## The Train and the Cosmos: Visionary Modernity

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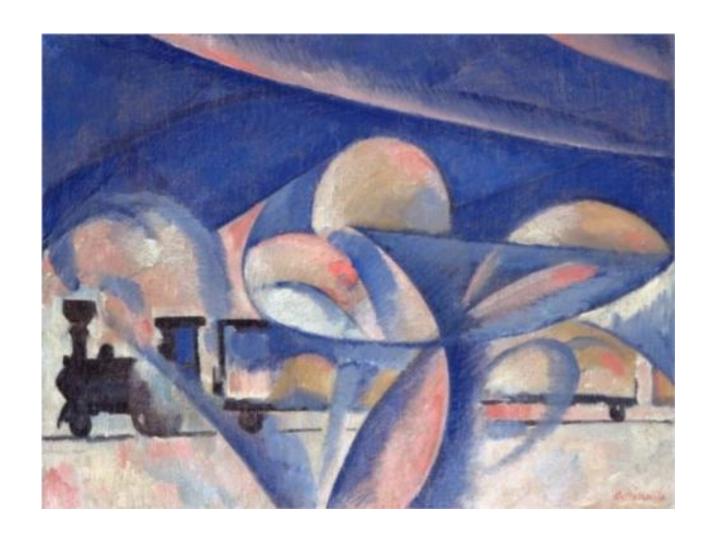
2015

- **Mythopoesis**: the capacity of the human mind to spontaneously generate *symbols*, *myths*, *metaphors*, . . .
- **Psychology** (especially C.G. Jung) showed that the human mind (especially the unconscious) continuously generates a complex language of symbols and mythology (archetypes)
- **Religion**: any form of belief that involves the *supernatural*
- Mythopoesis does not require Religion: it can be symbolic, metaphoric, lyrical, visionary, without any reference to anything supernatural
- **Visionary Modernity** has its roots in the *Anarcho-Socialist mythology of Progress* (late 19th early 20th century) and is the best known example of non-religious mythopoesis

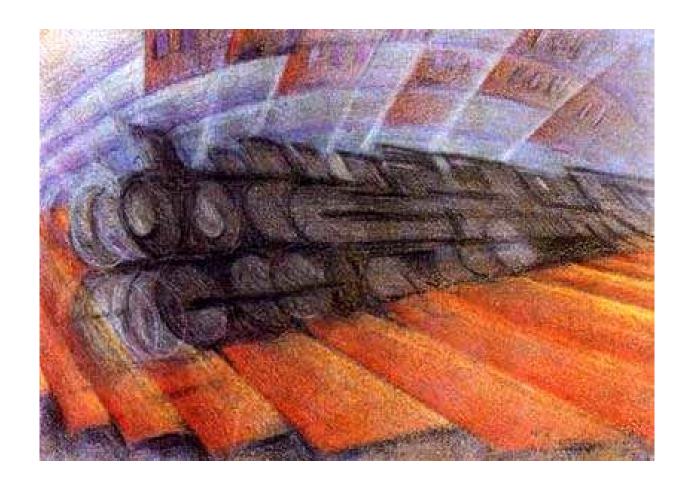
## Part 1: Futurist Trains

## Trains as powerful symbol of Modernity:

- the world suddenly becomes *connected* at a global scale, like never before
- trains *collectively* drive humankind into the new modern epoch
- connected to another powerful symbol: electricity
- importance of the train symbolism in the anarcho-socialist philosophy of late 19th and early 20th century (Italian and Russian Futurism avant garde)



Rozanova, Composition with Train, 1910



Russolo, Dynamism of a Train, 1912

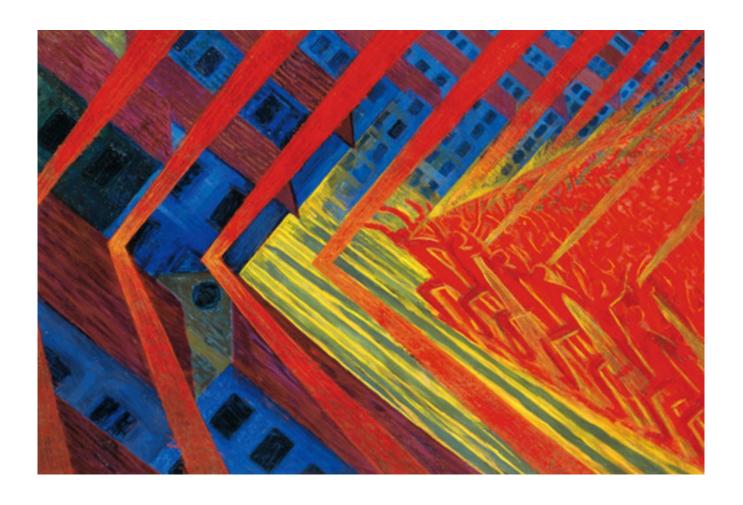
From a popular Italian song: Francesco Guccini "La Locomotiva"

... sembrava il treno anch'esso
un mito di progesso
lanciato sopra i continenti;
e la locomotiva sembrava fosse un mostro strano
che l'uomo dominava con il pensiero e con la mano:
ruggendo si lasciava indietro
distanze che sembravano infinite;
sembrava avesse dentro un potere tremendo,
la stessa forza della dinamite...

...the train itself looked like a myth of progress, launched over the continents; and the locomotive looked like a strange monster, that man could tame with thought and with the hand: roaring it would leave behind seemingly enormous distances; it seemed to contain an enormous might, the power of dynamite itself...

Ma un'altra grande forza spiegava allora le sue ali, parole che dicevano "gli uomini son tutti uguali" [...] e illuminava l'aria la fiaccola dell'Anarchia. [...] E sul binario stava la locomotiva, la macchina pulsante sembrava fosse cosa viva...

