

AHST 2331-001 (21414)

Understanding Art

Dr. Charissa N. Terranova

Tuesdays and Thursdays 11:30-12:45

ATC 1.102

Thursday April 5

Virtual Realities in Painting, Photography, and Film

**EXPANDED  
CINEMA**

**FILMIC  
MONTAGE**

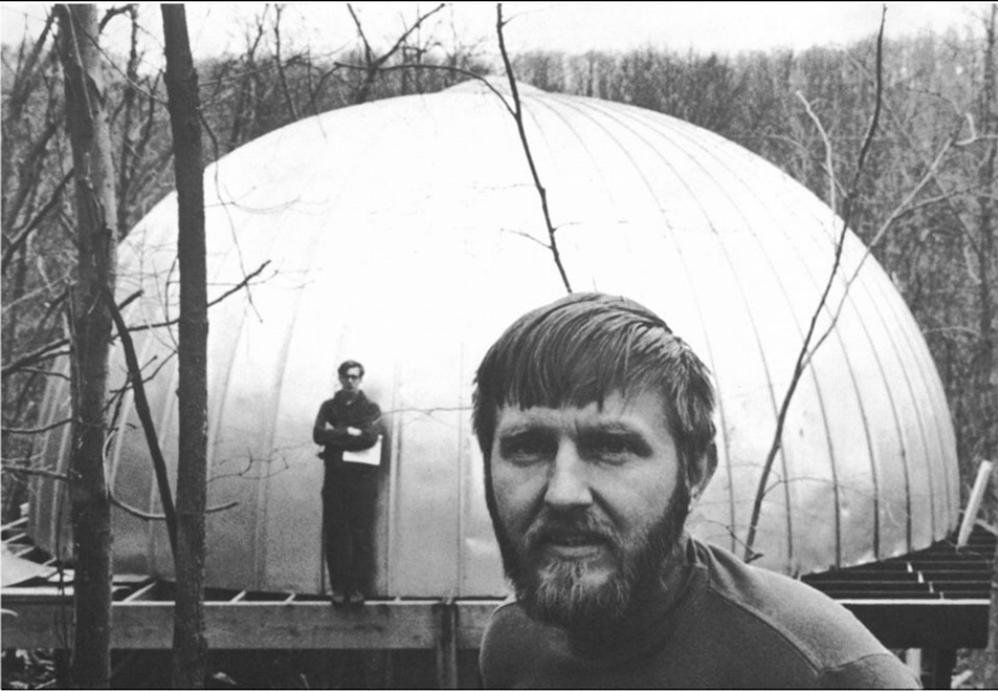
## **expanded cinema**

immersive multi-media experience based on an extended and multi-vectored version of cinema  
(images projected from multiple sources)

## **filmic montage**

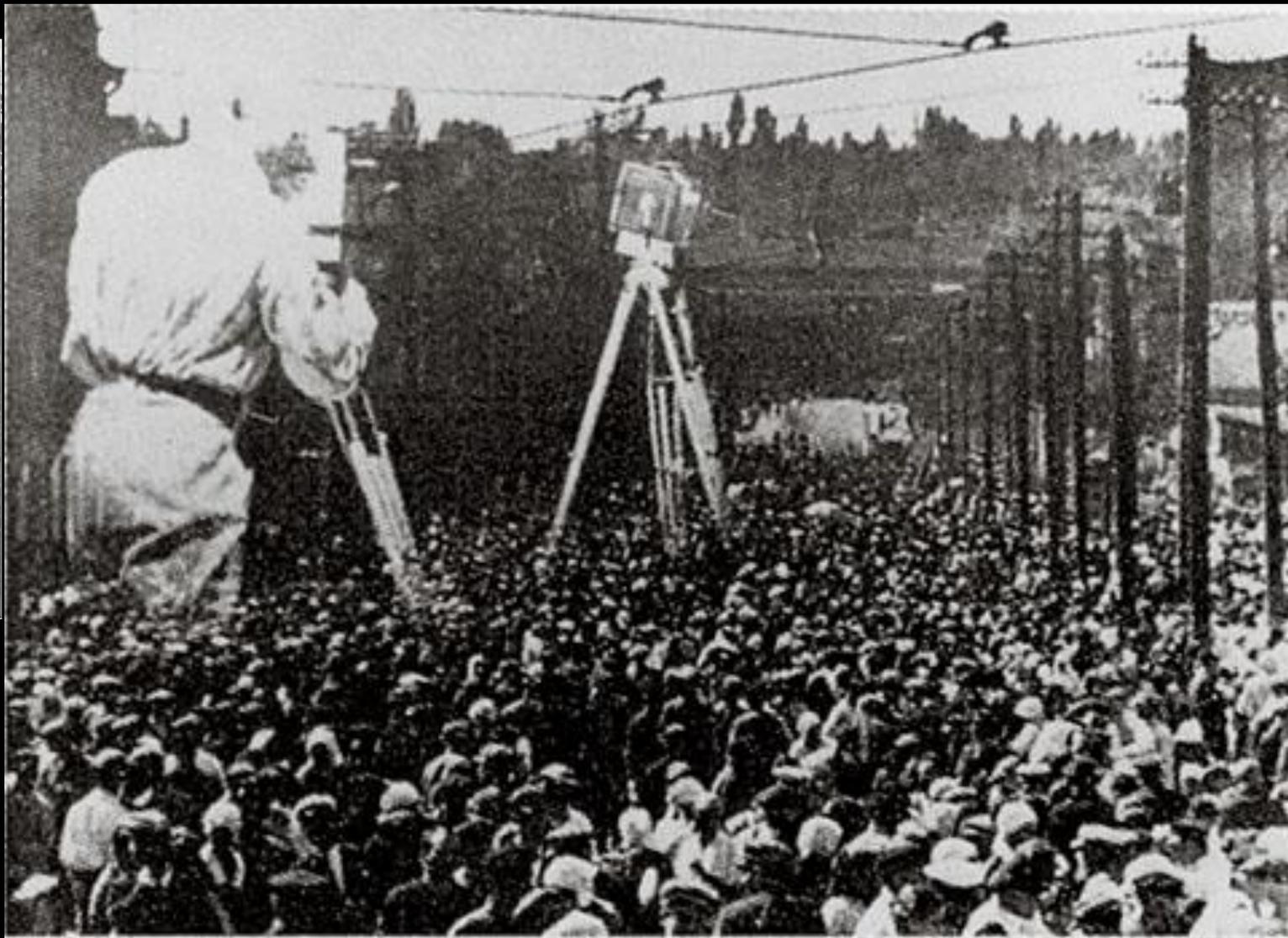
any combination of disparate elements that forms or is felt to form a unified whole, single image, etc.

A tactic in film making – the use of editing and special effects



Stan VanDerBeek, Moviedrome, 1957-1969

**expanded cinema:** Immersive multi-media experience based on an extended version of cinema



Dziga Vertov, Man with a Movie Camera, 1929

**filmic montage:** any combination of disparate elements that forms or is felt to form a unified whole, single image, etc.  
A tactic in film making – the use of editing and special effects

**1. Painting**

**2. Stereoscopic  
Technology**

**3. Film/Cinema**

**4. Expanded Cinema**

**...Virtual Reality**

# VIRTUAL REALITY

## its spectrum of experience and meaning

literal virtual reality  
replicating reality  
immersion without distance  
reproducing nature to best nature  
cinema  
market proximity/embeddedness

metaphorical virtual reality  
interpreting reality  
immersion with distance  
reproducing nature to comment on reality  
Expanded Cinema  
art/autonomy

Market Proximity/Embeddedness

vs.

Art/Autonomy

literal virtual reality  
replicating reality  
immersion without distance  
reproducing nature to best nature  
cinema  
market proximity/embeddedness



metaphorical virtual reality  
interpreting reality  
immersion with distance  
reproducing nature to comment on  
reality  
Expanded Cinema  
art/autonomy



A screenshot of an experimental environment, *Dream Realm One*, 2014, created with Oculus Rift by Simon Robertson.

<http://www.artnews.com/2014/12/17/virtual-reality-art-gets-real/>



James Rosenquist, *F-111*, 1965

<https://www.facebook.com/trent.straughan/videos/10155059212674640/?pnref=story>

[https://drive.google.com/file/d/0B\\_XfGQQbTJaAUzE5dUhzbkpKcEE/view](https://drive.google.com/file/d/0B_XfGQQbTJaAUzE5dUhzbkpKcEE/view)

