body of work. Point H, when transferred to *Les Jouets du Prince*, corresponds exactly to the point where a shadow enters

¹⁴ See K. Robinson, Backstage with de Chirico, in «Metafisica» 3-4, cit., p. 237.

the scene from the right, projected from something outside of the representation (fig. 10). The shadow, which extends diagonally onto the central plane, has a long rectangular shape with a slight jog at the tip. It is actually the shadow of the two books depicted on the left-hand side of *Les Jouets Défendus*, ideally projecting itself from one painting to the other. The two books are of different heights: this is what creates the jogged shape at the top the shadow. Looking more carefully at these books, we notice that the white spine of one of them delineates the same long rectangular shape. Here, the shape is turned upside down: the tip points downward and is given its "jogged" form by an absolutely improbable shadow cast upon it by the blue box to the right of it.

The act of seeing a specific shape in one painting (the outline of the shadow) and then recognising the same shape in another painting, where it serves the function of representing a "positive" element (the spine of the book), is a mechanism put in place by de Chirico to get us used to a different kind of logic. The fact that the shadow's shape is echoed elsewhere, where its colour and form are reversed – from black to white, from shadow to light, from a horizontal-diagonal position to a vertical position with the tip pointing downward – relieves the figure of a series of representational functions and empowers our mind with a logic in which white-black, right-left, updown, create a geography of relativity.

The operation that provided us with point H can be repeated with another pair of lines found on the same panel. These lines, when lengthened, intersect outside of the picture frame (fig. 12). It is interesting to note that the angle of this intersection measures 86°. If we look once again at figure 7, which shows the inclination of the central plane of *Les Jouets du Prince*, we see that this plane is constructed with two 86° angles. At this point we can effectively establish that the geometric scheme traced on the brown coloured panel in the background of *Les Jouets Défendus* is, in fact, a codification of the spatial structure of the other painting and serves as the registry of its constructive formulas.

In addition to the lines that are traced on this panel, the dark blue "V" in the centre of the painting defines two triangles by outlining their shape with its borders. The higher-up of the two triangles takes form in the scoop of the "V" shape (fig. 13). While the other triangle, found lower down on the left, is given its shape from the borders of the objects that surround it (fig. 14). By visually scanning the painting slowly from top to bottom, one has a sensation of a gentle decent, as if the entire background plane were falling and gradually turning in a counterclockwise direction. In fact, the vertexes of these two triangles follow the curve of an Archimedean spiral, the centre of which is found outside the canvas (fig. 16). This spiral passes through other points of intersection in the composition.

A fascinating relationship to the other painting now comes to light. The curved section hinted at by the two triangles in the background of *Les Jouets Défendus* directs us to a significant form in *Les Jouets du Prince*. If we draw a line from the centre of this spiral and carry it across to the other painting, we find ourselves in line with another spiral: the spiral on the tip of the red and white sugar stick (fig. 15). Let us be reminded that the tip of this candy stick marks the vertical division of the painting in the Golden Ratio, as seen in figure 7. The sugar stick is composed of three spiral shapes: the physical shape of the piece of candy, the spiral on its tip (and also on its base) and the red and white stripes that wrap themselves around its entire length, which are also spiral-shaped. These are the mobile margins of de Chirico's design: the equivalence between a barely visible trace – such is the

spiral described by the two triangles outlined in the background of Les Jouets Défendus - and a complex, multiplied form like the sugar stick, constructed of, and wrapped in, spirals. Both works designate the spiral but they do so in different measures and above all, by using completely different methods of representation. We are dealing here with a question of perception: the more finely we tune our minds to perceive the subtleties of form, the more skilfully we transit through the territories of visual knowledge. In order to intercept these different "levels of intensity" of form, our mode of perception must remain open and flexible. At times it is possible that a certain form presents itself in a clear and evident way but if it is outside of our range of perception, we may not even notice it. We began this analysis in the background of the image; we will now regain the foreground of the representation where a geometric construction is revealed that unites the two paintings in a complete image. Let us return to the blue area in the centre of *Les Jouets Défendus* where the two bands of white spiral "lacework" motives are drawn. A line traced on the central white "thread" of the band on the left (AB) intersects, on the bottom margin of the canvas, a line traced on the red stick at the right-hand side of the composition (fig. 17). The central "thread" of the other band (CD) converges on the upper margin of the painting with the diagonal line that defines the left-hand border of this band. The two lines (AB and CD) cross on the horizontal medial axis of the painting, forming a large "X". By turning this construction upside down and superimposing it on Les Jouets du Prince, a precise symmetry reveals itself: the line AB corresponds exactly to the last of the black lines on the front side of the teepee (figs. 18-19). This line, which overturned will be called BA, acts as the "axis of superimposition" of the two paintings. A computer graphics rendering superimposing the two paintings reveals an image that is quite spectacular: the two bands of "lacework" in Les Jouets Défendus lay themselves down on the facade of the tent as if made to fit (fig. 20). The angle of this application is perfect. The positive and well-defined shape of the teepee fills the "hollow" area of the dark blue V-shape and vice versa, this shape applies itself perfectly to the teepee's facade. The result is a composite image of the teepee with the spiralling lines in transparency on its surface. Additional correspondences occur in this double image such as the intersection or parallel inclination of other lines. Figure 20 is evocative. One has the impression of looking at something in an unusual light that increases in intensity where the light elements overlap, while the dark areas are amplified and melt into a soft, dark and diffused atmosphere. The two works "contain" each other and embrace in a relationship of interdependence, creating a cumulative image that goes beyond the two-dimensional plane of the canvas as well as the illusion of the three-dimensional space. De Chirico raises the scaffolding of a new plane of vision, brought into being by the geometric correspondences existing between the two works. This combination can be understood as two separate chemical elements that - when mixed together in the "right setting" - cause a specific reaction.

