

## A revolutionary Monument: the Tatlin Tower

**Prof. Vitor Murtinho** University of Coimbra

It is not about vague and general impressions; it's about a material participation. The dreamer no longer dreams images, only material<sup>77</sup>

Gaston Bachelard\*

One of the most iconic objects of architecture in iron is probably designated Monument to the *Third International* designed by the Russian architect Vladimir Tatlin (1885-1953). This peculiar structure – which was never built - had the intention of paying tribute to the work done by the *Communist International*<sup>1</sup>. This organization advocated the implementation of a singleparty regime following the 1917 Revolution and the overthrow of the imperial autocracy ruled by Russia until then. The construction of a large monumental building, was then an important strategic plan, having been chosen for its location the city of Petrograd.<sup>2</sup>

This visionary work, with a great visual and aesthetic impact, would have to have a monumental aspect and, at the same time, be able to function as the headquarters of the *Comintern*. In the genesis of this proposal was a summary of the designated *fine arts* in the classic sense of the term, covering architecture, painting and sculpture. What emerges in the set is a simple development structure, but complex looking, intending to create a new type of monument, which

<sup>1</sup> This organization was also known by the abbreviated form of *Comintern*, had as its founder Vladimir Lenin (1870-1924) and worked actively from 1919 to 1943, when it was dissolved by Stalin. This movement intended to bring together the various Communist parties and had as its main purpose the end of capitalism and the abolition of classes.

<sup>2</sup> This city, the second largest in Russia, was until 1918 the capital of the Russian Empire, and was then *Perestroika*. would bring together a creative appearance and be functional.

Despite being essentially a painter, Tatlin had a vision of art less aesthetic or contemplative and more seen as a dynamic process achieved through work, using a diverse type of materials and techniques. This principle will format what is usually called Constructivism. This movement with a huge spread in Russian space, in genesis took the bases of its influence from Cubism<sup>3</sup> and Futurism<sup>4</sup>, chains that have strongly marked the destiny of art in the early 20th century. In reality the isolation that marked the Soviet Union due to its politics, transformed the Constructivism into a more limited artistic movement in its area of influence. This principle of looking at art in a pragmatic perspective, where each material leads to the final shape - less worried about intelective utterances - turned out to fit perfectly in the strategies and in the ideals of the Soviet revolution.

Mass production, due to the potential allowed by mechanization and continuous production, was certainly crucial for the success of the new Russian social model, since this change has had in its genesis the bankrupcy of craft practices and its replacement by activities where the collective and technological exploitation are always in the center of action. One cannot ignore that in the USSR, in the context of the October Revolution of 1917<sup>5</sup>, we have an area widely battered by war and an unstable region due to a civil war that would last until 1921, giving then way to the creation of a Soviet State.

<sup>5</sup> The Bolshevik revolution of October 1917 is one of the great political events of the 20th century, in what has to do with the seizure of power by the proletariat, the workers movement and implantation of communism in Eastern European footprint.

<sup>\*</sup> Quote extracted from A Água e os Sonhos, Livraria Martins Fontes Editora, São Paulo, 1989, p. 67.

<sup>&</sup>lt;sup>3</sup> Cubism was an artistic movement that later spread to the literary field, whose major heralds were Georges Braque and Pablo Picasso. The aim of its proponents was the exploitation of representations through geometrized forms with translation of movement, expressing the fourth dimension. In the field of architecture, this effect is exploited through the use of transparent surfaces and volumes with planar surfaces. The Picasso, *Les demoiselles d'Avignon*, painted in 1907, is considered by critics the first piece of art experiencing the Cubist language.

<sup>&</sup>lt;sup>4</sup> Futurism was an artistic and literary movement whose formal beginning happened with the publication of a manifest (Futurist Manifest) by the Italian poet Marinetti in 1909. This chain somehow disowned the past and defended a huge belief in the future and the technological potential; in the field of architecture, it manifests itself through some inspiration in science fiction, with situations suggesting speed and movement, intending to give an idea of dynamism and optimism. One of its best-known interlocutors was Antonio Sant'Elia (1888-1916) with its numerous designs for a *Città Nuova*.