# 2. STEREOSCOPIC TECHNOLOGY

# STEREOSCOPE



Sir Charles Wheatstone, stereoscope, 1840

# VR HMD/Headset

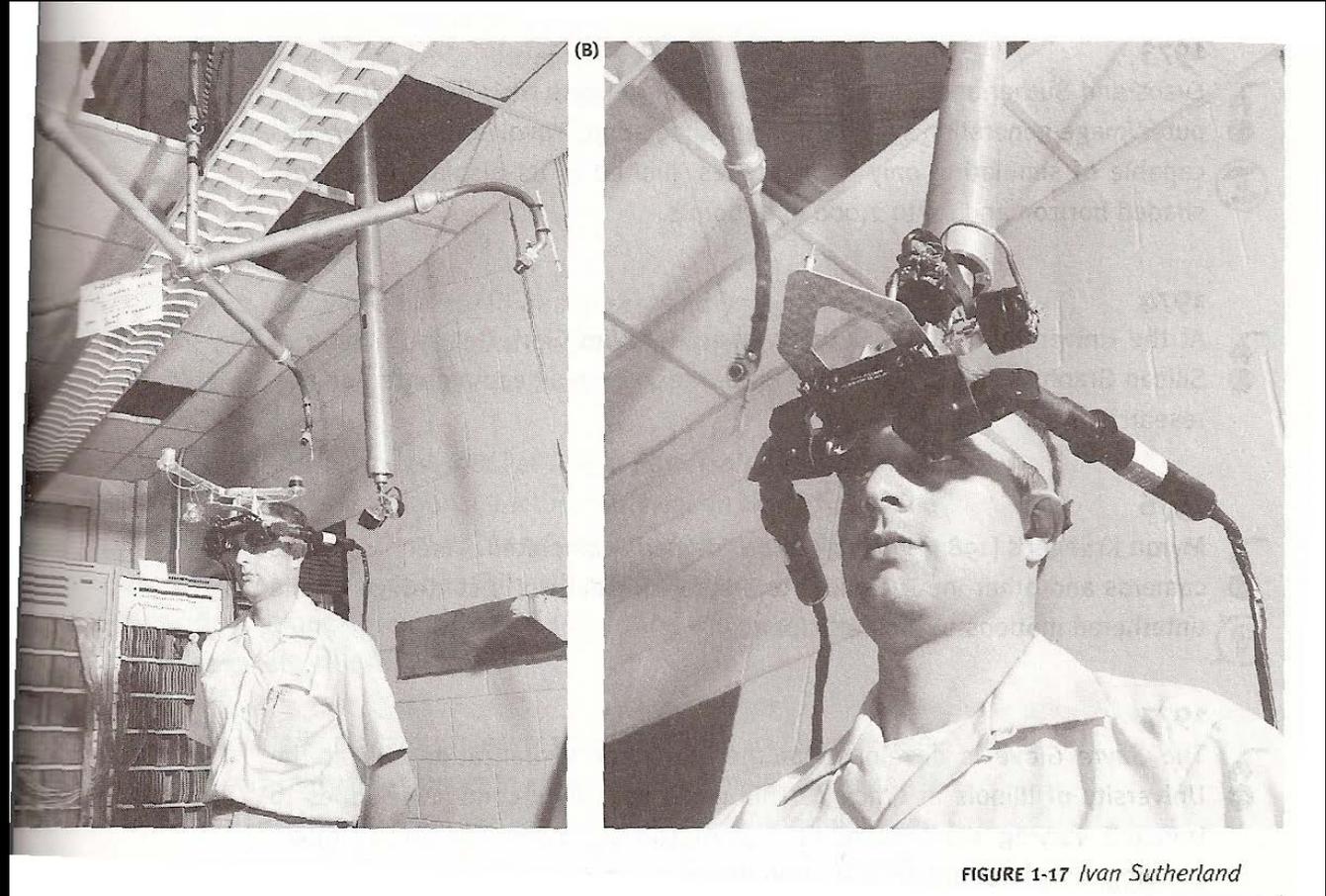
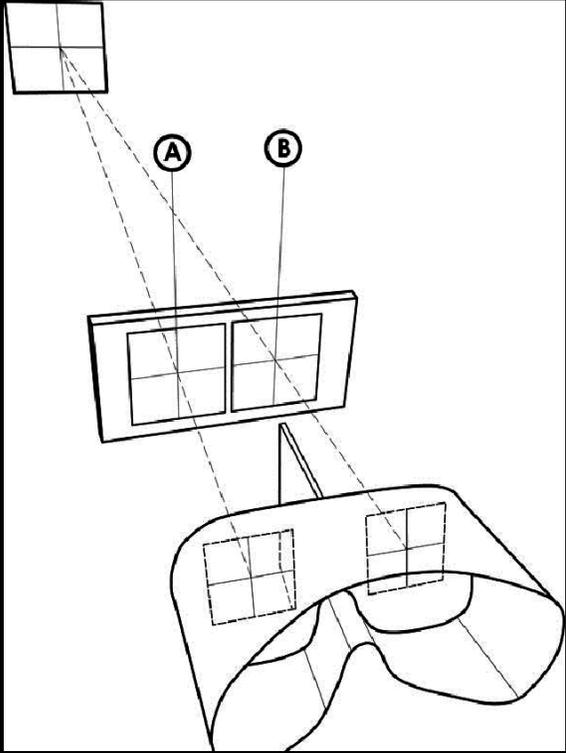
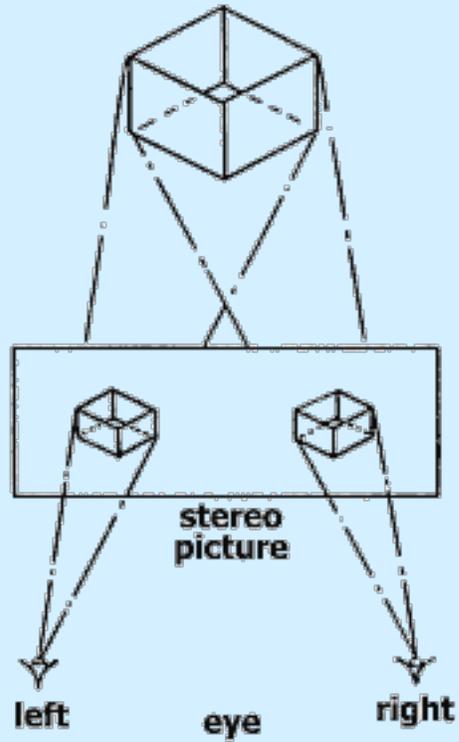


FIGURE 1-17 Ivan Sutherland

An early virtual reality headset, named The Sword of Damocles for its formidable appearance (1968) created by computer scientist Ivan Sutherland and his student Bob Sproull. HMD = head-mounted display



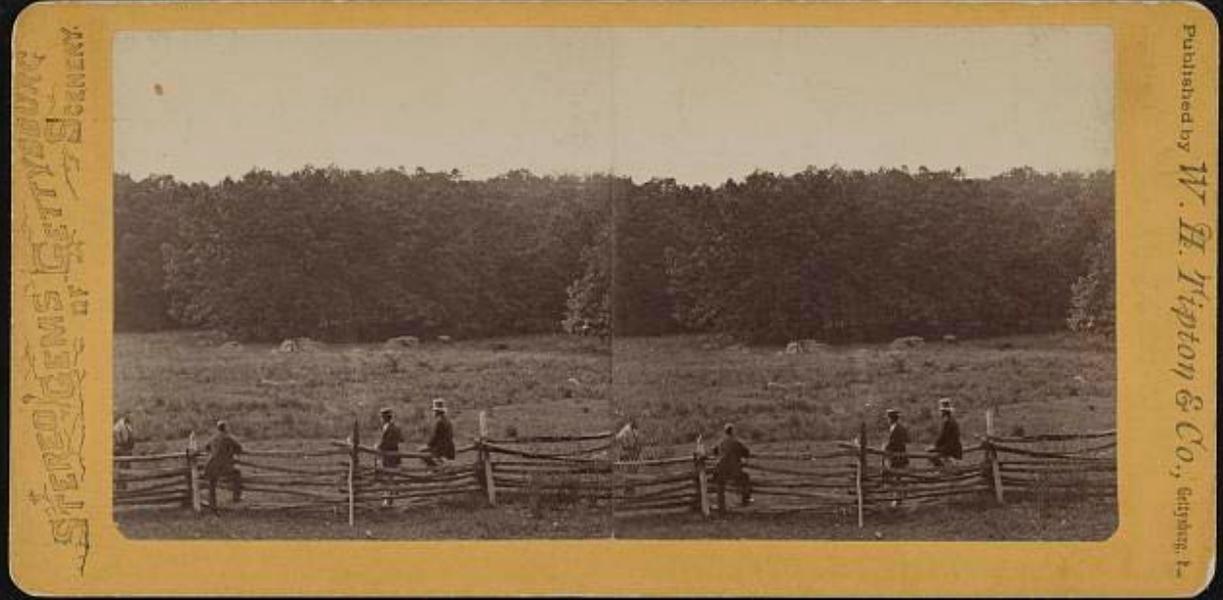
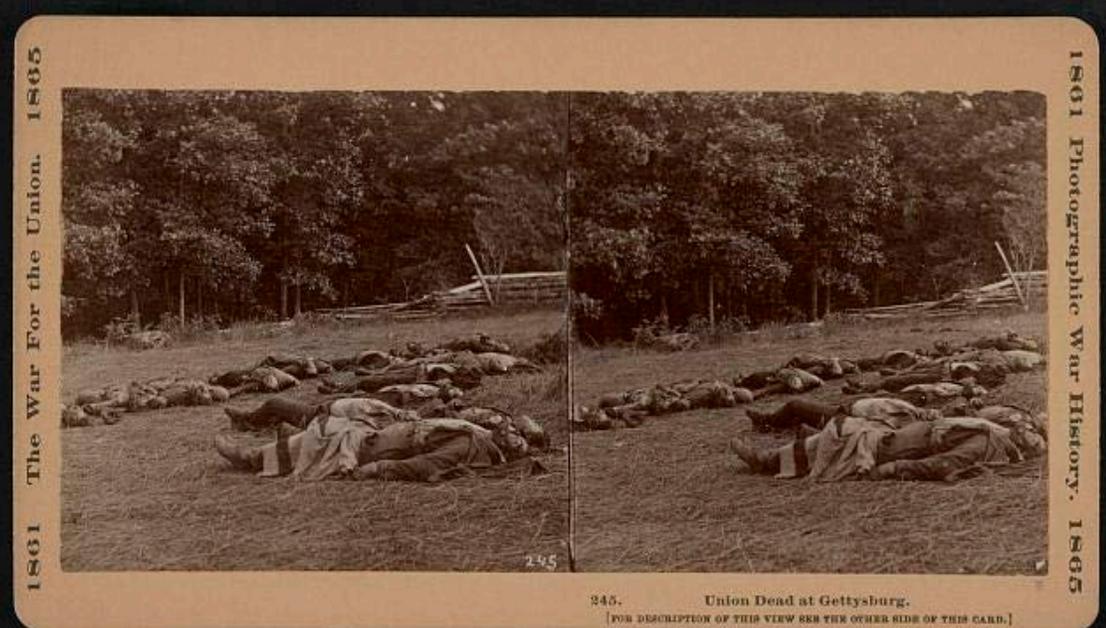
### Objects impression in the brain



The easiest way to create depth perception in the brain is to provide the eyes of the viewer with two different images, representing two perspectives of the same object, with a minor deviation similar to the perspectives that both eyes naturally receive in binocular vision.