In *Les Jouets du Prince*, the red and yellow band beside the blue star on the Indian teepee provides a key motive that confirms the operation of overturning described above: two little yellow triangles on this band form an "X" shape (fig. 21). This small decorative motive refers to the composite structure of the two paintings where a big "X" encouraged the overturning of one of the paintings in order to reveal their reciprocal relationship. The decorative motives in *Les Jouets du Prince* have an active function that is not merely that of embellishment. The artist uses these forms as a register in which

information regarding the structure of the composition is recorded, or in a spatial relationship, as seen in figure 3 where the zigzag motive at the base of the teepee produces a series of geometric correspondences with the frame of the canvas. As such, decoration assumes a role of "spatial formula" in the intricate structure that the artist offers to the attentive observer.

By looking at the two works side by side without the help of geometric diagrams, one can perceive, on a visual as well as an intuitive level that a relationship exists between them. The brightness released by the "prince" is absorbed, taken in and assimilated by *Les Jouets Défendus*. Recognizing this relationship is like reuniting two opposites: the indefinite (the ambiguous V- shaped space) to the definite (the precise polygonal structure of the teepee); the individual (the tent) to the manifold (the numerous spiral tracings), as well as black to white and upside down to right side up. The intricate and sophisticated architecture that sustains the unity of these two paintings brings to mind the philosopher of Ancient Greece that de Chirico is most fascinated by: Heraclitus and his law of the unity and complementarity of opposites, in which the continuous tension of opposites constitutes the "hidden harmony" of things: "God is day and night, winter and summer, war and peace, fullness and hunger; he changes the way fire does when mixed with spices and is named according to each spice".¹⁵ Heraclitus lived in VI and V century BC in Ephesus and was of royal ancestry. And thus, the identity of the prince of "toys" is revealed: Heraclitus is the prince de Chirico celebrates and the philosophical line of thought he exemplifies.¹⁶

In addition to the symmetry of opposites highlighted by the reciprocal correspondences in the two paintings, de Chirico also manages to "represent" the idea of "hidden harmony". In Les Jouets du *Prince*, the concept of "hidden harmony" is interpreted literally by means of a spatial system. The key to this concept is the presence of the Golden Ratio, which as we know marks a harmonic proportion. In many paintings of the Parisian period the Golden Ratio is clearly discernible by a linear division of the pictorial space, such as the horizon.¹⁷ In Les Jouets du Prince, the tip of the sugar stick marks the Golden Ratio of the painting's total height. It is noteworthy that the harmonic division is indicated by a mere point and not a fully traced line. This point corresponds to an "invisible axis" defined by the symmetrical position of two important structural lines, as seen in figure 7. An additional consideration is that on the tip of the sugar stick, there is a spiral: another harmonic element. In this painting, the Golden Ratio does not divide the pictorial space; rather, it is inserted in the painting in an obscure fashion as a note on Heraclitan term "hidden harmony". Les Jouets Défendus also participates in the quest for "hidden harmony": two little triangles point the way, as seen in figure 16. The circular movement of the Indian teepee is traced in the rhythm of its geometry in a space we easily perceive as being much vaster than the space represented. With just as much ease, we are drawn into the apparent intimacy of Les Jouets Défendus, between the lines that delimit the dark blue central area where the tiny spirals trace their winding paths. After a detailed geometric analysis, it

¹⁵ Heraclitus, fragment Diels-Kranz 22 B 67.

¹⁶ "Eternity is a child at play, playing draughts; the kingdom belongs to a child." Heraclitus, fragment Diels-Kranz 22 B 52.