But another force was unfolding its wings at the time, words that claimed all men are equal, [...] and the air was lit up by the torch of Anarchism [...] Meanwhile the Locomotive was standing on the tracks, a pulsing machine like something alive...



Russolo, Revolt, 1913



Vittorio Corona, Dynamism of a Train, 1921

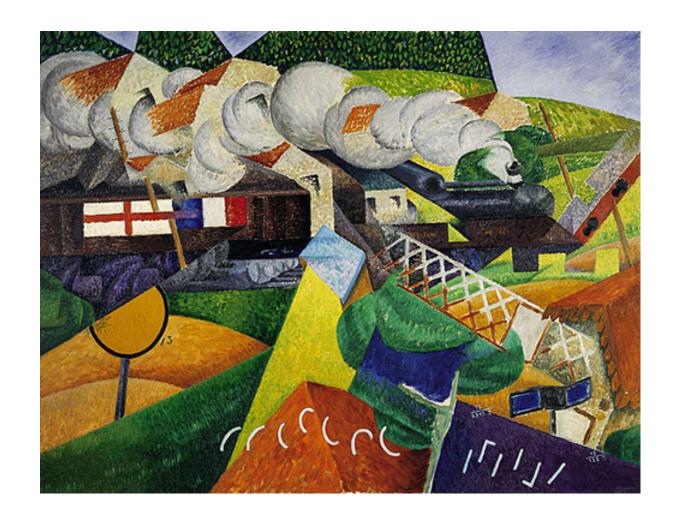


Carlo Carrà, Funeral of the Anarchist Galli, 1911

- the train as *collective voyage into the radiant future*
- often the image of the train is combined with that of the sun: the train is either traveling (flying) towards the sun (rising sun = future new society) or emerging from the sun as emanation of the new epoch that is rising
- a connection between this symbolic use of the train image and a "cosmic" destiny is retained in later Soviet iconology, well past the avant garde period



David Burliuk, Train



Severini, Red Cross Train, 1915



Severini, Train arriving in Paris, 1915



Baldessari, Train Arriving at the Station of Lugo, 1916

- in the context of the train as symbol of connectedness, a special symbolic meaning is attached to the longest railway road in the world, the Transiberian, completed in the late 19th century
- in 1913 Swiss/French poet Blaise Cendrars and Orphist artist Sonia Delaunay published the book "La prose du Transsibérien et de la Petite Jehanne de France": poem about a journey through Russia on the Trans-Siberian Express in 1905 during the first Revolution: combining themes of train as connectedness, as revolutionary force, with some dark overtones about war and revolution

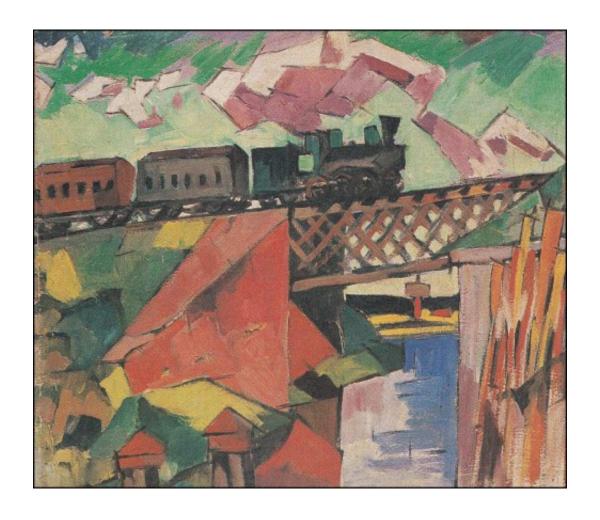


Sonia Delaunay, Prose of the Transiberian, 1913

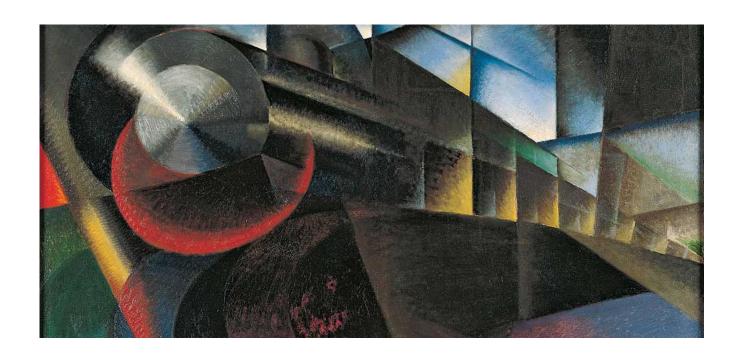


Sonia Delaunay, Prose of the Transiberian (detail), 1913

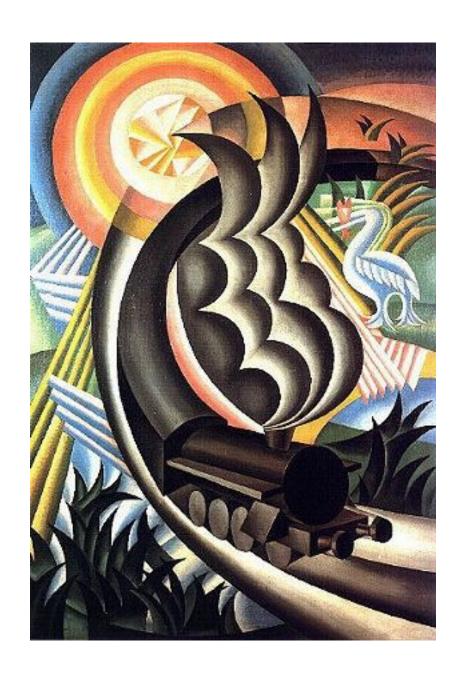
- images of trains as symbols of connectedness (especially in combination with bridges) and of dynamism, rupture with the past, glorification of modernity continue through the 1920s in the Futurist avant garde
- the "solar image" and "cosmic destiny" of the train is also further elaborated by Futurist artists of this period
- while the image eventually disappears from Italian art, it is absorbed, maintained, and continuously re-elaborated in Soviet art, where it becomes part of the official iconology