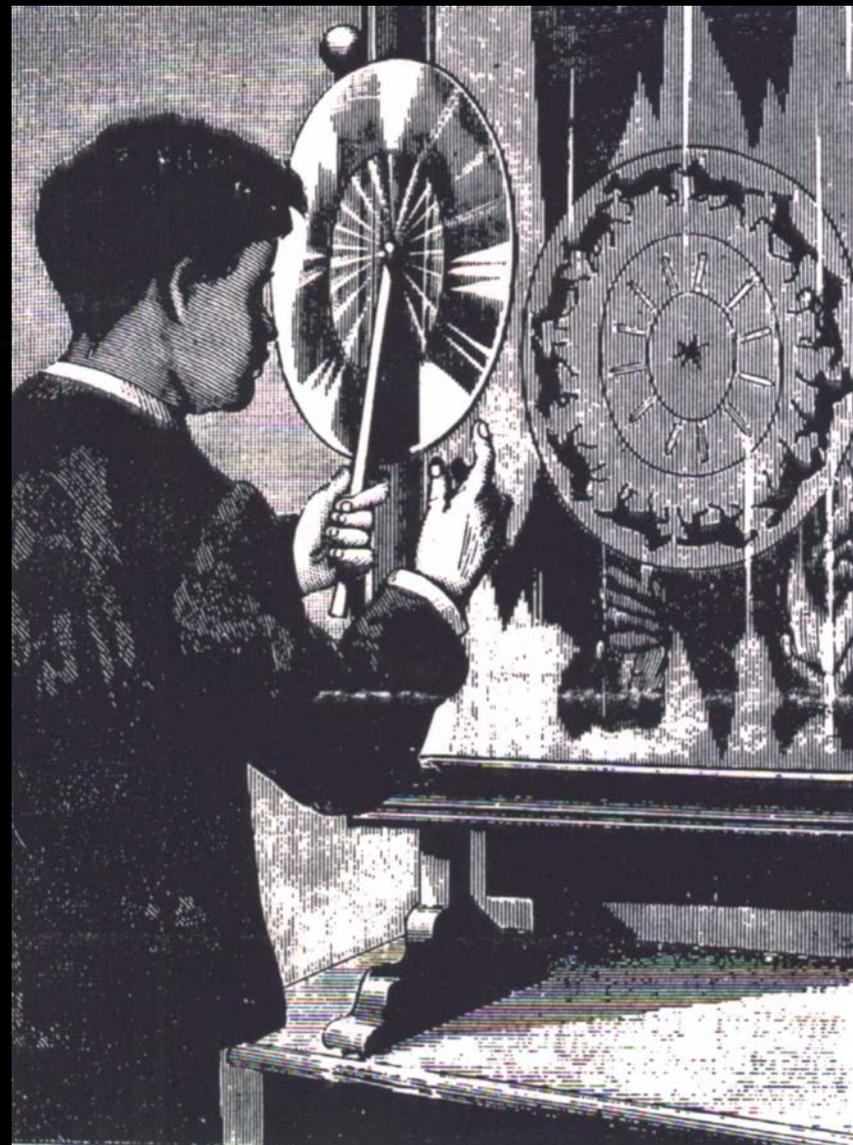
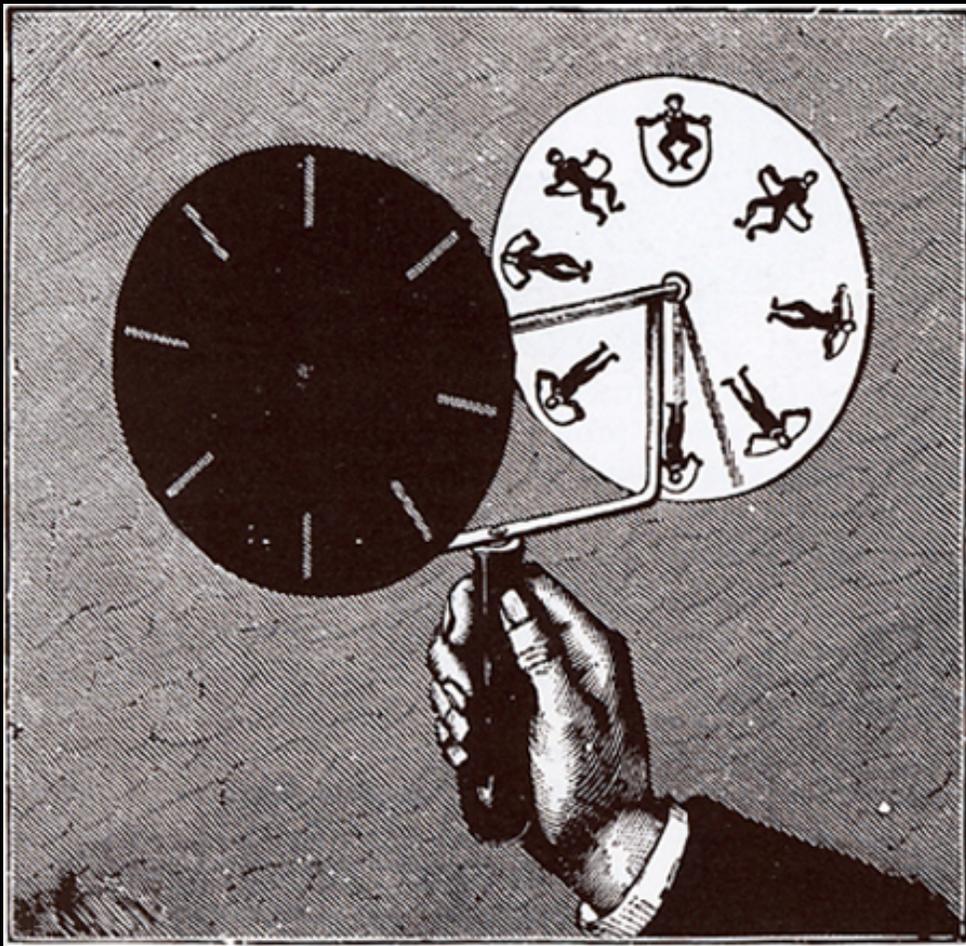


During the Civil War, the camera went along for the ride, often in the hands of one of Mathew B. Brady's and Alexander Gardner's well-trained field photographers such as Timothy H. O'Sullivan.



LEFT: Above - Union (i.e. Confederate) dead at Gettysburg, 1865; Below - War effect of a shell on a Confederate soldier at battle of Gettysburg, 1865  
RIGHT: Above - View at Losser's (i.e. Trostrle's) barn, where the 9th Massachusetts Battery was cut up, 1865; Below - Meadow over which the 2d Mass. and 27th Indiana charged on morning of July 3d, 1865

# 3. FILM/CINEMA



Joseph Plateau and Simon von Stampfer, Phenakistoscope (“spindle viewer”), 1832



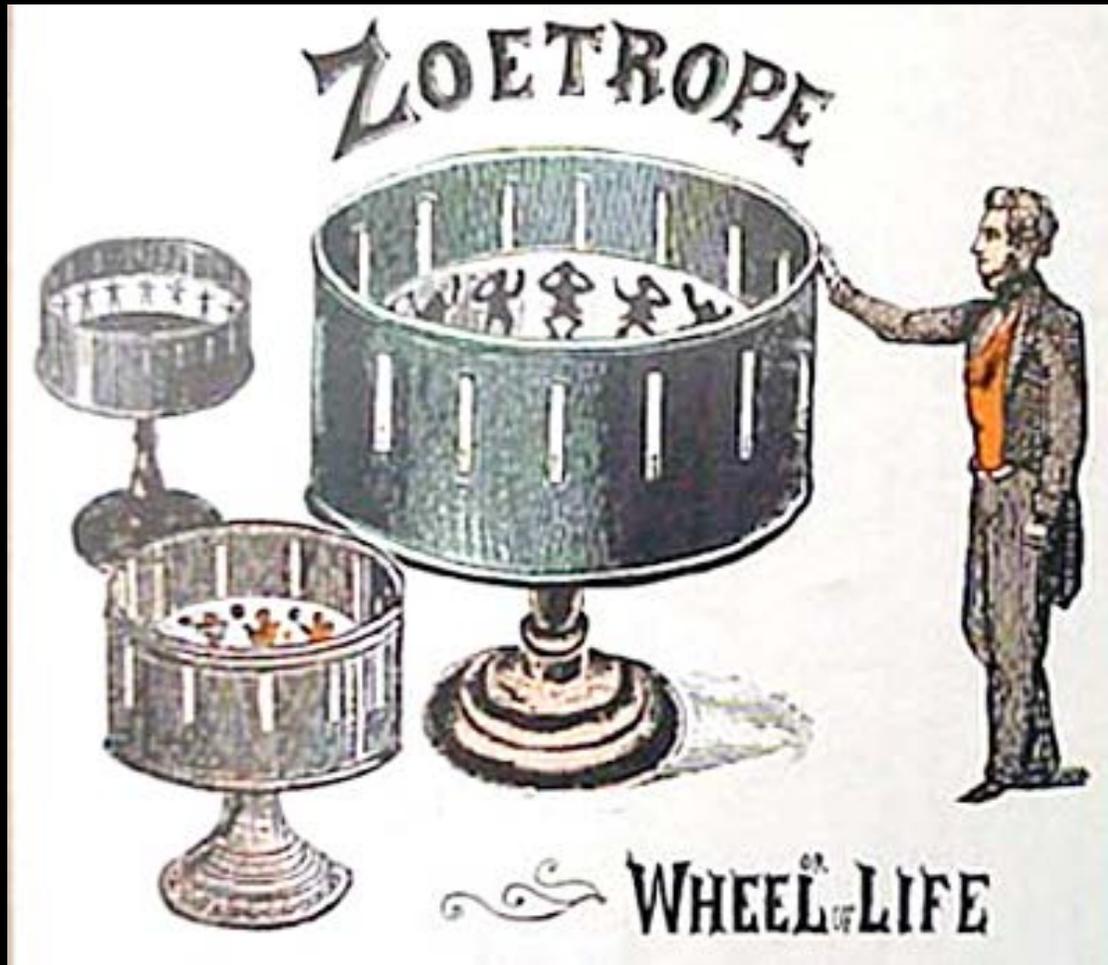


Above:

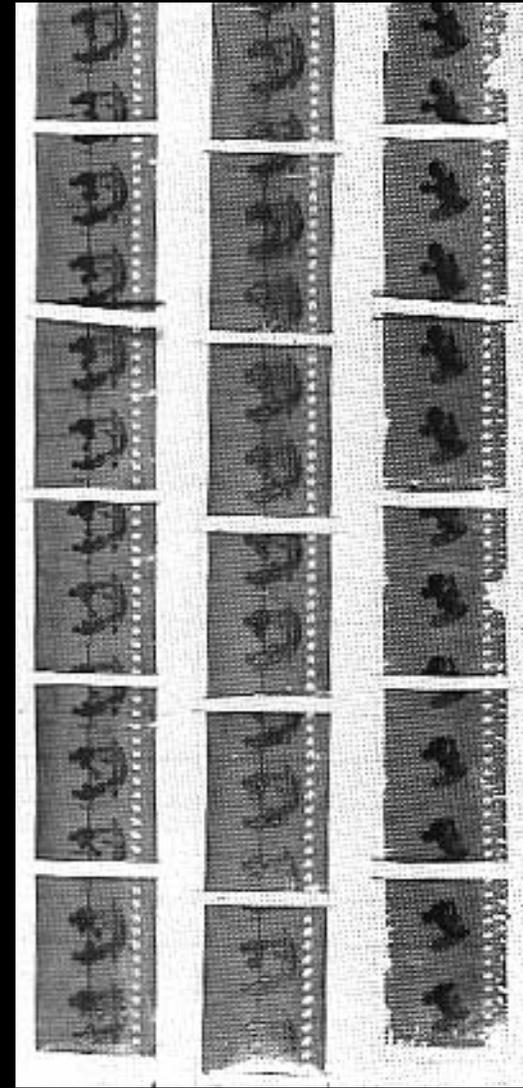
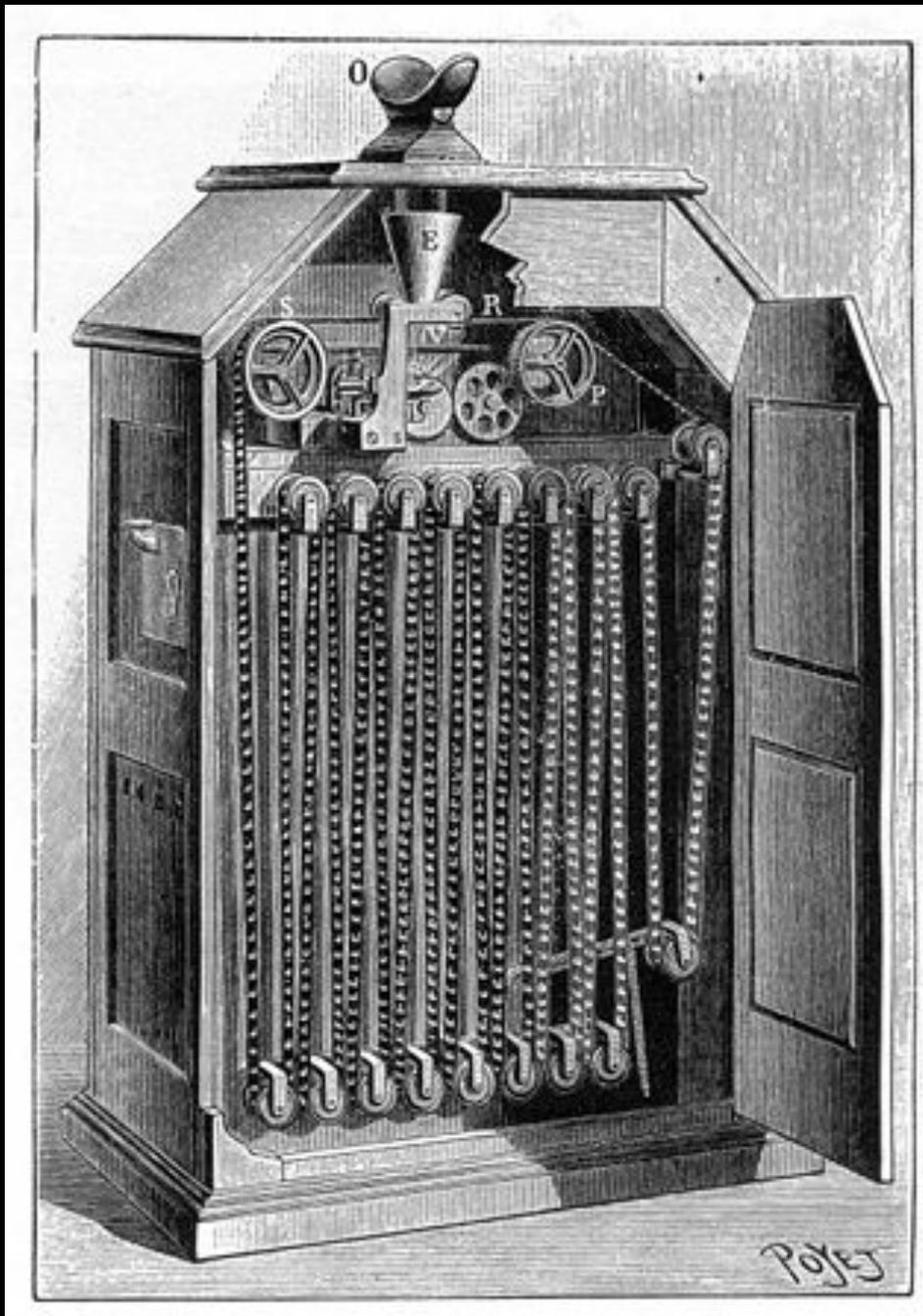
[https://upload.wikimedia.org/wikipedia/commons/9/9c/Optical\\_illusion\\_disc\\_with\\_man\\_pumping\\_water.gif](https://upload.wikimedia.org/wikipedia/commons/9/9c/Optical_illusion_disc_with_man_pumping_water.gif)

Left:

<http://www.thiscolossal.com/wp-content/uploads/2013/10/phenakistoscope-4.gif>



William George Horner, Zoetrope, 1833



Thomas Edison, Kinetoscope, 1891



Kinetoscope parlor, San Francisco, ca. 1894–95



Thomas Edison, Kinetophone, 1893

## EDISON PROJECTING KINETOSCOPE



It is unequalled for HOME ENTERTAINMENT. The improved machine is now so simple that an amateur can operate it. Projects both *moving pictures* and stereopticon slides on the screen. The mechanism is turned by hand. If electric current is not in your town or in your house, we give you choice of other ways of making the light. Our catalogues give complete information and lists of moving pictures.

ADDRESS KINETOSCOPE DEPARTMENT C  
EDISON M'F'G CO., ORANGE, N. J., U. S. A.

# TALKING PICTURES!

A FACT!



A REALITY!

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# THE KINETOPHONE

ABSOLUTELY THE FIRST PRACTICAL TALKING-MOTION-PICTURE EVER MADE

VOICE AND ACTION RECORDED SIMULTANEOUSLY  
PERFECT SYNCHRONISM AND ILLUSION

ANY FIRST-CLASS OPERATOR CAN HANDLE

THE MACHINE CONTROLS THE OPERATOR, HOLDING FILM AND RECORD TOGETHER IN PERFECT UNISON. IN FACT, HE CAN TURN HIS BACK TO SCREEN AND SYNCHRONIZE TO A FRACTION OF A SECOND

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WRITE FOR PARTICULARS

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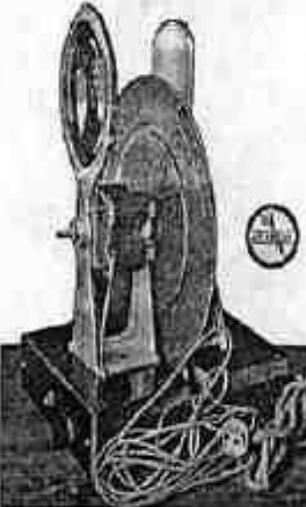
1493-1495 BROADWAY

NEW YORK



C. Francis Jenkins with Phantoscope 1895

In 1894, Jenkins staged the first "movie" show. He shipped his motion picture projector, which he called a phantoscope, from Washington to Richmond. In the jewelry store of his cousin, Charles Jenkins, at 726 Main in Richmond, Indiana, he projected pictures of a dancer performing a "butterfly dance" onto the wall,



# It Works!

YOU can now enjoy radiovision programs. Don't waste time, money and patience trying to work out your own equipment. Start right with Jenkins apparatus in convenient kit form or in ready-to-use form. Jenkins self-synchronous feature makes reception possible wherever signals are heard. Jenkins receivers, combined with Jenkins radiovisors, provide real television entertainment.

**RK-1 JENKINS RADIOVISOR KIT**

Complete kit of parts, fully equipped, ready to assemble and use. Includes lens, lens tube, window, ball-bearing shaft, rotor, electric connecting disc assembly, speed control, condenser, tone socket and bearing, wire, screws, nuts, bolts, packed in best box as shown below, with complete instructions. Assembled in a few hours as shown at left. Choice of 11, 21 or 41-line scanning system. Maximum lens optional. PRICE: \$47.50. Lamp, \$1.50.

**JENKINS TELEVISION RECEIVER KIT**

To tune in television signals, employ a Jenkins radiovisor receiver. Ideal electronic receivers are not satisfactory for good results. If you wish to build your own receiver, use Jenkins JK-26 receiver kit. Components fully equipped, ready to assemble and wire in a few hours. PRICE: \$43.00.

If you prefer a maintenance receiver, there is Type 2 for use with Radiovisor or common A.C. power system for electronic synchronization. PRICE, \$104.00. This kit is Type 2B, with self-synchronous power supply, is also suitable for those who like common power system sets.

One-tube design. A.U. operation, lighted type amplifier, single output for brilliant picture, self-synchronous power unit, sturdy all-metal chassis, are features of Jenkins radiovisor receivers.

**READY-TO-USE EQUIPMENT**

If you prefer assembled equipment, ready to use, there is the Model 100 Radiovisor. Many components are RK-1 kit, but involving less assembly and cost (total lens, finished in brass). Ideal for laboratory or home use. Two-inch square image. Self-synchronous attachment optional. PRICE, \$66.00. Lamp extra.

Model 200 Radiovisor is intended for laboratory use. Deluxe metal cabinet, three meters, eight-inch image. A.C. synchronous set. PRICE, \$109.00. Lamp extra.

Model 300 Radiovisor. Deluxe metal cabinet. Self-synchronous by scanning streak. Five-inch image. PRICE: \$112.00. Lamp extra.