¹⁷ See J. de Sanna *Metaphysical Mathematics*, cit. In *La récompense du devin* of 1913, the top of the brick wall at the back of the piazza marks the Golden Ratio, whereas in *Le revenant I* of 1914 the curtain marks the harmonic division, *Ibid.*, pp. 133 and 194.

seems evident that these tiny white lines can not be considered as mere decorative elements. Looking closely between these lines we find a small "X" hidden near the top of the line AB (fig. 22). In a direct superimposition of the two paintings (without turning one upside down), the position of the "X" corresponds to a point on the central black line on the front of the teepee in Les *Jouets du Prince*. This line is the central axis around which the teepee carries out its spinning motion, as described in the geometric analysis and illustrated in figure 2. It is interesting to recall the physical size of these two works: 55.5 x 25.9 cm. They are only slightly bigger than the span of a hand, yet the intricate structure of their composition makes the vision they provoke in the spectator incommensurably greater. The precise point indicated by this "X" seems to be in reference, not to the technical representational space as such – the four borders of the canvas –, but rather, to a point in a space far greater. In an astronomical geography rendered in the form of a model by the artist, the "X" hidden among the spiralling white lines, corresponds to a point somewhere in the cosmos: the position of the star-teepee on its circular path of celestial motion. The dark blue area at the centre of Les Jouets Défendus is a portion of the Universe in which these double-spiralled "threads" trace the circular and infinite paths of celestial geometry: star trails traced with a size number 1 paintbrush. De Chirico's thoughts also come to us from the tip of his pen: "And the perspectives of the constructions rise up, full of mystery and presentiment, the corners conceal secrets, and the work of art is no longer the dry episode limited to the actions of the people depicted, but it is the whole cosmic and vital drama that enmeshes man and draws him into its spirals; where past and future get mixed-up, where the enigma of existence, sanctified by the breath of art, divests the tangled and frightful appearance that outside of art man imagines, to clothe the eternal, tranquil and consoling aspect of ingenious construction."18

Returning to more "mundane" topics, these two paintings are thought to be the first works that de Chirico sent from Ferrara to his art dealer Paul Guillaume in Paris in 1916. In the autumn of 1915, de Chirico already had a working agreement with the young merchant for two years.¹⁹ In a letter dated November 1st, the artist wrote to Guillaume from Ferrara: "Other paintings are taking form; be patient and you will see; and believe so even without seeing".²⁰ Two photographs²¹ of the period show that Paul Guillaume did, in fact, deal with these two works. In a photograph of the art dealer dated 1916, *Les Jouets Défendus* is sitting on the mantelpiece of his apartment in Avenue de Villiers. A second photograph, also taken at Paul Guillaume's apartment, is dated by the events of the war. Wounded in battle, poet Guillaume Apollinaire returned to Paris in 1916. The photograph shows the poet with art critic Adolphe Basler in the Avenue de Villiers apartment.²² Apollinaire, with his head wrapped in a bandage, is standing in the middle of the parlour overflowing with paintings hanging on the walls and placed on the floor. A clue to finding de Chirico's painting could ironically be: "au pied de poète"

¹⁸ See Il senso architettonico nella pittura antica published in «Valori Plastici», Rome, year III, n. 5-6, May-June 1920, pp. 59-61; also published in *Il meccanismo del pensiero*, cit. pp. 100-103; and in *Commedia dell'arte moderna*, cit., pp. 39-42.

¹⁹ On October 9, 1915 de Chirico wrote a letter to Paul Guillaume in which he mentioned the proposition made by the art dealer "to continue business according to the agreement we made for the second year". The letter is reproduced in *La pittura metafisica*, cit., p. 115.

²⁰ *Ibid.*, p. 117.

²¹ See pp. 112-113.

²² See P. Georgel, La Collection Jean Walter et Paul Guillaume, Gallimard, Paris, 2006.

where the Indian teepee of *Les Jouets du Prince* stands out from the shadow between Apollinaire's right foot and the cane he holds in his hand.²³ The photograph is dated August 1916, showing that the painting was in Paul Guillaume's possession within the year of its execution. The two works were exhibited together in de Chirico's first solo show held in 1922 at Paul Guillaume's gallery in Rue La Boëtie.²⁴ The paintings were exhibited in various shows afterwards, although never again together. *Les Jouets du Prince* has followed its destiny and disembarked in America where today it is part of the significant collection of de Chirico's work at the Museum of Modern Art in New York, donated by Pierre Matisse in 1978. *Les Jouets Défendus* remains in the heart of Europe at the Národní National Gallery in Prague, on permanent loan from a private collection that bought the painting in 1933.²⁵ Hence, a long period of time has passed since the two paintings were shown together in the same exhibition. Even though these two works have been, and are still today, physically separated, the relationship between them is definite and inescapable. This relationship is supported by the various geometric, philosophical and spiritual correspondences exemplified in this study.