Aristark Lentulov, Bridge with Train, 1918



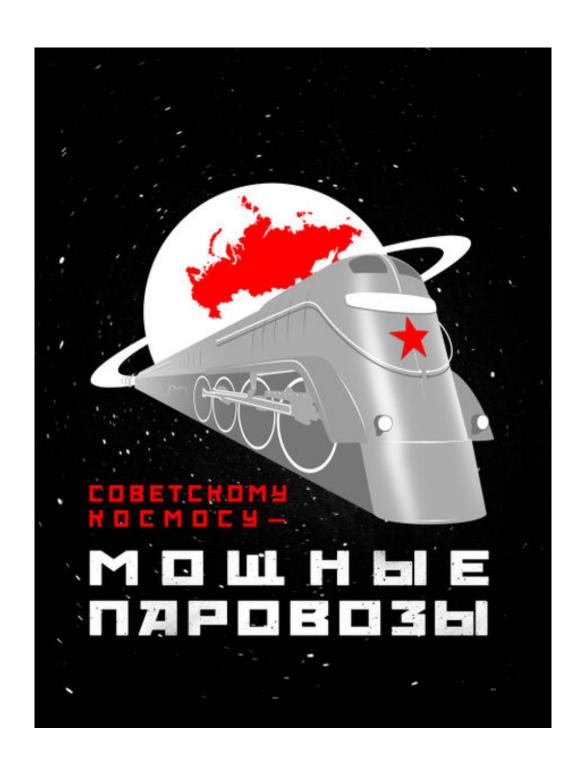
Pannaggi, Speeding Train, 1922



Fortunato Depero, The Sun gives birth to a Train, 1924



dal Monte, Train, 1928

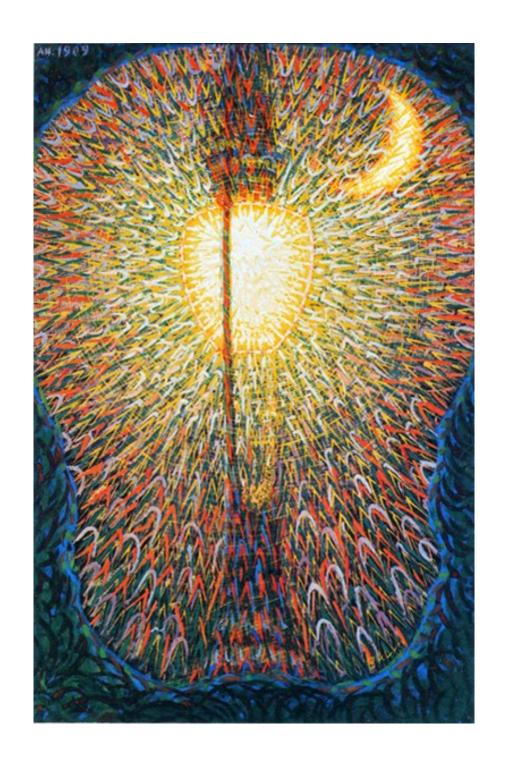


"Mighty Engines of the Soviet Cosmos"  $\sim 1960 \mathrm{s}$ 

Part 2: The Body Electric

## Electricity and the Body/Automaton/Robot

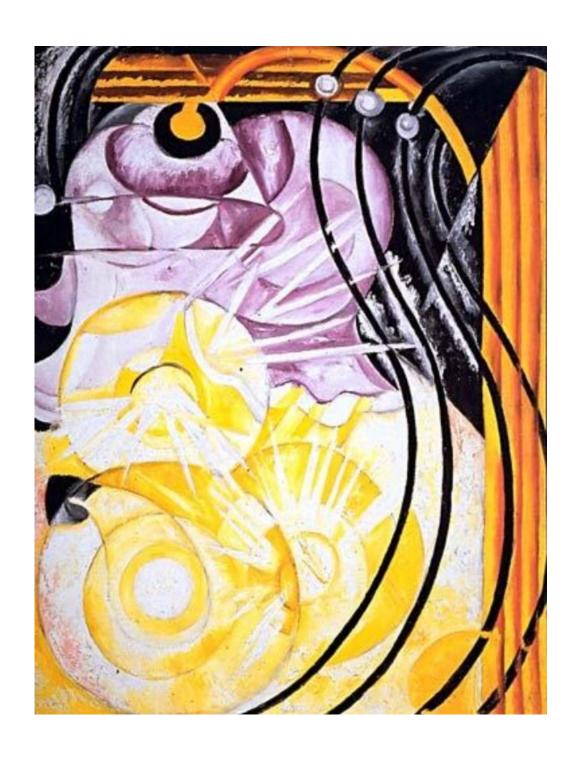
- two other major visual themes of early Modernism
- *Electrification* is another *connective network*: a new large scale structure in society and a symbol of progress, power, energy
- Lenin's famous quote on "Communism is Electrification of the whole Country"
- at the same time a new vision of the human body as automaton/machine/dynamism
- ullet this theme eventually merges with the "electrification" theme in the symbolic figure of the robot ( $\sim 1920$ )
- with a political connotation related to the revolutionary workers movement