**DASSAIC NEW JERSEY**



Television is here! It is ready for experiments, service men and dealers! Television programs are steadily increasing. Now is the time to get into television! Experience the thrill of getting broadcast data all over again! Just fill out and mail coupon below.

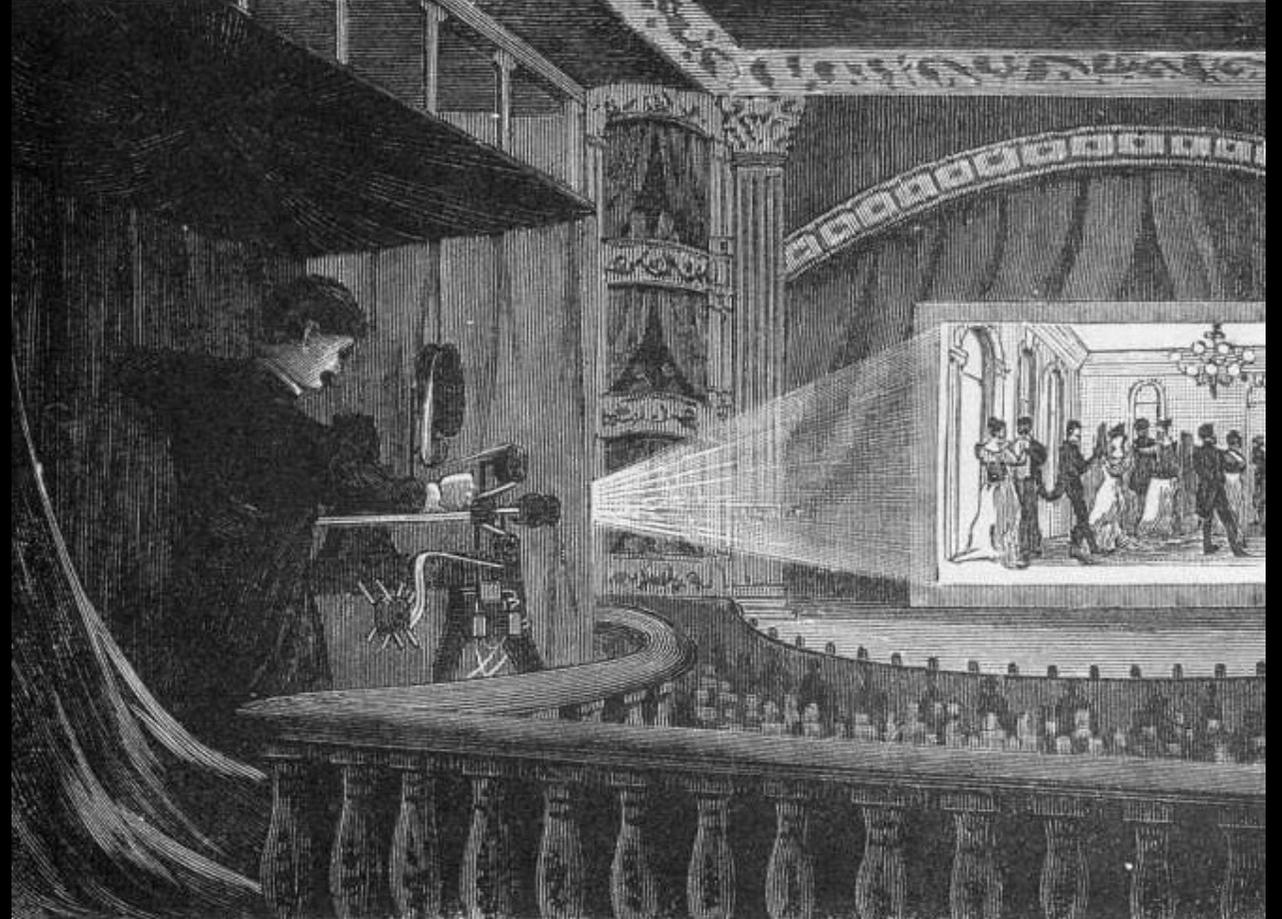
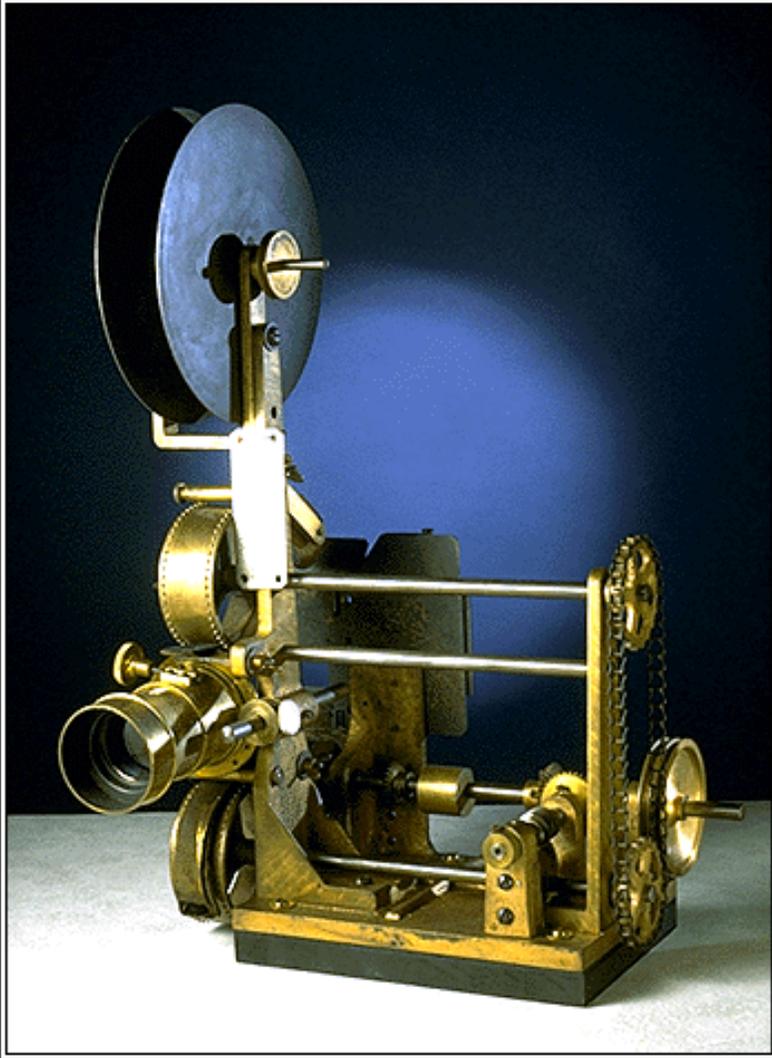
Later, in 1924, Charles Jenkins invented a mechanical television system he called radiovision.

**EDISON'S GREATEST MARVEL**

**THE VITASCOPE**

"Wonderful is The Vitascope. Pictures life size and full of color. Makes a thrilling show."  
NEWYORK HERALD, April 24, '96.

The Edison Manufacturing Company agreed to manufacture the phantascope and to produce films for it, but on the condition it be advertised as a new Edison invention named the Vitascope. The Vitascope's first theatrical exhibition was on April 23, 1896, at Koster and Bial's Music Hall in New York City. Other competitors soon displayed their own projection systems in American theaters, including the re-engineered Eidoloscope, which copied Vitascope innovations; the Lumière Cinématographe, which had already debuted in Europe in 1895; Birt Acres' Kineopticon; and the Biograph which was marketed by the American Mutoscope Company.



Thomas Edison, Vitascope, 1896

# EDISON

1901 MODEL

## PROJECTING KINETOSCOPE

IS NOW READY. FULL DESCRIPTION IN CATALOGUE No. 104.

### NEW FILMS NOW PREPARING. NEW FILMS.

- LAURA COMSTOCK'S BAG PUNCHING DOG**.....(Code word, Ungainful) 100 ft.  
Shows Laura Comstock's Wonderful Trick Dog, Mammie, punching the bag. Very clear and realistic. Full of action.  
We also furnish an excellent 50ft. strip. (Code word, Ungainly.)
- PIE, TRAMP AND BULL DOG**.....(Code word, Ungallies.) 75 ft.  
Tramp enters, sees bull dog in kennel. Retreats, re-enters on stilts. Starts eating pie from a shelf. Bull dog jumps from window, throws tramp and shakes him up.
- GORDON SISTERS BOXING**.....(Code word, Ungallant) 100 ft.  
Champion Female Boxers of the World.  
We also furnish an excellent 50 ft. strip.....(Code word, Ungartered)
- TRAMP'S DREAM**.....(Code word, Ungangbar) 100 ft.  
Tramp asleep on park bench. Dreams of getting pie without working for it. Also of an encounter with a bull dog. Wakes up, finds it only a dream. A cop has just soaked him on the bottom of his feet. Very Funny.
- HAPPY HOOLIGAN'S APRIL FOOL**.....(Code word, Unellig) 50 ft.
- HAPPY HOOLIGAN'S SURPRISE**.....(Code word, Unelnlig) 65 ft.
- WHY BRIDGET STOPPED DRINKING**.....(Code word, Unedlbor) 75 ft.
- MONTREAL FIRE DEPARTMENT ON RUNNERS**.....(Code word, Unedlifying) 100 ft.
- LOVE BY THE LIGHT OF THE MOON**.....(Unedonem) 65 ft.
- A DONKEY PARTY**.....(Uneducate) 60 ft.  
The Greatest Mysterious Picture ever made is now ready.
- MYSTERIOUS BLACKBOARD**.....(Code word, Ungarina) 100 ft.

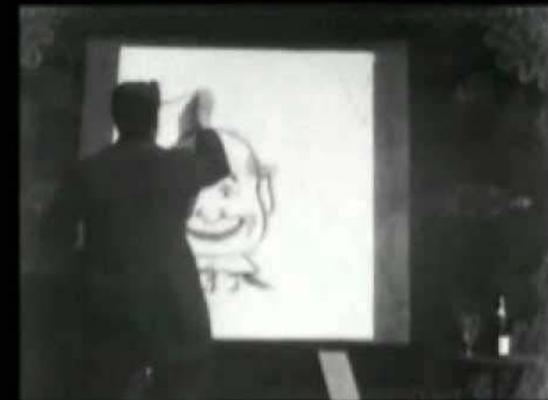
Our Latest Films Are Being Exhibited Daily at the Following New York Theatres: Proctor's Four Houses, Tony Pastor's and Eden Musco, Which is a Strong Recommendation as to Their Merit. You Should Follow in Their Footsteps.