The monument idealized by Tatlin for the *Third International* became a unachievable construction, especially for that time, that place and the technology available. If in the field of painting, any initiative was more individualizable and, therefore, more easily implementable, in architecture, which was a more collective art, the process of implementation was much more complex and interdependent. Because of the dichotomy of these two artistic fields, El Lissitzky considered architecture a methodical practice promoted by acts of diligence and research, while for the practice of painting it was essential to have talent.<sup>6</sup> And, let's face it, as El Lissitzky refers, in this particular case of *The monument of the Third International*, it was mostly an ideation, more of a painter than an architect.<sup>7</sup>

In the utopian field, the proposal of Tatlin embodies a huge fresh aesthetics and an indisputable belief in a very promising future, leveraged by the idea that art and architecture, can shape thoughts and educate society. However the harshness with which the regime

- <sup>6</sup> El Lissitzky, Russia: An Architecture for World Revolution (original edition of 1930), MIT Press, 3<sup>8</sup> edição 1989, p. 28.
- <sup>1</sup> El Lissitzky, "Nuova arte russa" in Lisitskij-Küppers, Sophie, El Lisitskij. Pittore architetto tipografo fotografo, Editori Riuniti, Roma, 1967, p. 333.

was evolving and the successive trends for intelectual repression, with concrete actions of persecution and punishment, made this movement gradually lose freshness and creativity, also leading important Russian personalities to emigrate to the West, favoring in many circumstances and in particular context a new force for artistic production in other parts of the world.<sup>8</sup> One of those authors who emigrated was Wassily Kandinsky, an artist who taught at the Bauhaus and that was connected to the creation of abstraction in fine arts; two other prominent authors who also emigrated were the Antoine brothers (1886-1962) and Neemia Pevsner (1890-1977), important sculptors in the constructivist movement, among many other personalities.<sup>9</sup>

The constructivist architecture established some promiscuity with engineering, to the extent that the handlers of artifacts should use structural methods and new materials so that in a convergent mode they could solve the utilitarian needs that were underlying the

- <sup>8</sup> Janson, H. W., História da Arte, 4th Edition, Fundação Calouste Gulbenkian, Lisboa, 1989, pp. 738-739.
- In the case of Neemia or Naum Neemia Pevsner This artist has opted to change his artistic name to Naum Gabo, from which he was known, due to the confusion that it created with his brothers.



## architecture



Figure 1. Pablo Picasso, Les Demoiselles d'Avignon, 1907, Museum of Modern Art, New York.



Figure 2. Leonardo da Vinci., interior stairs of the Castle of Chambord, Loir-et-Cher, France.



**Figure 3**. Minaret of the Great Mosque of Samarra, Iraq, built in the 19th century.

program of any building. The new Russian architecture intended to be something that breaking up with the past. More than connecting with previous styles or with the production made until then, as a revolutionary movement, it had the aim of moving to the urban space the social dynamics that, admissably, signalled a beginning, the creation of a new world. For this purpose, it is explored and encouraged the relationship between the various forms of art, having a direct contagion of them all over architecture. In this context the artistic practice used all the instruments that were at its disposal by meticulous analyses, numerous trials, making the apology that at that time the art belongs to science. In that purpose, all the senses are overrated as means of excellence for the perception of the world and the geometry as knowledge and practice oriented for the rational and orderly translation of what is observed.<sup>10</sup> But, what the project of Tatlin offers, is the possibility of a complicity between the technological processes and industrial production. A reality that at the time is still not possible to implement, but that conceived potential gives people hope so convincing and credible that leads to believe that this proposal is a herald of the entrepreneurial capacity of that country with that politics.