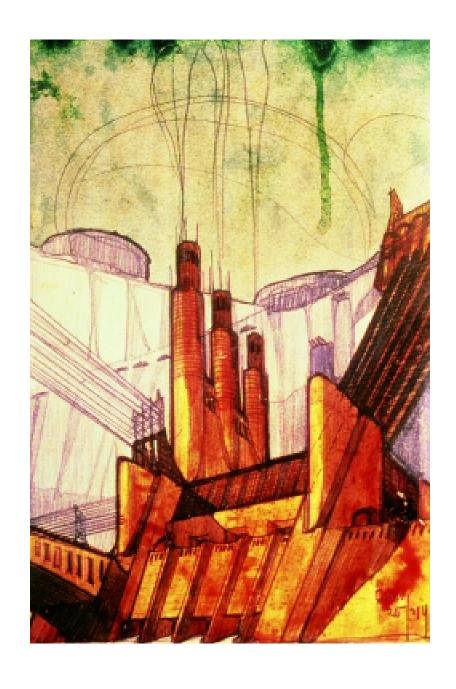
Giacomo Balla, Street Light, 1909



Gino Severini, Expansion of Light, 1912



Goncharova, Electric Lamp, 1913



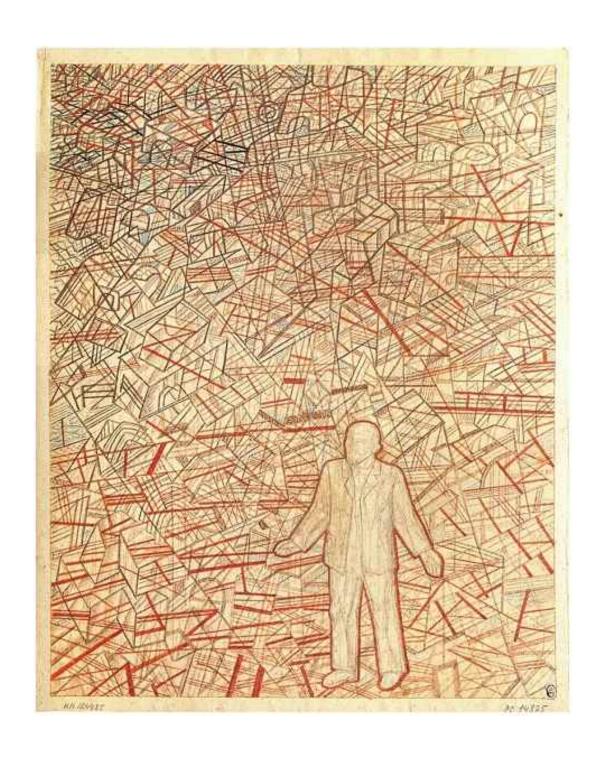
Antonio Sant'Elia, Drawing of Electric Powerplant, 1914



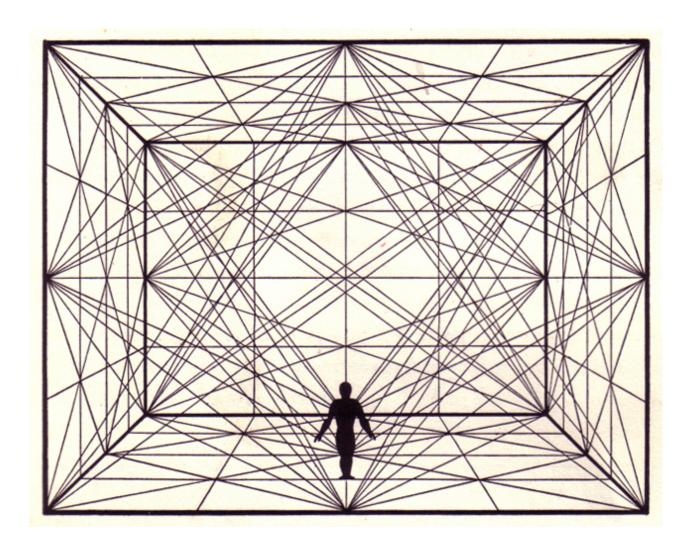
Antonio Sant'Elia, Drawing of Electric Powerplant, 1914



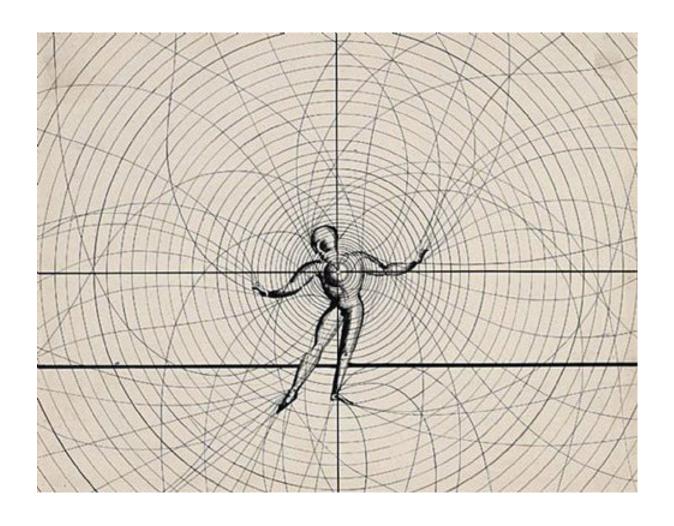
Mikhail Baljasnij, Electrification of the Whole Country, 1930



Pavel Filonov, Electrification of the Whole Country, 1930



Oskar Schlemmer, Figure in space with plane geometry and spacial delineations, 1921