It is only now, after almost a century, that the lines hidden in de Chirico's work have started to surface thanks to the intuition Jole de Sanna²⁶ had in devising a method of research that uses geometry and other spatial systems to approach that which we can call, using an expression of the artist's, the "ingenious construction" in the work of Giorgio de Chirico. In addition to the numerous geometric correspondences detected in the paintings that confirm the mathematical basis of his work, many of the artist's theoretical writings show his interest in the spiritual aspects of geometry. In a text in which he praises Giorgio Morandi for the attention he affords to "the Metaphysics of everyday objects", de Chirico describes his working situation as such: "In the evening, [...], he teaches youngsters the eternal laws of geometric drawing, the base of every grand beauty and every profound melancholy".²⁷ In contrast, in a text entitled Seventeenth Century Mania he criticizes artists of that period for no longer caring about "the problem of composition in its spiritual sense, the problem of the way the painted vision must appear in the square or rectangle of the canvas".²⁸ From these and many other quotations one can clearly comprehend how geometry delineates a spiritual quality and the manner in which a line traced on the canvas has a form that is mysteriously equivalent to an aspect of our deepest awareness, an awareness that is reawakened. Speaking about the act of conceiving a painting in order to render the phenomena of revelation, de Chirico elucidates: "And in all this, technique plays no role; the sensation of wholeness will be given by the linear composition of the picture, which in this case always gives the impression of being something that is unchangeable, where chance has never entered."²⁹ Given a premise like this, the lines and structures that have come to light in this

²⁴ 55 of the artist's works were exhibited in *Exposition de G. de Chirico, chez Paul Guillaume*, 59 Rue de La Boëtie, Paris, March 21 - April 1, 1922. For a complete list of the works exhibited see "Metafisica" n. 1-2, 2002, p. 28.

26 See J. de Sanna, in Metaphysical Mathematics, cit., p. 111.

²³ Le vaticinateur (winter 1914-15) is visible in this photograph, hanging on the wall at the upper right; art critic A. Basler seems to be looking straight at it. See *De Chirico*, edited by W. Rubin, The Museum of Modern Art, New York, 1982, p. 21.

³⁵ At the Národní National Gallery in Prague, the work goes by the title Still life in Artist's Studio (Metaphysical Interior).

²⁷ See G. de Chirico, presentation of Giorgio Morandi for the exhibition *Fiorentina Primaverile* April 8 – July 31, 1922. The text is reproduced in *La pittura metafisica*, cit., p. 187.

²⁸ See Commedia dell'arte moderna, cit., p. 67.

³⁹ Translation of a manuscript written by de Chirico in the Parisian period 1911-15 previously part of the collection of P. Eluard; published in J. Thrall Soby, *Giorgio de Chirico*, The Museum of Modern Art, New York, 1955, p. 244. The text is reproduced in *La pittura metafisica*, cit., p. 96.

analysis are of prime importance. These structures constitute genuine cardinal points that make it possible to navigate the image as if it were a geographic map, while tracing the inner workings of perception itself. Employing these lines in an intuitive analysis allows one to gain access to the inner workings of the artist's thought process. When de Chirico says that technique has no role in this, he is referring to the quality of depth within the image that he offers us, where the dimensions and lines carry within themselves forms of the eternal and the infinite. The fixed lines in the work are so in two ways: firstly in that they are bound to the edges of the canvas (the corners, sides, horizontal and vertical medial axes) and secondly – as stated by de Chirico – in that they are separate from chance, therefore fixed within space-time, called *existence* in general and *destiny* in the specific. And in this case, the specific destiny of the artist Giorgio de Chirico.

Reprise of the Theme

Over the extended period of time in which he created art, de Chirico took up certain themes of his all over again. To these themes he introduced new elements that vary, not only over the years, but also within his artistic thought process. The *Italian Piazza*, the Mannequin and the *Ferrara Interior* are themes that contain images and forms that continue to flow from his creative source. The repetition of these themes creates a sort of temporal geography in which important relationships are highlighted within each of the themes, as well as de Chirico's very personal concept of artistic production.³⁰

A systematic and thorough study regarding the repetition of themes carried out by de Chirico over time has not, as yet, been undertaken. However, the research of an American scholar, Paul Winthrop Lauf, has laid down an initial "map" concerning the many themes developed by de Chirico over the years.³¹ Lauf observes that from his first Metaphysical period from 1911 to 1918, de Chirico executed a great number of repetitions, some of which are identical to the original work and others which have iconographic and stylistic variations. There are other paintings from this period that the artist never repeated and still others that he repeated only a few times and did so after many years. *Les Jouets du Prince*, painted in 1915, is an image that de Chirico took up again in his later years. Four variations of this theme are known and are dated respectively: 1950; 1960; 1972; 1973.³² It seems that *Les Jouets Défendus*, the other painting studied in this analysis, is a work that the artist never repeated.

It is known that de Chirico, on a number of occasions, pre-dated some of his works. Consequently, we can not be entirely sure that the date that appears beside his signature on certain paintings is exact. It is probable that de Chirico took the *Les Jouets du Prince* theme up again at the beginning of the 1970s and that the paintings executed at the time were then dated according to criteria other than

³⁰ See J. de Sanna regarding the repetition of themes, in Mysteries surrounding de Chirico's Signature in «Metafisica» 3-4, cit., p. 362.