The monumental proposal, called *Tatlin Tower*, is part of the strategy of Lenin to end the memorials to the former regime of the Czars and replace them with new monuments that exalted the revolution and its main actors. Even before Tatlin had drawn the proposal for the *Monument of the Third International*, had he already the responsibility to select which monuments should be replaced and, at the same time, played a major role in leading the renovation of museums, in an effort to place of Russia in the course of the modern and contemporary art. For that, Tatlin led some major reforms in artistic education in Moscow and in Petrogado, and was also appointed Director of the Department of fine arts of Moscow (IZO).11 Until the date of the proposal for the monument of the Comintern, Tatlin was mostly well known for his contribution in the fields of painting and of the experiments, so little is known of his activity in the sciences of space manipulation. For this reason, in the case of the design of the monument to The Third International, in addition to the methodological and technological issues it is presented as a generic and intuitive idea where the materials used - especially steel and glass - provide a little detailed base of the building.<sup>12</sup> Knowing that Tatlin did not have a very well enough specialized training for in that context to develop in depth that proposal, it eventually asserted itself as a kind of utopian manifest to create a feeling of hope and future.

The Tatlin monument intends to establish a credible bridge between the artistic values and technological components. Here, knowledge, skill and art, tend to produce a single object, unparalleled, original. Constructivists' work is used as an example of inauguration of a new era, a time in which steel and glass are considered almost as regime materials, generators of a fervent belief in the future and collective capabilities, which are the driving force that will enable the Foundation of all the arts, the construction of another architecture. And, this purpose will be the consummation of a simple idea, understanding that all forms are the result of construction.<sup>13</sup> And, the process of changing the type of artistic production and of mentality, rather than an abrupt or momentary transformation, corresponds to a long and painful gait, made of advances and setbacks, but which will always go through a path of determination and

20

<sup>&</sup>lt;sup>11</sup> That nomination occurred in April, 1918 and was made by Anatoli Lunacharsky, responsible for *Narkompros*, equal to Ministery of Education. See Lynton, Norbert, *Tatlin's Tower, Monument to Revolution*, Yale University Press, New Haven, 2009, p. 52 e p. 64.

<sup>&</sup>lt;sup>12</sup> Punin, Nicolau, "The Monument to the Third International" (original version of 1920) in Art in Theory 1900-1990. An Anthology of Chaging Ideas, edited by Charles Harrison e Paul Wood, Blackwell publishers, Padstow, Inglaterra, 1999, p. 312.

<sup>&</sup>lt;sup>13</sup> El Lissitzky, Russia: An Architecture for World Revolution, pp. 29-30.

## architecture

insistence on artistic transformations, optimism, belief in a better and more promising future. The recent modern ideals claimed for a society managed by principles of freedom and belief in the ability of transforming society. In that effervescent context, a monument such as Tatlin, was clearly a transforming proposal of a city, it was a very striking and distinctive building in urban areas characterized by low-altitude constructions. This particular monument was intended to be the characterisitic of the new political and social experiences that were being tried. The program of that building was the synthesis of these experiences and the states of mind that were proclaimed. That monumental colossus - kind of Trojan horse - intended to conquer a city spiritually and politically and then extend its influence to an even wider territory. If in the case of Troy, it was a war machine for subjugation of a people, in the case of the Tower of Tatlin, the ploy was to spread to every corner of the world the information that made the apologia of an ideology. It was essentially a banner that, through the press and radio, would give news of a better life for a people oppressed and restricted from many of their rights until then. Instead of imposing a model by force of weapons, this town experimented the acceptance of a philosophy of life through the spirit. This faith, this desire was more like

an utopia, as ideal as the one Thomas Morus imagined four centuries before and that had influenced, in the early 19th century, the so-called utopian Socialists, who fought for the construction of an egalitarian society. And certainly a text that was popular, in terms of a model for organization of a society, *the Sun City*, of Thomas Campanella, who describing a community philosophy provided a preview equal to the egalitarian Communist ideology, and that was known to be a text that had a strong doctrinal influence to Lenin.<sup>14</sup>