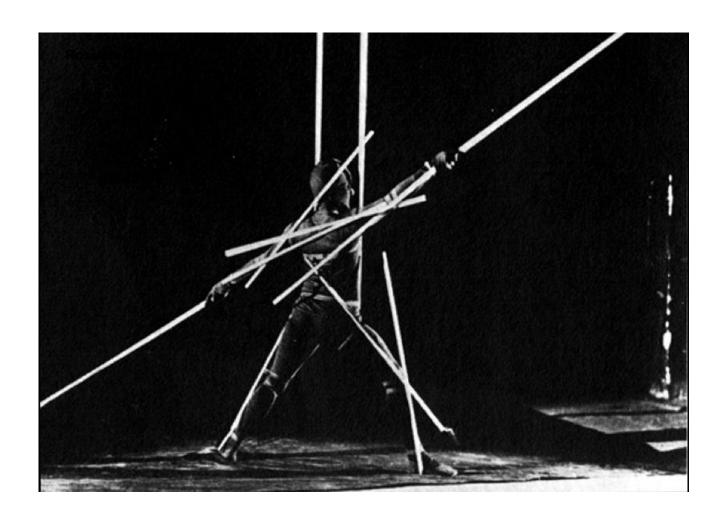
Oskar Schlemmer, Drawing of Man as Dancer, 1921



Umberto Boccioni, Unique forms in the continuity of space, 1913



Marcel Duchamp, Nude descending a stairway, 1912



Oskar Schlemmer, Ballet, 1920

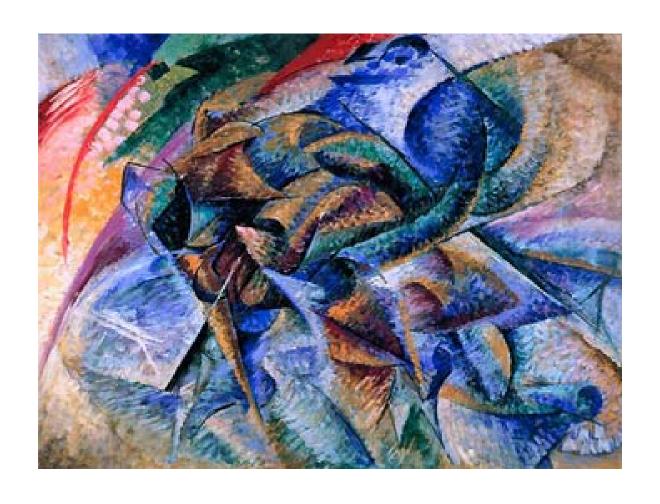


Enrico Prampolini, Geometry of Sensualness, 

- the *bicycle* became a special symbol of a mechanical enhancement and continuation of the mechanical human body
- the bicycle is also a symbol of dynamism in Futurist iconology
- the idea of a natural blending of the organic and the mechanical in the human + bicycle pair develop alongside ideas of human/machine blends in the Russian Cosmist philosophy



Natalia Goncharova, Cyclist, 1913



Boccioni, Dynamism of a Cyclist, 1913

## **Robots**

and the Animal/Human/Machine interface

- in 1920 Czech writer Karel Čapek published the science fictional theater play "R.U.R. Rossumovi Univerzální Roboti" (Rossum Universal Robots), first introduction of the word "Robot"
- the play is about a workers revolt: the mechanical robots rebel against their human exploiters; "robot" same root as the slavic word for "worker"
- the debate around work and automation remained crucial to anarcho-socialist philosophy
- the animal/human/machine symbolic triad is already apparent: Karel Čapek's later novel "War with the Newts" (1936), sees an intelligent animal species being enslaved and exploited by humans



Fortunato Depero, Solidity and Transparency, 1917



Fortunato Depero, May Day,  $\sim$ 1920

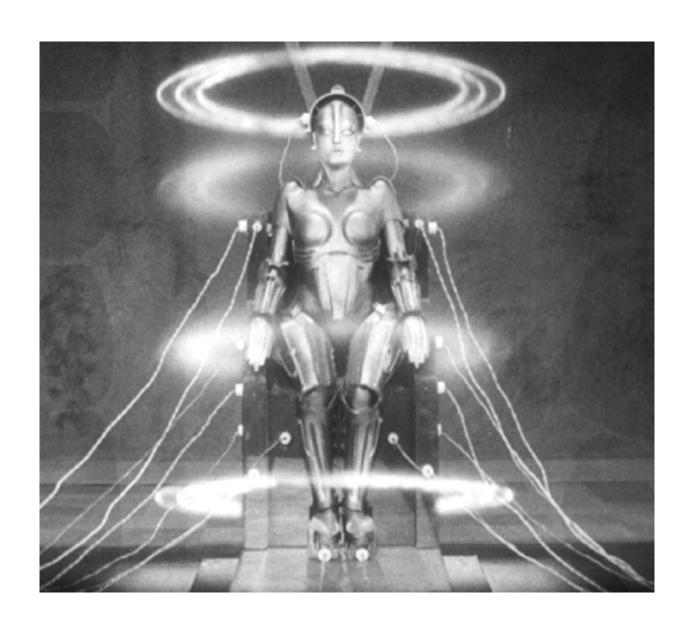
- the most famous robot of early Modernism is in Fritz Lang's Metropolis
- it is also associated to a workers revolt
- it also shows the overlap between the symbolic image of the *body/machine* and that of *electricity* as power of animation

"The universe is a procession with measured and perfect motion [...] Exquisite senses, life-lit eyes, pluck, volition, Flakes of breast-muscle, pliant backbone and neck, flesh not flabby, good-sized arms and legs...

