

## Chapter 7: FUTURISM IN ITALY/ RUSSIAN CONSTRUCTIVISM

### 7.1 FUTURISM IN ITALY

The founder of futuristic ideals in Italy is Fillippo Marinetti (1876-1944). He published a manifesto in 1909 and called for radical transformation in Italian Landscape eg. Paving of the canals of Venice. His ideals pointed towards the end of the traditional setting.

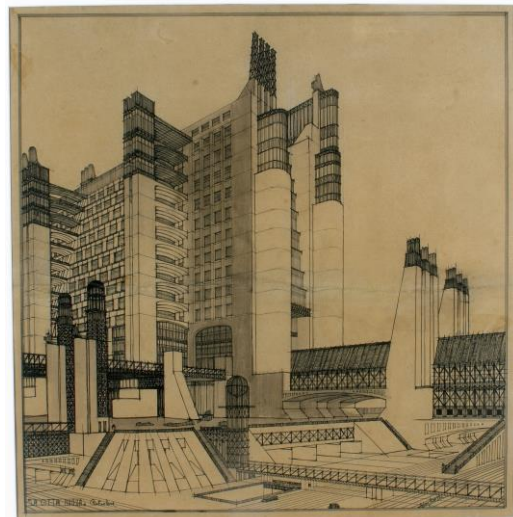
The most influential architect of Italian futurism is Antonio Sant'Elia (1888-1916). He is best known for his “**Citta Nuova**” **New City exhibition of 1914** and publication “**Messagio**”.

“Sant'Elia's designs of the supporting proposals followed the text clearly—visually elements were dynamically executed with the use of ellipses and powerful lines, forms were stretched and extruded, emphasizing the celebration of speed and movement that was to become a recognizable language of Futurist architecture. The proposals also rejected ornament and decoration with a particular bias for an aesthetic of modern living and values of sensibility, themes common in many strands of modernism. This work was first presented as untitled work as part of an exhibition on modernism in May 1914, immediately after which Sant'Elia joined Marinetti, who reviewed the text and published it as a manifesto.” (Evans A, 2016)

#### Characteristics of his Works

Sant'Elia was of the opinion that architecture must find a rational method of design and rid itself of traditions. He proposed that urban slums should be rebuilt, with large hotels railway stations and boulevards and gigantic ports. He also predicted the use of new building methods and industrial materials such as steel and concrete to erect lightweight buildings, but none of his visionary designs were ever built.<sup>1</sup>

- Bold massing without ornamentation
- Verticality and battered or stepped-back walls
- Multiple levels of horizontal circulation
- External elevators
- Exposed power production facilities



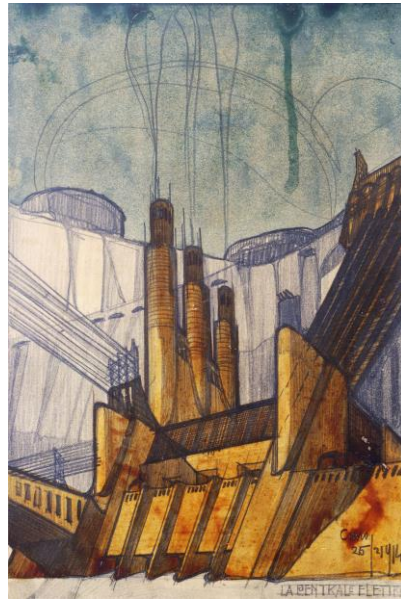
House with external elevators (1914)<sup>2</sup>

<sup>1</sup> Gossel .P ed,2007, The A-Z of Modern Architecture, Futurism, p325

<sup>2</sup> [https://en.wikipedia.org/wiki/Antonio\\_Sant%27Elia#/media/File:Casa\\_Sant'Elia.jpg](https://en.wikipedia.org/wiki/Antonio_Sant%27Elia#/media/File:Casa_Sant'Elia.jpg)

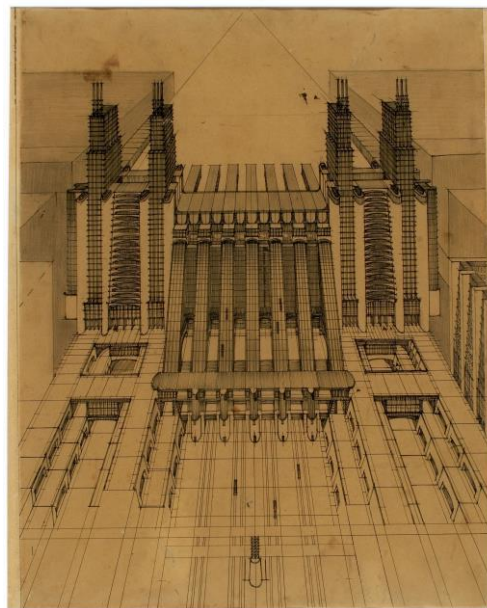
### His Works

- Used dramatic perspective technique
- Proposed designs for airship hangers, apartment blocks, transportation centers, hydroelectric plants and power stations