The aforementioned appointment of Tatlin for Director of IZO was likely one of the reasons, for being named in 1919 as the person responsible for developing the project of the monument for The Third International. The descriptions of the monument are not very detailed and the number of designs is limited, but from what we know, it was a building about 400 m high and with a peripheral volumetry that resembled a conical trunk with skewed axis.<sup>15</sup> This appearance was virtual

## Improving safety, quality and performance

- Conformity Assessment with European Directives
- ASME Authorised Inspection Agency
- Pressure Equipment Certification

- Welding Procedures and Welders Certification
- Certification of Quality Systems for Welding
- Standard and tailored training courses





Working together for a safer world

<sup>&</sup>lt;sup>14</sup> Milner, John, Vladimir Tatlin and the Russian Avan-garde, Yale University Press, Londres, 1983, pp. 176-178.

<sup>&</sup>lt;sup>15</sup> This question of time is important because it becomes clear that one of the goals of Tatlin's Tower was to be the tallest building in the world. The construction that had this status was the Eiffel Tower with its about 300m height (reaching 324m, including antenna) and that was until 1931 the tallest building in the world, having been dethroned, then by the Empire State Building in New York.





**Figure 4**. Athanasius Kircher, Tower of Babel, Amesterdam, 1679.

**Figure 5.** Vladimir Tatlin, tower of the monument of the Third International

as outer shape was defined by a steel structure, of double helical development which accommodated to the conceptual volumetry of the solid referred above, resembling a *snake of steel*. This double spiral, in some ways recalls the symmetric Spiral ladder of cylindrical development that Leonardo da Vinci designed for the Castle of Chambord.<sup>16</sup> Historically, until this period there aren't many constructions that took advantage of helical surfaces. But, there are some that most likely will have come to the knowledge of Tatlin and that in addition to a hypothetical influence of Leonardo, might have been considered. One that can more directly be compared to the Comintern headquarters is the Minaret of the Great Mosque of Samarra, Iraqi city situated on the banks of the Tigris River.<sup>17</sup> This minaret presents a form with a single conical spiral, which allows the pedestrian path to the top through a succession of rhythmic steps and has some formal similarities with the ancient ziggurats, including a structure like the biblical Tower of Babel. This tower, referred to in the old testament<sup>18</sup>, was many times illustrated in different historic times and, for example, in the case of Athanasius Kircher<sup>19</sup> appears drawn with a spiral development that also reminds us of the Tower of Tatlin.

The two spirals of the Monument of the *Comintern* appear to have a similar design, just in opposite support points, at the base of the structure whose maximum contour aggregates these shapes by drawing a circle. Still in the interior structure, two arcs situated in extreme points of the base stood out, which is speculated that they allow to overcome the Neva riverbed, admitting that the deployment of the tower

<sup>16</sup> It is known the appreciation and admiration that Tatlin had for Leonardo. If this references between the French Castle of Chambord and the Tower, since the similarity between some of Leonardo's studies on flying machines and the version of Letalin that Tallinn has developed for the Russian Aviation during the thirties of the last century. About Leonardo/ Tatlin view Lynton, Norbert, Tatlin's Tower, Monument to Revolution, pp. 193-202 and 128.

- <sup>17</sup> Milner, John, Vladimir Tatlin and the Russian Avan-garde, p. 156.
- <sup>18</sup> Bíblia Sagrada, Génesis, Livro 11, Difusora Bíblica, Lisboa, 2003, pp. 37-38.
- <sup>19</sup> See Lynton, Norbert, Tatlin's Tower, Monument to Revolution, p. 83.

was made covering both banks of the watercourse.<sup>20</sup> Inside the helical structure there were provided three kinetic volumes, individualized, but animated by the same mechanical element: a cube, a pyramid and a cylinder, hierarchically positioned from bottom to top.<sup>21</sup>