Send in your name and ask for our Special Advance Lists of the Latest New Films. These are All Winners. If you want to get subjects worth owning, send for our Latest Supplements and Advance Lists.

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WONDERFUL FILMS

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THE PRICE OF FILMS IS \$15.00 PER 100 FEET.  
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A HIGH STANDARD  
OF PHOTOGRAPHIC  
PERFECTION and  
list nothing but  
**PERFECT FILMS.**

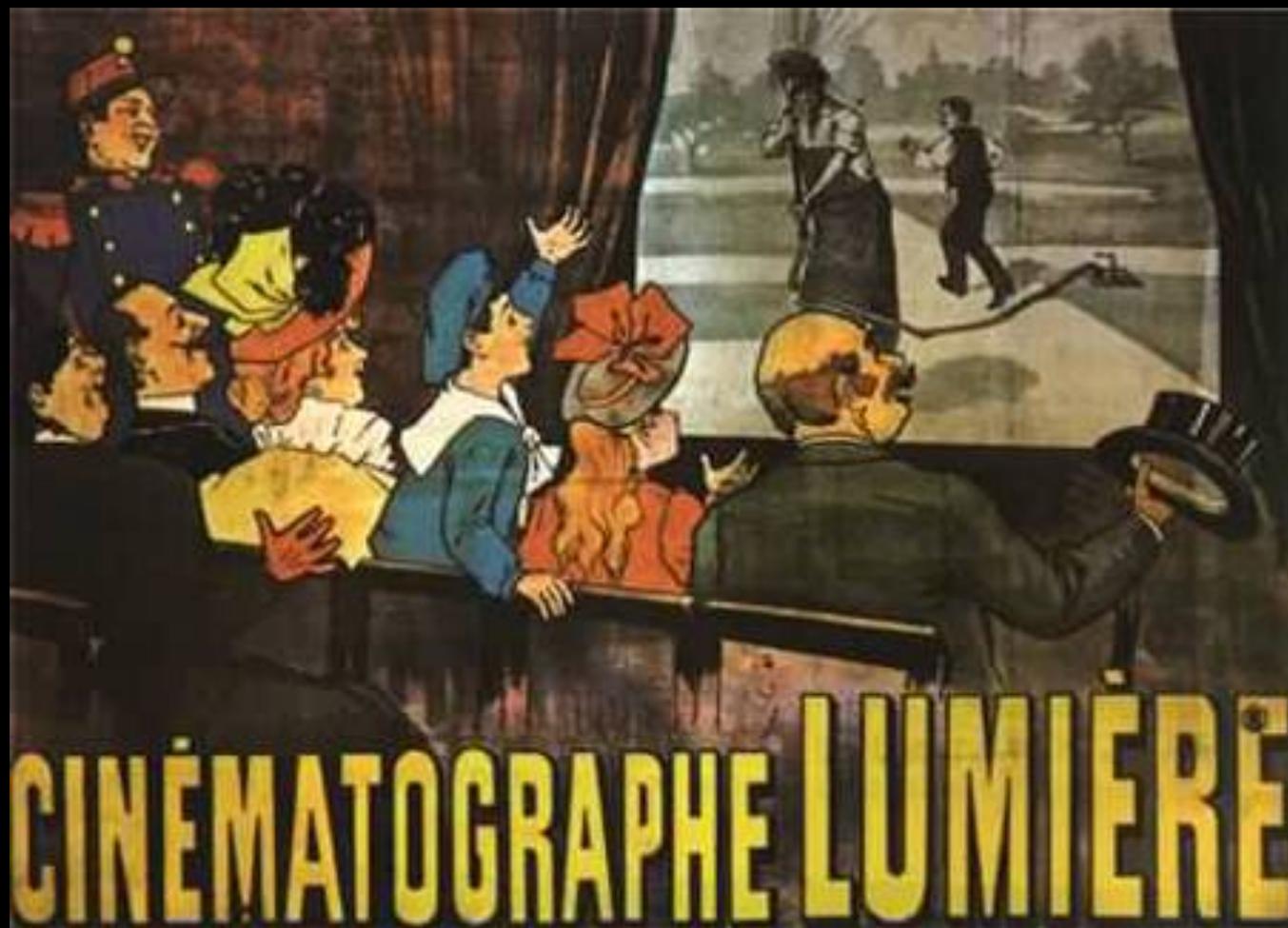


Edison Film, Enchanted Drawing, 1900  
<https://www.youtube.com/watch?v=8230qZnlvNM>

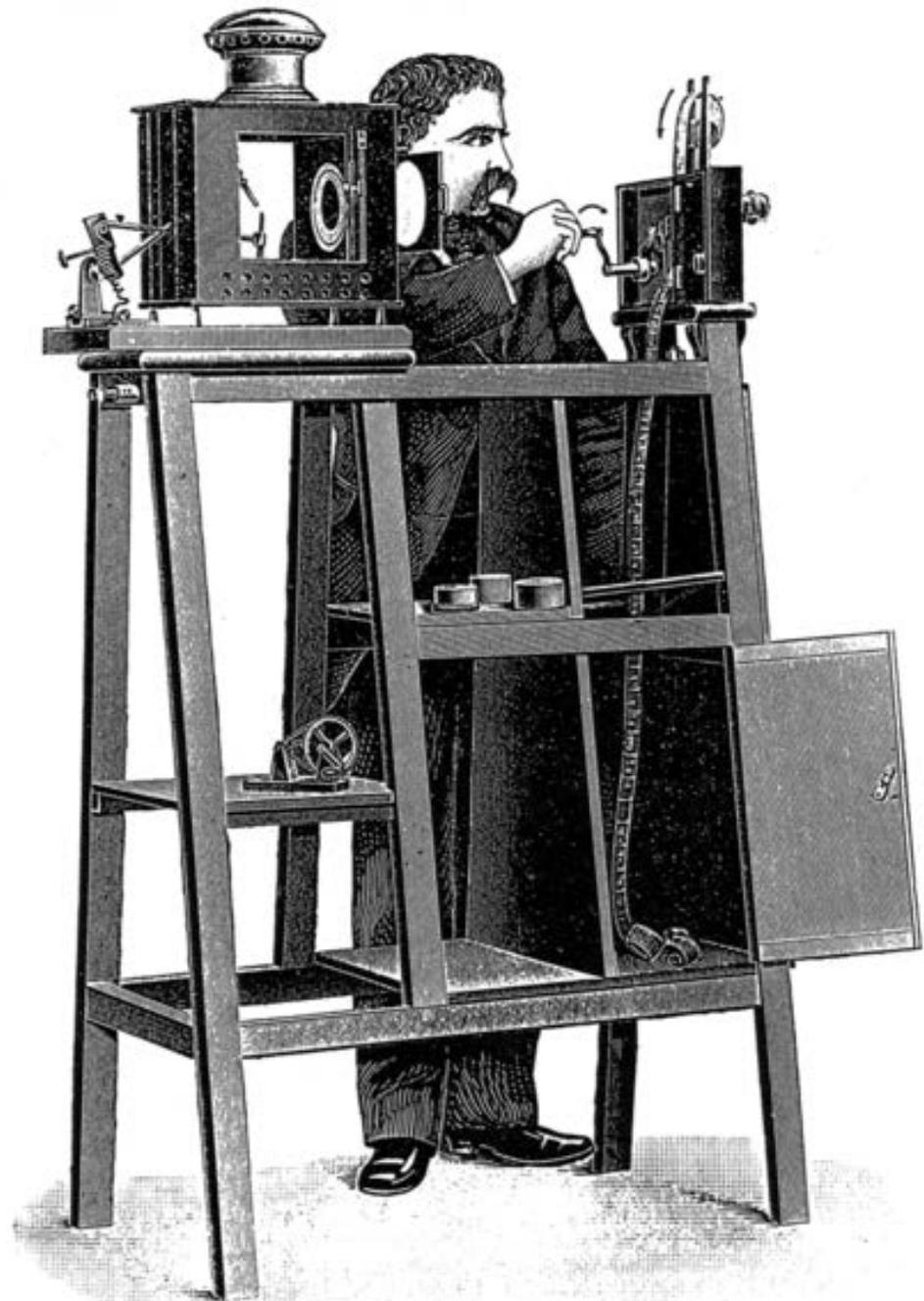


Edison Film, Gordon Sisters Boxing, 1901  
<https://www.youtube.com/watch?v=CPG0na-Aemk>

Thomas Edison, Projecting Kinetoscope, 1896



Auguste Lumière [1862-1954]  
Louis Lumière [1864-1948]



*Le cinématographe Lumière: projection.*



Much smaller and lighter than Edison's Kinetograph, le cinématographe Lumière weighed around 11 pounds and operated with the use of a hand-powered crank.