³¹ See. P. W. Lauf, *Giorgio de Chirico: The Father of Metaphysical Art* in which a systematic scheme of the themes and the dates of the repetitions carried out by the artist constitutes a precious source of reference. The second part of this publication presents an extensive biography of the English language sources regarding de Chirico that lists over 575 articles including, books, monographs, exhibition catalogues and a great number of periodicals from 1924 to 1990. UMI, Ann Arbor, Michigan, 1990.

³² Images of all five paintings are found on pp. 118-119 of this periodical. The paintings *I giocattoli del principe*, 1960 and *L'anniversario del principe*, 1973 are part of the collection of the Giorgio and Isa de Chirico Foundation. Other two versions of the theme, *La capanna del re* dated 1950 and *I giocattoli del piccolo principe*, 1972 are filed in the Foundation archives.

the actual date of execution. Such reasoning is certainly appropriate for the painting dated 1950 and is a hypothesis regarding the painting dated 1960. The physical dimensions of the paintings are, on the other hand, an aspect with which it is much easier to establish some certainty regarding the artist's modus operandi. All four of the remakes are of the same height as the original painting of 1915: 55.5 cm. The fact that the height is the same in all four of the later versions of this theme is a further indication of the importance that de Chirico attributes to the format and the frame in which the image must establish itself. It is interesting to note that the artist based this repetition of theme on a painting that he handed over to his dealer as soon as it was finished. After a great number of years he took the theme up again and executed it with the same vertical measurement. From the original painting, which measures 55.5 x 25.9 cm, the width of the later versions increases by approximately 10 cm in the second, third and fourth versions (55.5 x 35.5 cm) and by 20 cm in the fifth version $(55.5 \times 46 \text{ cm})^{33}$ Three of the remakes have titles that refer to the title of the original painting³⁴: I giocattoli del principe (The Playthings of the Prince) (1960); I giocattoli del piccolo principe (The Playthings of the Young Prince) (1972); L'anniversario del principe (The Anniversary of the Prince) (1973). But the painting dated 1950 has a rather strange title: La capanna del re (The King's hut). The research method used in this analysis is based on careful observation, geometric verifications, biographical and historical research on the artist, as well as deductive reasoning. With these later variations of the theme, we find ourselves with a number of additional facts and several new enigmas. The teepee, the Renaissance-style building and the central plane are the principal elements in all five versions. In the remakes, a group of strange coloured objects, such as striped geometric shapes and sticks are placed around the tent. They are the drawing instruments, the squares and rulers from the Ferrara Interiors. The instruments are similar throughout the different paintings, although their disposition varies. However, the objects in the painting of 1950 are positioned the same way as those in the painting of 1973. In comparison to Les Jouets du Prince of 1915, the teepee in the four later paintings loses the decorative red band wrapped around the tent near the star as well as the black lines on its facade. The enigmatic "right-hand side" of the tent with its double cross persists, as well as the shaded left side. The red stripe at the base of the teepee is missing even though the zigzag line bordering it is traced. The writing above the star on the facade is no longer present. The sky has taken on a more natural tone with the colour fading towards the horizon. The spiral-shaped sugar stick in the painting of 1915 has become a curved object, which seems to be made of plaster or painted wood. In all of the later versions, the building hosts statues in its niche.

Let us divide the analysis in two parts. We will begin by examining the second painting *The King's hut* (1950) with the fourth *The Playthings of the Young Prince* (1972) as these two works are very similar. The only difference between them is the position of the building in the background and the arrangement of the objects in the foreground. The teepee is almost identical, in fact, when the two

³⁹ Upon examination, an interesting detail was discovered in *L'anniversario del principe* of 1973, the fifth and widest (46 cm) painting in the series: at exactly 35.5 cm from the left-hand margin, a vertical line drawn on the canvas is visible through the paint. This line runs from the painting's base up through the yellow apple and the bunch of grapes, through the rectangular openings on the building's facade and intersects the tip of the pediment. This seems to be a technical reference to the three remakes dated 1950, 1960 and 1972, all of which measure 35.5 cm in width.
³⁴ All four later versions of *Les Jouets de Prince* were given Italian titles.