Referring the first to the concentration of legislative activities, the second to the executive activities and the third to informational initiatives. We can imagine the possible technological and structural complexity that this building should have to function as it was conceived. In this case, the proposal was almost an experiment that was restricted to its materialization in a model on a scale of about 1/80, approximately five meters high. Hence it was natural that once passed the biggest heat of the revolution, this colossus would quickly enter the field of artistic heritage and forgotten as a radical and feasible building. The study of the mechanical operation of the building must never have been seriously made. Those technological tools would hardly be available to the capabilities of a country that at that time mostly copied the West instead of inventing new instruments. Even with an issue as simple as the illustration of the movement of the model exhibited in Petrograd and later in Moscow, the animation was made because in its base, in a hidden position there was always a young man moving the lever.<sup>22</sup>

<sup>22</sup> Milner, John, Vladimir Tatlin and the Russian Avan-garde, p. 170.

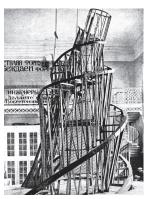


Figure 6. Model of the monument to the Third International during the exhibition in St. Petersburg in 1920.



**Figure 7.** Model of the Monument to the Third International during the exhibition in Moscow in 1920.

22

<sup>&</sup>lt;sup>20</sup> Lynton, Norbert, Tatlin's Tower, Monument to Revolution, pp. 85 e 101-102

<sup>&</sup>lt;sup>21</sup> The graphics and visuals that make it possible to reconstitute the design of the tower are two drawings, corresponding to two elevations and the model made by Tatlin with help of other artists as i. a. Meyerzon, m. p. Vingradov and t. m. Shapiro (see Milner, John, Vladimir Tatlin and the Russian Avan-garde, p. 151). Between the drawings and the model, which was developed later, there are some discrepancies, the most striking fact is that in the drawings the solid the lowest quota refers to a cube while in the model there is a built wide cylinder.

Deciding for the cylinder allowed a better use of available area because in the process of rotation we could take better use of the interior space to the supporting structure as in the case of the cube the side diagonal and which corresponded to the maximum possible projection, could eventually be the size of the diameter of the cylinder.

This monument has become a symbol of the USSR, an identity element of a regime, an artefacto necessarily presented in exhibitions that from that time onwards illustrated those who intended to evoke this revolutionary process. Somehow, still in a strictly symbolic field, the spiral, became the representation that heralded a modern time, a time ruled by a strong will of a proletariat with a pure and transparent conscience.<sup>23</sup> In other words, synthetically speaking, this architecture of spiral helical form, whose development was projected for the skies of St. Petersburg, was after all a steel and glass architecture, true symbol of belief and purity of a revolution. These geometric solids had their volumetry defined by double glazed surfaces, where the interstitial space between them functioned as a vacuum chamber and thus minimizing the thermal losses or gains between outer space and inner space - this solution is similar to what currently constitutes the double skin system, constituting an antecedent of this constructive technique. In the case of the inhabited part of the building, each of the volumes had very different rotational speed from the rest. Thus the cube rotated

<sup>23</sup> Ching, Jarzombek e Prakash, A Global History of Architecture, John Wiley & Sons, Hoboken (USA), 2007, P. 680. at a speed that allowed it to make a full rotation in a year. The pyramid, with irregular shape, with the horizontal base and one of the vertical faces, was animated by a rotational speed that allowed a revolution per month. The cylinder, with vertical axis, being the highest solid, featured a speed corresponding to a full rotation per day. Programmatically, the inhabited part of the monument should meet the needs of the Third International. In the ground part - cube - there would be the parts related to the relationship with the community and with the outside world. That is, spaces for conferences, for international meetings, all of the other spaces required for the functions related to these tasks, and also everything involving legislative purposes. The intermediate body - pyramid - would accommodate the more administrative functions; there would be the areas devoted to the operation of the Comintern, secretariats, committees and executive areas. In the back part. where there was a higher guota - cylinder - would be the areas dedicated to sources and information; in other words, the facilities for the transmission of official information, a newspaper, a telegraph, a radio station, and everything having to do with statements, advertisements, brochures, manifestos, etc. At the back of the building, in the form of the cylinder cover, there







Figure 8. Simplified model during a presentation in



Figure 9. Contemporary model of the Tatlin Tower.