Power Plant, 1914, (1888- 1916)<sup>3</sup>

The Futurist movement dissolved following the death of Marinetti in 1944. However, the radical ideas exemplified within the Futurist's architectural position continue to influence contemporary architecture, most recently and notably Zaha Hadid's BMW Factory in Leipzig, Germany (2001–2005) and Denton Corker Marshall's Manchester Civil Justice Centre in Manchester, England (2002–2007). (Evans A, 2016)



La Citta Nvoua(1914)<sup>4</sup>

<sup>3</sup> <https://www.rem.routledge.com/propagator/data/img-dc/original/image/power-plant-1914-by-antonio-santelia-1888-1916-study-in-black-green-and-red-ink-and-black-pencil/REMO21fig1.jpg>

<sup>4</sup> [https://en.wikipedia.org/wiki/Antonio\\_Sant%27Elia#/media/File:Stazione\\_Sant'Elia.jpg](https://en.wikipedia.org/wiki/Antonio_Sant%27Elia#/media/File:Stazione_Sant'Elia.jpg)

## 7.2: RUSSIAN CONSTRUCTIVISM

### THE MOVEMENT

The first and most powerful architectural image of a new Soviet Modernism was the vast spiral steel structure of rotating auditoria conceived as a **Monument to the Third Communist International in 1919** by the Artist Vladimir Tatlin (1885-1953). For the new workers parliament called The Palace of Labour in 1923 where most entries were inarticulate lumps like flattened Orthodox cathedrals, his colleagues the three Vesnin brothers, Leonid, Viktor and Alexander, took third prize with a clear new spatial organization in a stripped concrete frame that became another canonical image of Soviet Modernism.<sup>5</sup>

It is an Artistic and Architectural movement in Russia from 1914 onward. A term used in modern art today that dismissed "pure" art in favor of art as instrument for social purposes, i.e. the construction of the socialist system. The artists used materials from, industrial design such as sheet metal and glass, to create geometric objects.

It aimed to encompass cognitive, material activity, and the whole of spirituality of mankind. The artists tried to create art that would take the viewer out of the traditional setting. Most of the designs were a fusion of art and political commitment.

Nuam Gabo publically criticized **Vladimir Tatlin's** design saying **Either create functional houses and bridges or create pure art, not both**. This led to a major split in the Moscow group in 1920. The Constructivists main political patron was **Leon Trotsky** but after 1921 his support began to decline - the **Communist Party** could not afford to support a pure art movement and distanced themselves from Gabo, Tatlin and Rodchenko; began to use the term **Productivism**.

In the 1980s graphic designer **Neville Brody** used styles based on Constructivist posters that sparked a revival of popular interest. Later a number of **Constructivists** taught or lectured at the **Bauhaus**.

### CHARACTERISTICS

- Architectural monumentalism, symbolic of whole Constructivist movement
- Derived from cubism and futurism with architectonic emphasis on the technology of the time
- In design there was a complete departure from precedent in different aspects like; external appearance, planning and social programs.
- Marked by abstract creation based on logic, pure geometry and new tool/ mediums.

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<sup>5</sup>Cruikshank D ed, Soviet Modernism, Russian and the Soviet Union, A History of Architecture, p1431

- Introduction of new materials; metals, wires, concrete, glass and plastic.
- The art was to be practical, applied and utilitarian – a part of the modern production process.

### CONSTRUCTIVISTS and THEIR WORKS

1. (Sharp D.,1991) **Vladimir Tatlin's** project for the **Monument to the Third International** (1919-1920) evoked through its interplay of spirals a new kind of architectural monumentalism, symbolic of a whole constructive movement.



Monument to the Third International<sup>6</sup>

2. **Vesnin Brothers** with their **Pravada Newspaper Building, Moscow, 1924**
  - Exterior Elevators
  - Huge changeable graphics
  - Diagonal braces
  - Digital Clock
  - Searchlight on top as Communist metaphor
3. **El Lissitzky** designed **Das Wolkenbügel (The Cloud-iron) 1925** Idea ( not built)
4. **Konstantin Melnikov**

Melnikov was essentially an individualist, searching for unique design solutions. Melnikov's main contribution of the development of new Soviet building types was his sequence of Moscow Workers Club. Of all the buildings, the workers club and the factory kitchen had the greatest influence in developing the ideological awareness and collectivising domestic life at this time. Clubs were the focus of political education and training in such basic skills as literacy; in the later 1920s they were renamed palaces of culture to reflect an increasing emphasis on politically edifying hobbies and entertainment. Two different spatial models for these building emerged. Melnikov's clubs pioneered the first, where all accommodation was integrated into a single, often highly distinctive form.