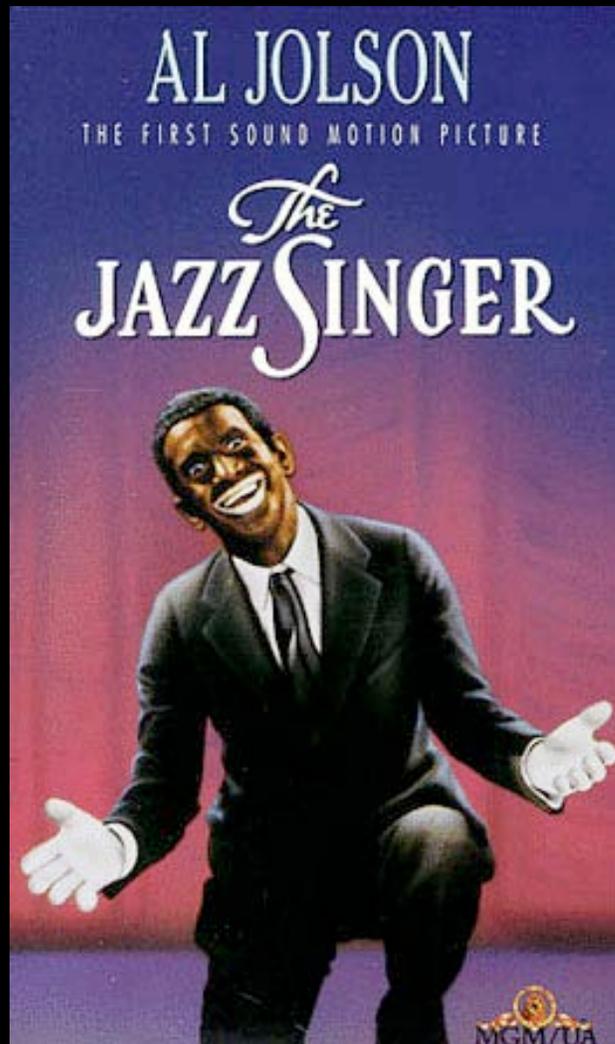
Lumière Brothers, 10 Early Films, 1895

<https://www.youtube.com/watch?v=4nj0vEO4Q6s>

<https://www.youtube.com/watch?v=JGugm8Dzmuc>

1. Leaving the Lumière Factories in Lyon
2. Horse Trick Riders
3. Fishing for Goldfish
4. The Disembarkment of the Congress of Photographers in Lyon
5. Blacksmiths
6. The Gardener, or The Sprinkler Sprinkled
7. Baby's Breakfast
8. Jumping Onto the Blanket
9. Cordeliers Square in Lyon
10. The sea (Bathing in the Sea)





Al Jolson in *The Jazz Singer*, first talky, film with sound, 1927; Directed by Alan Crosland

# 4. EXPANDED CINEMA

The term “expanded cinema” was popularized in a text of the same name by Eugene Youngblood, and was most commonly used (though Youngblood’s definition was considerably broader) to describe multi-screen and mixed-media presentation built around one or more film projectors. Cinema is “expanded” in more than one sense in this definition: it could utilize a number of screens or surfaces, it could involve other not-strictly-cinematic mediums, and it could utilize the conventionally static screening environment; even the audience could be implicated or drawn into the flow of performance/event.

-- Steven McIntyre, “Theoretical Perspectives on Expanded Cinema and the ‘Cruel’ Performance Practice of Dirk de Bruyn” (2008)

# Expanded Cinema (1970)

## Gene Youngblood

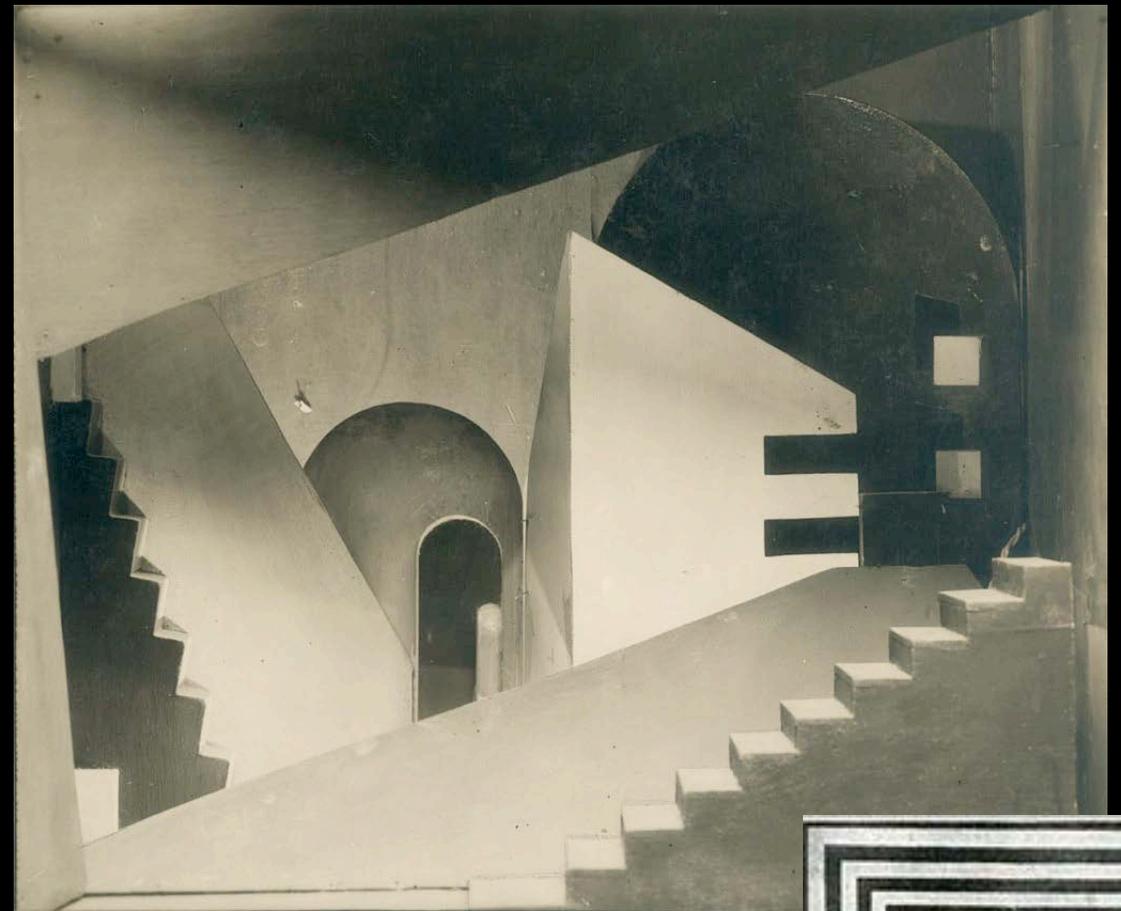
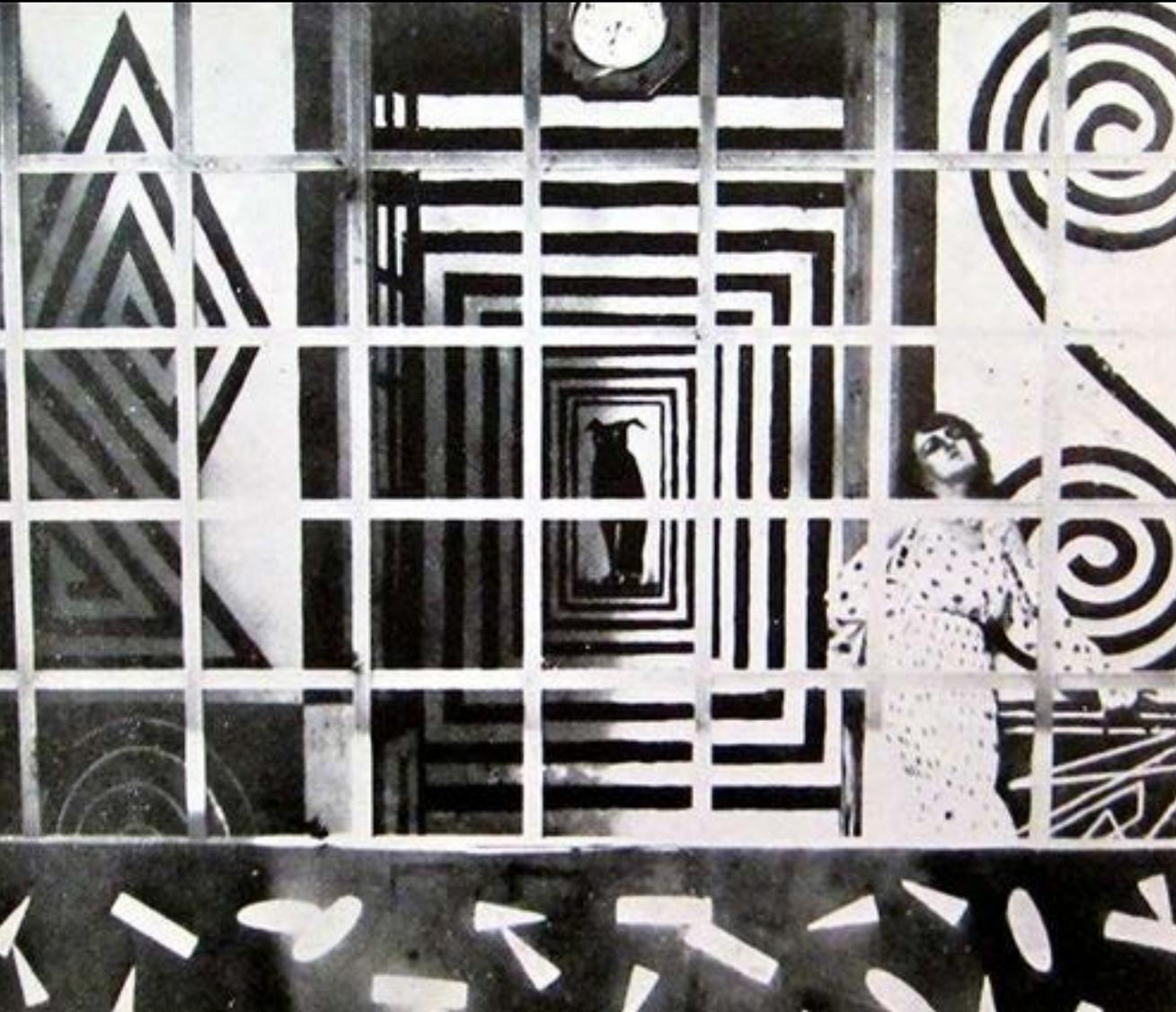
In the cinema, feedback is possible almost exclusively in what I call the synaesthetic mode, which we'll discuss presently. Because it is entirely personal it rests on no identifiable plot and is not probable. The viewer is forced to create along with the film, to interpret for himself what he is experiencing. If the information (either concept or design) reveals some previously unrecognized aspect of the viewer's relation to the circumambient universe – or provides language with which to conceptualize old realities more effectively – the viewer recreates that discovery along with the artist, this feeding back into the environment the existence of more creative potential, which may in turn be used by the artist for messages of still greater eloquence and perception...

When finally we erase the difference between art and entertainment – as we must to survive – we shall find that our community is no longer a community, and we shall begin to understand radical evolution.