images are superimposed, the lines that define the polygonal shape of the teepee correspond perfectly. De Chirico presumably traced this form from one image to execute the other one. In the painting dated 1950, the Renaissance building resembles the one in the original painting of 1915, whilst in the 1972 version the building (which has an arcade) is no longer positioned frontally, but is turned perspectively to the right. Its position creates a greater sense of depth in the image, and increases the spatial tension between the building and the teepee. The quality of the execution in the 1972 painting is clear and pristine. In the 1950 version, the objects in the foreground are executed with less precision; in this painting, a shadow enters the scene from the right, as in the final version of 1973. We will now take the other three paintings into consideration: the first, Les Jouets du Prince (1915), the third, The Playthings of the Prince (1960) and the final version, The Anniversary of the Prince (1973). The painting dated 1960 is oil on cardboard and is executed with a fluid and indefinite manner. The paint is transparent and the brush strokes clearly visible. The colour is earthy and toned-down. It looks as if it was executed quickly, like a preparatory sketch. It is the only painting in which the teepee is presented in a different position. Here, the teepee is small and moved further back toward the right and no longer occupies a dominant position. Beside it, a large triangle divides the compositional space in two. A symbol which recurs throughout the artist's work is inscribed on it. The last of the remakes, The Anniversary of the Prince of 1973, is painted with precise lines and areas of colour that are well defined. Apples and grapes are introduced as a reference to nature. The painting manifests solid and luminous space. Its lines are well defined, and the colour cheerful and bright. Les Jouets du Prince of 1915, as seen in the first part of this analysis, seems set in the darkness of the cosmos, whereas The Anniversary of the Prince (1973) presents itself under the bright light of high noon. If it wasn't for the 13 years that apparently separates the 1960 version and the 1973 version, one would presume that the painting of 1960 was a preliminary study for the grand finale of *The Anniversary of the Prince* in 1973. The dates of these three works are significant. De Chirico painted Les Jouets du Prince in 1915 when he was 27 years old. The date of the third version of this theme, The Playthings of the Prince 1960, corresponds to his age of 72 years. He undertook the last remake, The Anniversary of the Prince in 1973 when he was 85 years old.35 Between Les Jouets du Prince of 1915 and the final version of 1973 there is an interval of 58 years. These numbers form a precise symmetrical order. De Chirico painted the first painting when he was 27 and the third at 72 years of age: 27 -72; 58 years go by between the original painting and the final version, which he paints when he's 85 years old: 58 - 85. The temporal relationship that exists between these paintings is closely related to de Chirico's life. The method of research devised by Jole de Sanna and based on geometry, has brought to light impor-

Ine method of research devised by Jole de Sanna and based on geometry, has brought to light important spatial systems in the works executed during the years of 1911 and 1915. The application of this method to works of other periods, such as that of the *Ferrara Interior*, following immediately after, has already produced interesting results. Employing this method of analysis to paintings executed after a great number of years opens a further area of investigation, which can be useful to understand if the geometric set-up of an original work remains a fundamental aspect in the recreation of a

³⁵ The same year the artist created the Mysterious Baths Fountain in The Sempione Park in Milan.

certain image after many years. A structural analysis of the four successive versions of *Les Jouets du Prince* has revealed similarities with the work of 1915. In all four of the remakes, it turns out that the Indian teepee is composed of lines that converge on the upper margin of the canvas (figs. 23-26). The only painting in which this structure differs is *The Playthings of the Prince* of 1960, where the big triangle in the centre is positioned in a way that its left side converges with the enigmatic "right-hand side" of the teepee, on the upper margin of the canvas. This is the only one of the four versions in which the geometric midpoint of the painting is centred on a specific element: the spiral shaped stick, positioned between the teepee and the big triangle (fig. 26).

In the final two versions of this thematic series, *The Playthings of the Young Prince* and *The Anniversary of the Prince*, the very tools of the painter hold the image in place. The objects in the foreground of the image – the drawing instruments, the squares and rulers from the *Ferrara Interiors* – are placed in such a way as to connect with various cardinal points of the canvas such as the upper and lower corners, and other important points (figs. 27-28). In the original painting of 1915 the area in the foreground is the seat of the unknown, of that which has not, as yet, been discovered. In the golden years of his artistic career, in two bright and well defined works, the artist substitutes this dark and indefinite area with the colourful and precise tools of his trade.

The oddest element is always the one to catch the eve. The Playthings of the Prince of 1960, with its summary finish, seems as if it were painted in a couple of hours. This painting holds the central position in the sequence established by these five paintings. Two very similar paintings, The King's Hut of 1950 and The Playthings of the Young Prince of 1972, are temporally positioned either side of The Playthings of the Prince. The other two paintings, Les Jouets du Prince of 1915 and the final version The Anniversary of the Prince of 1973, hold opposite positions on the temporal arch determined by the thematic series. Executed at the beginning of the artist's career, the original work is set in an atmosphere of night, while the final version painted in his golden years is set in the noonday sun. The great relevance of the painting of 1960 is neither its painterly qualities, nor its iconography – even if the iconography is, in fact, quite interesting for the diversity of objects present and the large triangle at the centre of the composition –, but rather its date. It is true that from what we know about the way de Chirico dated his work at times, it is difficult to establish if this painting was in fact executed in 1960. I believe that this date has another connotation. This date takes us back - exactly 2500 years - to 540 B.C., the year in which our prince Heraclitus was born. And thus, 1960 is the 2500^{th} anniversary of this event. Therefore, with the final version of the series, we shall celebrate *The* Anniversary of the Prince. The painting resounds. The colours shine. The space is dilated and open. The objects ready themselves, opening up in the shape of a fan. The banquet is served. It consists of apples and grapes painted with a more naturalistic touch: Nature celebrates! The mysterious "righthand side" of the teepee finally reveals its true function: it is a metronome, while the spiral-shaped sticks declare themselves as treble clefs: let the concert begin!³⁶ We shall join the guests already in attendance: the philosophers looking upon the scene from the niche in the building.