(Walt Whitman, "I sing the body electric" 1855)



Fritz Lang, Metropolis, 1927



Fritz Lang, Metropolis, 1927

- The body/automaton/robot theme gets a new life after the Information Theory and Cybernetic revolution of the late '40s and early '50s
- Blending of the automaton/robot with the computer concept, modern robotics and cybernetics
- the symbolic connotations remain throughout the 20th century, all the way to contemporary views on Artificial Intelligence and Brain/Computer interfaces
- the symbolic role of *electricity* in the early 20th century is similarly taken over by *electronics* in the second half of the century



Andrei Sokolov, Electronic Brain,  $\sim$ 1970



Alexey Leonov and Andrei Sokolov, Illustration for Tekhnika Molodezhi, 1970s

Part 3: The City and the Stars

- the *City* is probably the ultimate symbol of modernity
- it is viewed metaphorically as an organism that *grows*, with its public transportation system (trains!) as a kind of blood circulation and the architectural structure as an abstract geometry (like the body/machine)
- the City is *dynamical*: in transformation and a catalyst of transformations in the society and in culture

the City is the hub of technological progress and scientific innovation

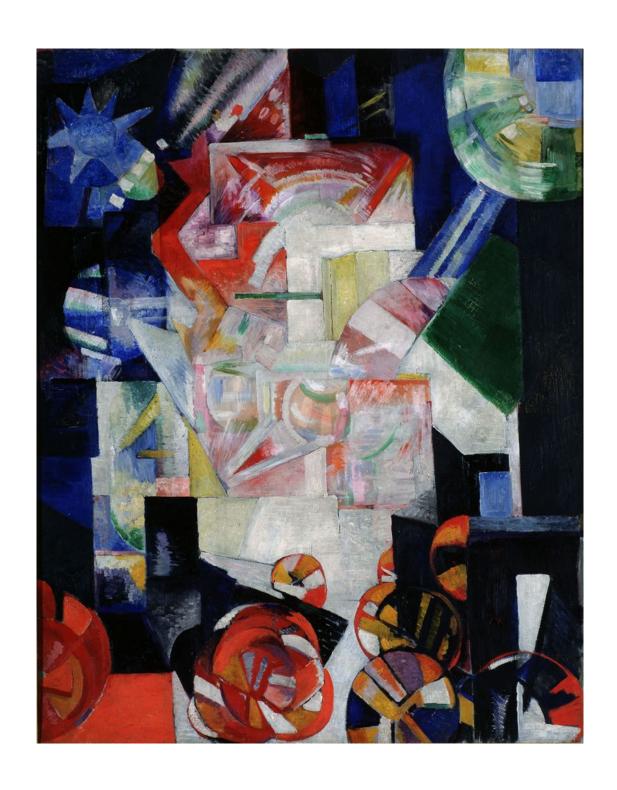
• 19th and early 20th century anarcho-socialism was a fundamentally urban phenomenon, prevalent among industrial workers, tied up to visions of techno-scientific progress, and with little connection (beyond some lip service praise of farm workers) to rural realities: all of Modernism is intrinsically urban