Figure 10. Photomontage with the Monument

existed a spherical cap where there was incorporated, on their axes, a projection screen and from which emerged the antenna of the radio station and their masts. In addition and to connect all these great different bodies, there were developed a set of electric elevators that adjusted to different mechanical rotational speeds facilitated the inteprenetations and ensured the proper functioning of the building.<sup>24</sup>

In some ways, the Tower of Tatlin may remind us of a giant astronomical mechanism, and may even resemble a telescope, giving with this analogy some consistency to the circumstance of Petrograd being at that time an important centre of observations of the sky and having in that same city a vast heritage of Renaissance maps and astronomical devices.<sup>25</sup>

With all this cinematic imaginary that would run clockwise, with this whole existence of curved shapes inducing spiraling movements that projected into the sky, the movement for the liberation of humanity was being represented. For this purpose, and to stress this ideal of liberation, the building in terms of lighting, should be thoroughly assisted by bright light effects, being interesting to imagine the Faerie effect of this set along the banks of the Neva River. The set of steel elements and trusses that together guide and stabilize the suggested helical forms, in addition, a graceful spiral movement, but, given their robust appearance, would refer to a muscular body that resisted determined to the wear imposed by the force of gravity.

Tatlin's Tower is a propagandistic building, animated with scheduled rotation, that hosts spaces dedicated to cultural programs and political persuasion. A persuasion which was very symbolic and representative. In reality, this monument, due to its foundational nature, allowed to purge all figurative references that until then mostly characterized the artifacts of celebration, calling for a more intellectual field, channeling the spirits to feelings, emotional tensions and, especially, to ideals. The

imposing asymmetric structure that would be built in the city of Petrograd, would reach a height that would induce deceptively its dissapearance under the sky. It had some pure and crystalline solids, almost intending - in its set - to function as a big clock, a clock replicating important revolutions, visible or certain, in what had to do with the movements of the Earth or with the cadence of the signs of the zodiac. The rhythmic cycles per day, month and year, given the similarities, it would be as if in that context and in that monument, would occur the absolute time for cosmic effects.

No wonder, therefore, that it is said that along the Neva River, Tatlin tried to idealize a building made of iron, glass and revolution.<sup>26</sup> A revolution marked by different cyclical movements, a social and political revolution that has irredeemably conditioned the further course of history. In this double sense, Tatlin designed a true and genuine revolutionary monument. Is it possible that what he was idealizing was the creation of one of the Wonders of the Modern World, becoming thus imortal and leaving indelible mark of an utopia of an allegorical monument to the Liberation of Humanity?<sup>27</sup>

As a result we would have a monument made of iron and glass, whose air of the revolution would be the intangible glue that would give sustainability to a shape and a volume, a transforming and visionary design for a people.<sup>28</sup>

But, one thing is certain, the recurrent comparison to the Parisian Tower designed by Gustave Eiffel - this one in fact - a previous monument and that become reality.

24

<sup>&</sup>lt;sup>24</sup> Punin, Nicolau, "The Monument to the Third International", pp. 311-312.

<sup>&</sup>lt;sup>25</sup> Milner, John, Vladimir Tatlin and the Russian Avan-garde, p. 154.

<sup>&</sup>lt;sup>26</sup> This idea of these three componentes of the monumento belongs to Viktor Shklovsky in a text published for the time called "The Monument to the Third International (Tatlin's Most Recent Work)" and reproduced in the book of the same author, Knight's Move (1st edition in russian in 1923), Darkey Archive Press, Illinois, 2005, p. 70

<sup>&</sup>lt;sup>27</sup> Among the different names given to refer to Tatlin's monument, one of those names was in fact Monument for the Liberation of Humanity.

<sup>&</sup>lt;sup>28</sup> This idea of the air of the revolution functioning as intangible glue of the project was presented by Boym, Svetlana, in Architecture of the Off-Modern, Princeton Architectural Press, New York, 2008, p. 15.