³⁶ I would like to thank Pierangelo Sequeri for the identification of these two elements.

Here, at the heart of the celebration, amid the spaces and colours of painting, we come across a mechanical devise that marks time by producing a regular pulse in a rhythmic cadence. Present in all five paintings, the metronome has "silently" flanked the teepee throughout the itinerary traced by the five thematic works. We hear it only now, as it inserts a linear tempo by means of a regular right-left, right-left movement: an oscillation of opposites that would certainly please Heraclitus. The tempo is usually indicated at the beginning of a musical piece, here, the two treble clefs announce it at the end, after 58 years. In *Les Jouets du Prince* of 1915, the geometric space is wound up like the spiral of a watch. And here, we come upon the grand finale of its ultimate extension. Time regulates the function of space, sending it forward – and at times – even backwards.

Origin of the Theme

Le Mauvais Génie d'un Roi, 1914 (61 x 50.2 cm)

In 1914 in Paris, de Chirico executed a number of paintings on a toy theme, works in which the toy carries the connotation of "mysterious object". In these paintings, the pictorial space is divided in two by a vertical panel placed diagonally and strange multicoloured objects are positioned on a central plane.³⁷ Compared to the architectural elements in the background, these objects look close at hand and small, like toys. *Le Mauvais Génie d'un Roi (The Evil Genius of a King)* is part of this group and one of the toys depicted in it attracts our attention in particular.³⁸ Sitting on an upward tilting plane, is a coloured object that has the same shape as the Indian teepee in *Les Jouets du Prince*, that is, the impossible form of a truncated pyramid, the base of which is hexagonal and the tip, seemingly square. The reference to a king in the title also catches our attention. These two elements are worthy of investigation with regard to a possible relationship with the paintings examined in this study. If the analysis undertaken thus far has managed to identify the prince as Heraclitus of Ephesus, the identity of a king will now be revealed: a king "orchestra director", who knows how to keep time.

In the painting *The Evil Genius of a King*, the central plane stretches upward towards the top right area of the composition. By lengthening the plane's margins, we see that the lines converge upon a vanishing point outside the painting, at a point that is inline with the painting's upper margin. The plane's upward bearing is accentuated by the various objects sitting on it, including a white arrow, all of which are directed toward the point where the top of the plane intersects the right-hand side of the painting (fig. 29). A line drawn from the bottom left-hand corner of the painting also connects to this point, passing on its way through the centre of the toy's base, which lies on the horizontal medial axis of the painting. The large red panel that divides the image in two can be considered the pendulum of a clock, a mechanism that keeps time with constant, oscillating movements. The pendulum seems to be at the highest point of its arched movement and appears to push, or one could even say encourage, the objects on their upward march to the top of the plane. We too shall proceed, propelled and encouraged by this temporal device of the artist, as we follow playfully along his train of thought.

³⁷ Composizione metafisica con giocattoli; La maladie du général; Le caserme dei marinai e Le mauvais génie d'un roi.

³⁸ I would like to thank Gianluca Fusco for having indicated this painting as relevant to this study.