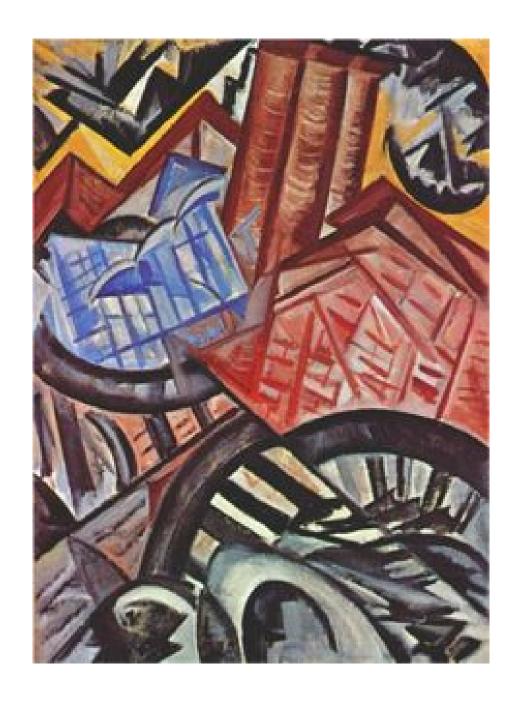
Umberto Boccioni, The City Rises, 1911



Alexandra Ekster, Cities, 1913



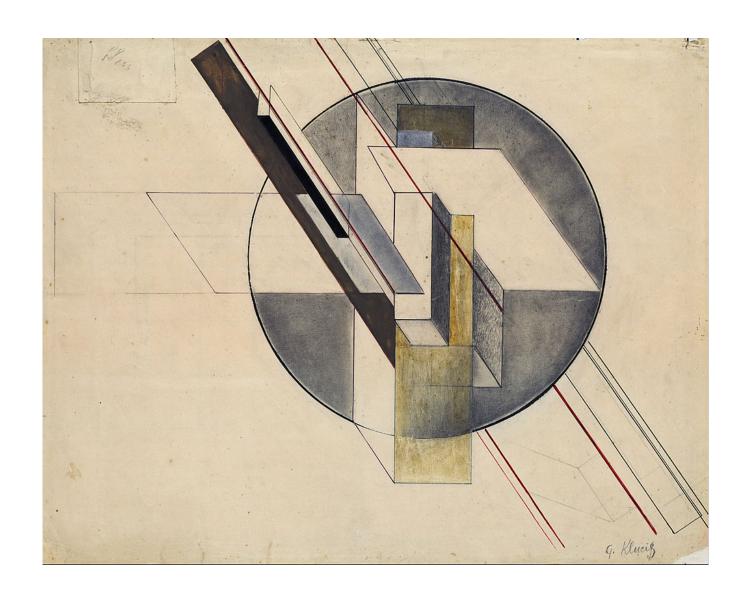
Alexandra Ekster, Composition, 1914



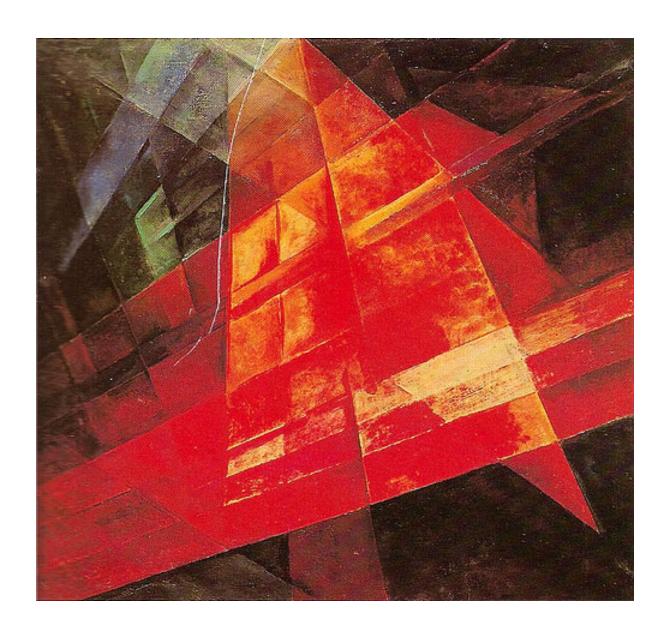
Olga Rozanova, Factory Bridge, 1913



Fernand Léger, the City, 1919



Gustavs Klucis, Construction, 1921



Ivan Kudriashev, Construction with Rectilinear Motion, 1925



Erich Kettlehut, sketch for Fritz Lang's Metropolis, 1926



Fritz Lang, Metropolis, 1927



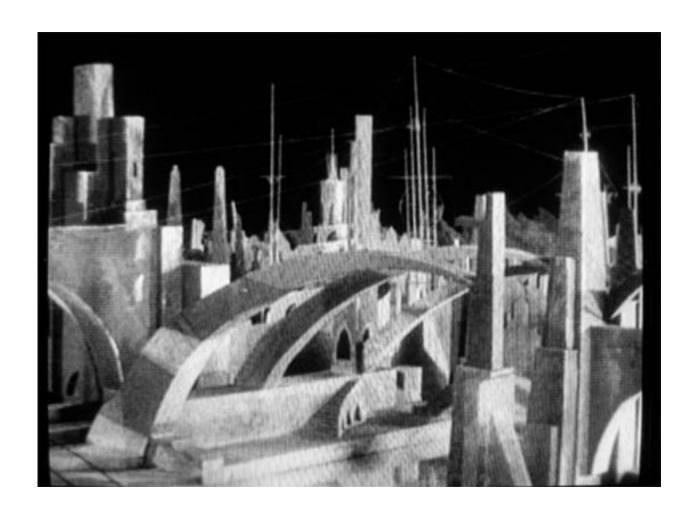
Fortunato Depero, Skyscrapers and Tunnels, 1930



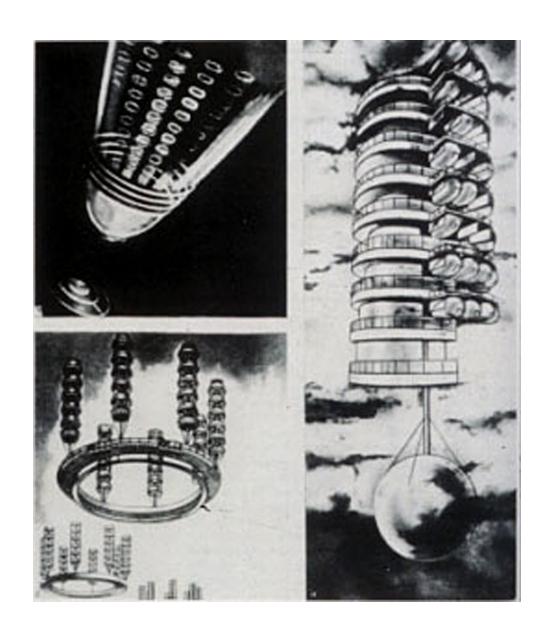
Chernikhov, Architectural Fantasy, 1933

## The City and the Mythology of Outer Space

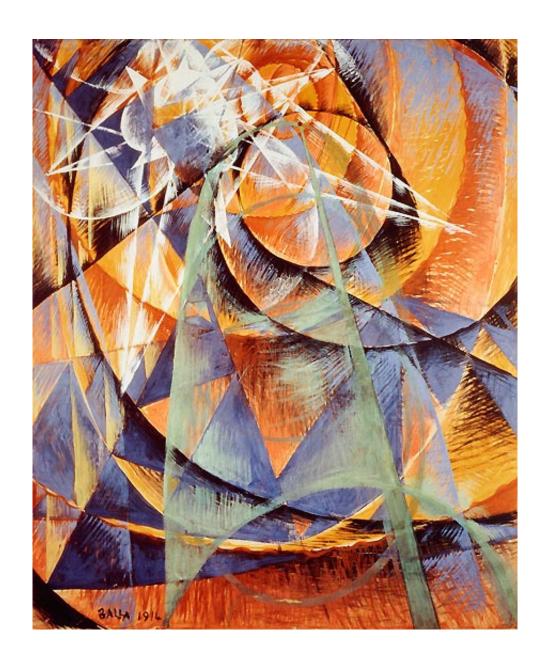
- The idea of technological development leading to the colonization of extraterrestrial space develops alongside the symbolic image of the City in early Modernism
- The first visions of space travel often involve "Cities in Space"
- the early Soviet philosophy of *Cosmism* (Nikolai Fyodorov, Konstantin Tsiolkovsky) played a crucial role in fostering the development of the Space Age and its mythology (in the form of *Biocosmism* also combined the ideal of space exploration with that of mechanical and biological enhancement of human beings and a dream of technologically achieved immortality)
- Konstantin Tsiolkovsky and the rocket equation, 1911 (also worked on first studies of air resistance and high speed train projects)