<sup>6</sup> [https://upload.wikimedia.org/wikipedia/commons/f/ff/Tatlin%27s Tower maket 1919 year.jpg](https://upload.wikimedia.org/wikipedia/commons/f/ff/Tatlin%27s_Tower_maket_1919_year.jpg)

Thus his Rusakov club for Moscow municipal employees (1927-8) was generated around the idea of one auditorium that could extend to different sizes by sliding walls into three smaller spaces cantilevered off the back.<sup>7</sup>

The club is built on a fan-shaped plan, with three cantilevered concrete seating areas rising above the base. Each of these volumes can be used as a separate auditorium, and combined they result in a capacity of over 1,000 people. At the rear of the building are more conventional offices. The only visible materials used in its construction are concrete, brick and glass.



Rusakov Workers Club<sup>8</sup>

### **Kauchuk Factory Club**

As his trademarks; the building has raised cubical shapes that are offset of supporting columns. It was a combination of single sloped roof and has glazed corners.

### **Konstantin Melnikov's own house, Moscow, 1929**

Melnikov preferred to work at home, and always wanted a spacious residence that could house his family, architectural and painting workshops. As the Russian idiom says, he designed the house starting "from the hearth"; existing white oven in his living room dates back to his 1920 drawings. Floorplan evolved from a plain square to a circle and an egg shape, without much attention to exterior finishes. Melnikov developed the concept of intersecting cylinders in 1925-1926 for his Zuev Workers' Club draft (he lost the contest to Ilya Golosov). Twin cylinder floorplan was approved by the city in June 1927 and was revised during construction. The towers, top to bottom, are a honeycomb lattice made of brickwork. 60 of more than 200 cells were glazed with windows (of three different frame designs), the rest filled with clay and scrap.



Melnikov's own House<sup>9</sup>

<sup>7</sup> Cruickshank D ed,1999, Soviet Modernism, Russian and the Soviet Union, A History of Architecture, p1434

<sup>8</sup> [https://upload.wikimedia.org/wikipedia/commons/f/fd/Ref\\_pfanter14.jpg](https://upload.wikimedia.org/wikipedia/commons/f/fd/Ref_pfanter14.jpg)

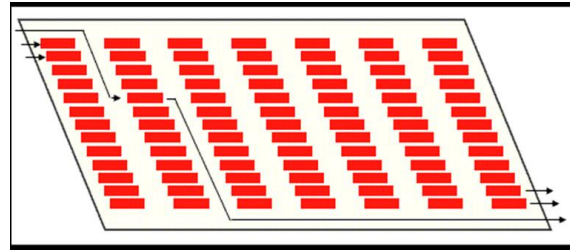
This unorthodox design was a direct consequence of material rationing by the state – Melnikov was limited to brick and wood, and even these were in short supply.

The wooden ceilings have no supporting columns, nor horizontal girders. They were formed by a rectangular grid of flat planks, in a sort of orthotropic deck. The largest room, a 50 square meter workshop on the third floor, is lit with 38 hexagonal windows; equally large living room has a single wide window above the main entrance.<sup>10</sup>

### **Bakhmetevsky Bus Garage**

It housed 104 buses and had an area of 8500 square meters

It had an unconventional, parallelogram-shaped floor plan with Vladimir Shukhov's roof system



Bakhmetevsky Bus Garage<sup>11</sup>

### **5. Vladimir Shuchov**

**Shuchov Tower(1922)**; Shukhov's steel lattice shells were already built as the overhead covers of buildings, hyperboloid water and other towers, including the famous 160 meter radio tower in Moscow

### **Narkomfin Building by Moisei Ginzburg**

(Cruickshank D ed,p1434)This was a demonstration project for the modern concrete framed and hollow block construction in Russian housing and Le Corbusier's five points notably "the pilotis".

#### Reference books:

1. Cruickshank D. ed.1999. Sir Banister Fletcher's A History of Architecture,Russia and the Soviet Union, CBS Publishers & Distributors, New Delhi, p1431-1440
2. Gossel P ed, 2007, The A-Z of Modern Architecture, Futurism, TASCHEN, p325
3. Gossel P ed, 2007, The A-Z of Modern Architecture, Constructivism, TASCHEN, p214
3. Sharp D., 1991, Twentieth Century Architecture A Visual History, The Bath Press, p60

#### Reference Article:

Evans A, 2016, Futurist Architecture, Futurism, Routedge Encyclopedia of Modernism

<sup>9</sup> [https://en.wikipedia.org/wiki/Konstantin\\_Melnikov#/media/File:Melnikov\\_House\\_in\\_MSK\\_\(img2\).jpg](https://en.wikipedia.org/wiki/Konstantin_Melnikov#/media/File:Melnikov_House_in_MSK_(img2).jpg)

<sup>10</sup>Khan-Magomedov, p.(162,177,191),cited in [https://en.wikipedia.org/wiki/Konstantin\\_Melnikov#cite\\_note-20](https://en.wikipedia.org/wiki/Konstantin_Melnikov#cite_note-20)

<sup>11</sup> [https://upload.wikimedia.org/wikipedia/commons/e/ea/Melnikov\\_garage\\_floorplan.GIF](https://upload.wikimedia.org/wikipedia/commons/e/ea/Melnikov_garage_floorplan.GIF)