The Evil Genius of a King is the blueprint of a future plan. In the spring of 1914, in the full swing of painting toys, the artist seems to have made calculations concerning not only the geometric set-up of his compositions but also with regard to time. Positioned firmly within the parentheses of past and future, de Chirico looks both ways. In the past he sees his much loved philosopher Heraclitus of Ephesus, and in the future, he envisions the realization of the philosopher's idea in material form, which he will achieve with his two works of 1915 and 1916: Les Jouets du Prince and Les Jouets Défendus, which, as seen in this study exemplify Heraclitus's law of "the unity and complementarity of opposites". The artist also keeps the prince's birth date in mind: 540 B.C. From the geometric groundwork of Metaphysics, it is possible to imagine that de Chirico takes on the challenge of building a "structure to host time". He calculates that in the far-off year 1960, exactly 2500 years will have passed from the birth of Heraclitus and it is possible to imagine that he devised a way to link this event to his work and to his personal history. He calculates that, in 1960, he himself will be 72 years old and so he starts to build... The artist constructs, in paint, a geometric solid that functions as a "model of time", which is the principal toy in this composition. Its shape, which would be impossible to realize in three-dimensional form, is composed of a base with 6 sides, a central section divided into three sections, and a tip that appears to have only 4 sides. The result obtained by the multiplication of these numbers: $6 \times 4 \times 3$ is 72. In Les Jouets du Prince, painted the following year, this same geometric shape is used to construct the Indian teepee that acts as a spinning top "of time" as it traces its circular path in space. In 1915, when de Chirico set himself to work at this task, he was 27 years old, a number symmetrical to 72. The toy in question has been seen as an "upturned tower" that shows its base.³⁹ In the Italian Piazza, the tower is always placed in the background of the scene, behind a wall and at any rate, over and beyond the curvature of the horizon. We are never permitted to see its base. The reason for this is that the base of the tower marks a future date, a date which our consciousness is not allowed knowledge of. In addition to its tower shape, this object, with two little balls as feet and a ball for a head with two antennas, looks like a snail. The snail, a slow moving creature, serves as a metaphor for the quantity of time that will have to pass before "the evil genius of a king" will be achieved. It is a diabolic, complex plan, one that our painter-king considers impossible to decipher. The artist invests 58 years to complete the entire arc of this theme, from the two works Les Jouets du Prince and Les Jouets Défendus that exemplify Heraclitus's concept, and the reprise of the theme with the four late works that establish the Indian teepee as an icon of cyclical and measured time. De Chirico marks the 2500 anniversary of Heraclitus's birth in 1960, with the central painting of the series, The Playthings of the Prince, and brings the series to a close in 1973 with The Anniversary of the Prince, a true celebration of colour and form. And so, the king's genius is finally revealed, not very evil after all, but rather, extremely ingenious as well as very playful. With the strange title of the 1950 version, The King's Hut, the artist enacts the appropriation of one of his icons: the king's hut is the Indian teepee: instrument of the painter-king, capable of "carrying time" not only within the formal confines of the painting, but literally across the artist's life. In 1960, de Chirico painted another version of The Evil Genius of a King, entitled L'amore del mondo

³⁹ Cf. J. de Sanna in Metaphysical Mathematics in «Metafisica» 3-4, p. 176.

(The Love of the World) in which a troubadour appears in the window on the left-hand side of the composition. This remake is slightly bigger than the original work: The Evil Genius of a King measures 61 x 50.2 cm and The Love of the World, 73 x 60 cm. However, the two paintings have the same proportional ratio (1.21) and an identical geometric set-up (fig. 30). The fact that the new version has the same geometric structure as the original work of 1914, confirms the artist's clear will to use the same scheme in the reelaboration of a specific image. Once again, the period of time between the original painting and the remake is more than fifty years, as seen in the correspondences found in the four remakes of the Les Jouets du Prince theme. It is quite strange how the very dimensions of The Love of the World⁴⁰ (73 x 60 cm) bring to mind the dates of the most significant remakes of this theme: The Anniversary of the Prince, 1973 e The *Playthings of the Prince*, 1960. In addition the image's geometric construction, does de Chirico attempt to link even time to the margins of the painting? And could the troubadour in the window on the left be an indication that here, something has been found? The research method employed in this study is based on careful observation, geometric verification, biographical and historical research on the artist's work and life, as well as deductive reasoning. In the carrying out of this study, the instruments guiding the research have become more clearly defined: vision, geometry and logic. Vision is applied in a careful exercise of observation across the entire field of the image. Geometry serves as a means of exploration, by following the lines, volumes and relationships within the image, thus plotting the lines of latitude and longitude of its territory. Logic functions like a system of scales in which that which has weight remains, and that which proves irrelevant, is left aside. On these scales opposites are considered equal and find harmony in recognizing their contrary. These are finely tuned instruments, ready for new departures. Metaphysics, or that which is "beyond" the visible appearance of things, is almost indescribable inasmuch as it deals with the territory of the unknown. The structure within de Chirico's paintings is a promontory poised in this direction. In a text of 1918 entitled Zeusi l'esploratoreⁱ¹, the artist prepares for new departures:

"The world is full of demons" said Heraclitus of Ephesus, walking in the shade of the portico at the gravid hour of high noon, while in the dry fold of the Asian gulf, water boiled under the meridian libeccio.

It is necessary to discover the demon in all things. [...]

And the new annunciatory paintings have arisen.

Like autumn fruit, we are now ripe for the new Metaphysics.

Strong winds bear down from distant disquieting seas.

Let our call reach the populous cities of faraway continents.

We must not become fat, not even in the happiness of our new creations. We are explorers ready for new departures.

Under roofs echoing with metallic clanging, the quadrants are struck at the mark of release.

And in the signal boxes, the bells ring out.

It's time ... "Ladies and gentlemen, all aboard!"

⁴⁰ L'amore del mondo is dated "started in 1960, it was finished in 1969". See Catalogo Generale Giorgio de Chirico vol. IV (works from 1951-1971) edited by C. Bruni Sakraischik, Electa, Milan, 1971, n. 617.

⁴¹ The article was published in -Valori plastici-, Rome, year I, November 1918, p. 10; also published in *Il meccanismo del pensiero*, cit., pp. 81-82; and later in *Commedia dell'arte moderna*, cit., pp. 52-53.