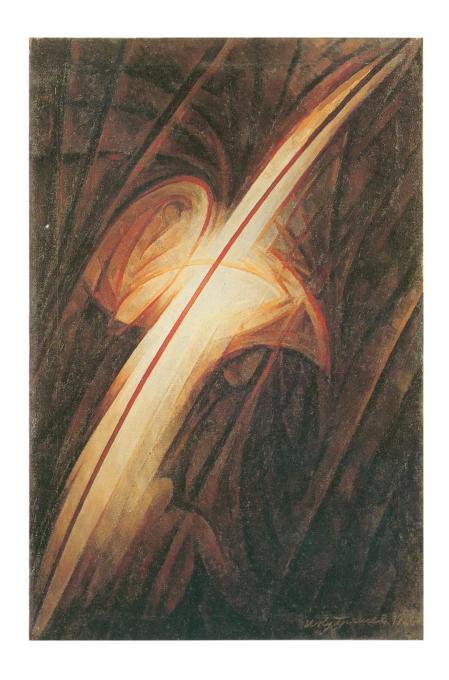
Yakov Protazanov, Aelita the Queen of Mars, 



Krutikov, Future Space City, 1928



Giacomo Balla, Mercury transits in front of the Sun, 1914



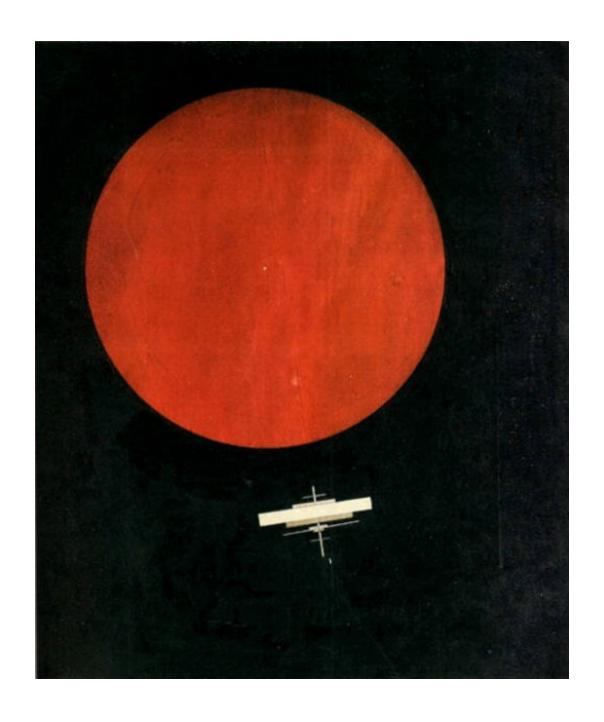
Ivan Kudriashev, Luminescence, 1926



Ljubov Popova, Space Force Construction, 1921



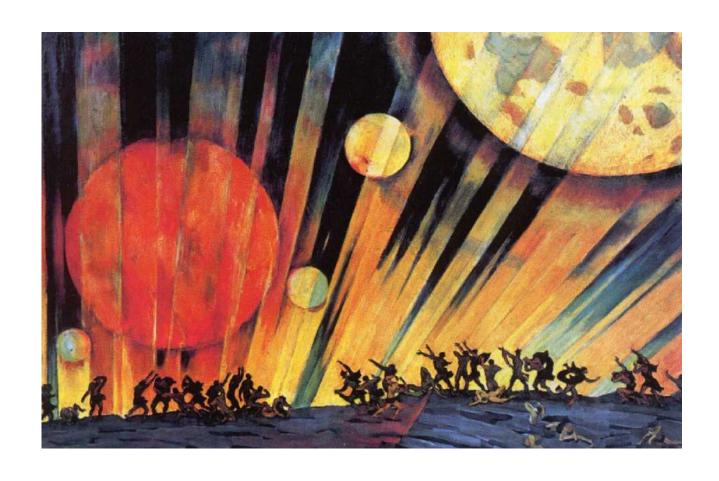
Pavel Filonov, Cosmos (later retitled "The results of the first five year plan"), 1922



Ilya Chashnik, Cosmos, 1925



Ilya Chashnik, Suprematist Composition, 1920



Konstantin Yuon, A New Planet, 1921



Andrey Sokolov Artificial Satellite of an Alien Civilization, 1970s

let a train lay a scar of soot across the blue as it flies along the branching forest network. [...] Brace up the constellations with log-beams, and fasten the valleys together with an axial grid [...] [...] and the train, swift envoy, will pass out of sight more glittering than the crowned constellations. You wind electric coils from the very earth, whose wires are conductors for storms alone [...] Encased in a shell of steel, an eaglet will fly, trailing its crimson wings [...]

(Velimir Khlebnikov, Lightland, 1920)

## What happened to Visionary Modernity?

- Anarchism took a darker turn with nihilism and neo-primitivism; progressive modernism survives in some European anarcho-socialist formations and in some new forms of anarchism (anarcho-transhumanism)
- Socialist and Marxist Philosophy got an injection of anti-scientific post-modernism (especially in the '80s and '90s); progressive modernism survives in some Western European social-democracies and in some communist political formations (often as heritage of Soviet cultural influences)
- **Cosmism**: the ideal of space exploration gave rise to the Space Age enthusiasm of the 1960s; the idea of body/mechanism/enhancement resurfaced first in the context of Cybernetic ideas of a general information based theory of animal/human/machine. It also resurfaced in the current philosophies of *Transhumanism* and *Posthumanism*

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