<https://www.youtube.com/watch?v=IDJqA6jOXYw>

# Foregrounding Expanded Cinema in History

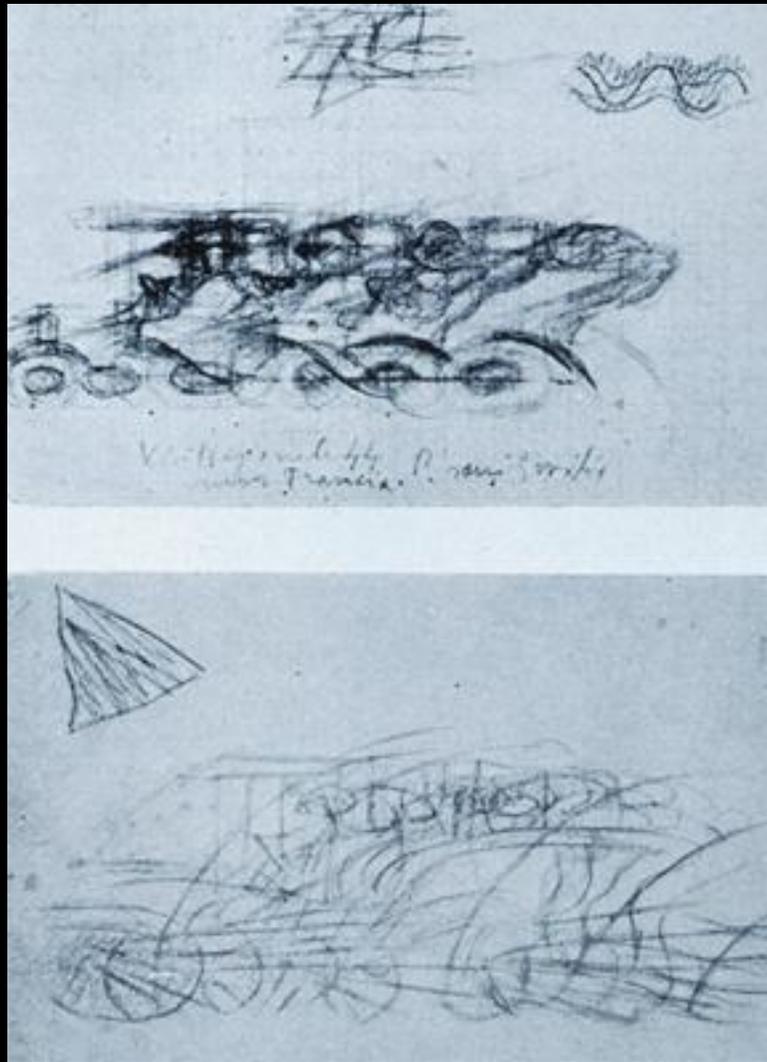
# Italian Futurist Polydimensional Scenospace



Above: Enrico Prampolini, Unidentified Giacomelli Futurist Pavilion stage design (Gelatin silver print), 1928  
Left: Still from *Thais* (1917), futurist film with sets designed by Enrico Prampolini



**FUTURISM**  
speed  
machines  
violence  
war



Giacomo Balla, Studies of automobiles:  
det.: Balla's notebook #2, 1910

## The Founding and Manifesto of Futurism by F.T. Marinetti (1909)

...Suddenly we jumped, hearing the mighty noise of the huge double-decker trams that rumbled by outside, ablaze with colored lights, like villages on holiday suddenly struck and uprooted by the flooding Po and dragged over falls and through gorges to the sea.

Then the silence deepened. But, as we listened to the old canal muttering its feeble prayers and the creaking bones of sickly palaces above their damp green beards, under the windows we suddenly heard the famished roar of automobiles.

“Let’s go!” I said. “Friends, away! Let’s go! Mythology and the Mystic Ideal are defeated at last. We’re about to see the Centaur’s birth and, soon after, the first flight of Angels!...

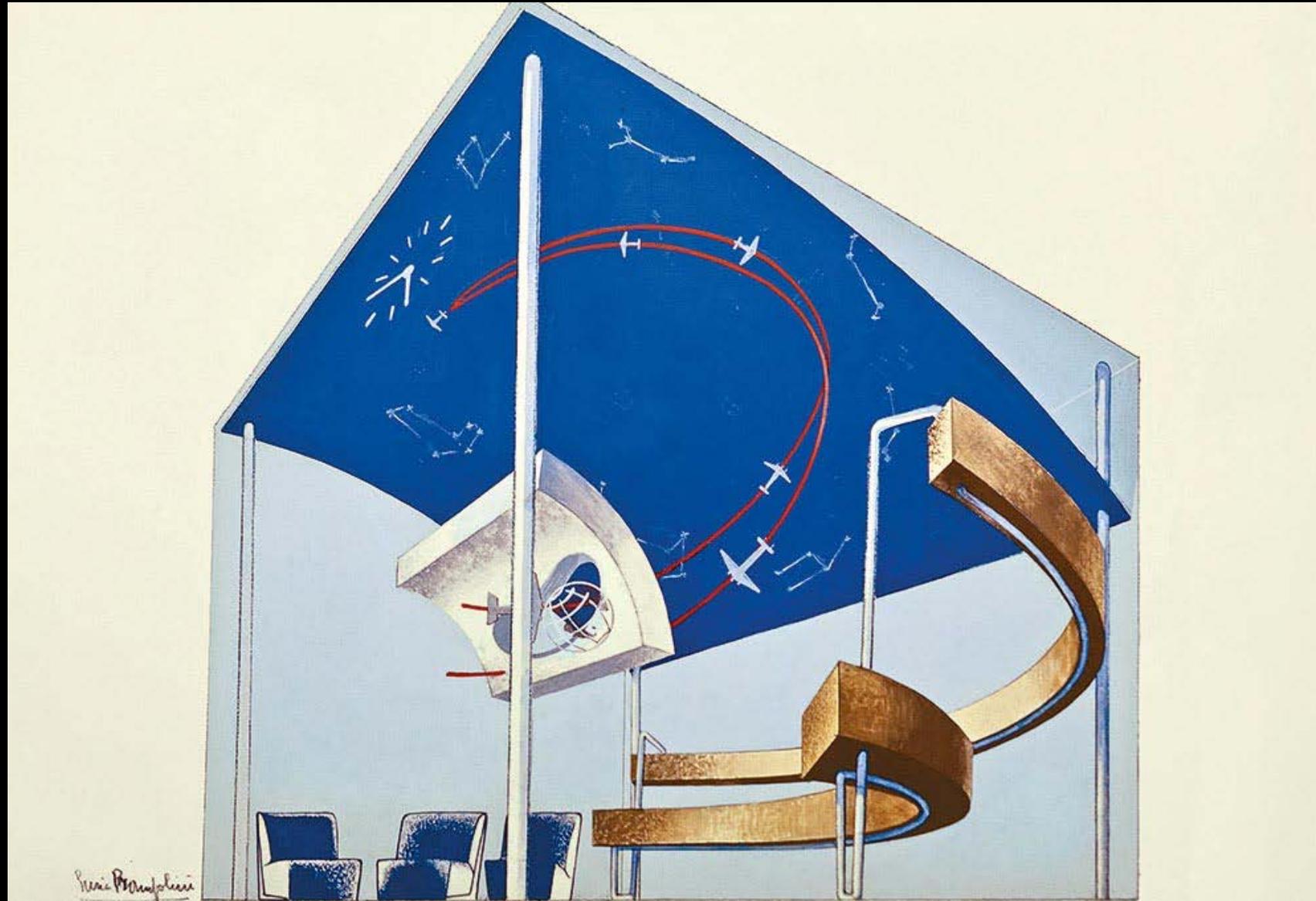
We must shake at the gates of life, test the bolts and hinges. Let’s go! Look there, on the earth, the very first dawn! There’s nothing to match the splendor of the sun’s red sword, slashing for the first time through our millennial gloom!” We went up to the three snorting beasts, to lay amorous hands on their torrid breasts. I stretched out on my car like a corpse on its bier, but revived at once under the steering wheel, a guillotine blade that threatened my stomach.



Giacomo Balla, Speed of an Automobile, 1913

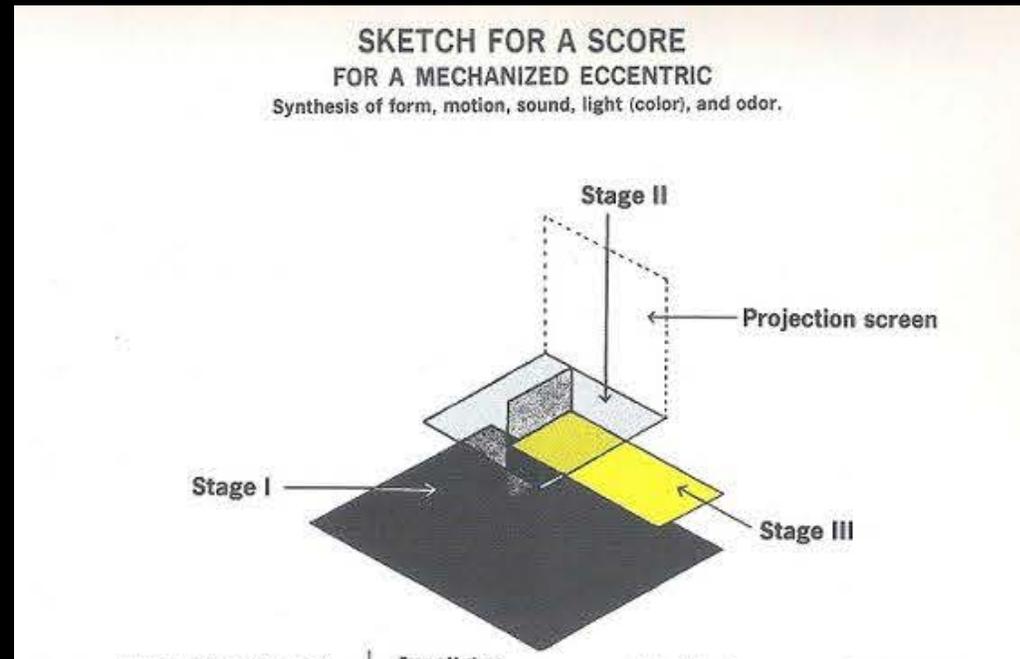
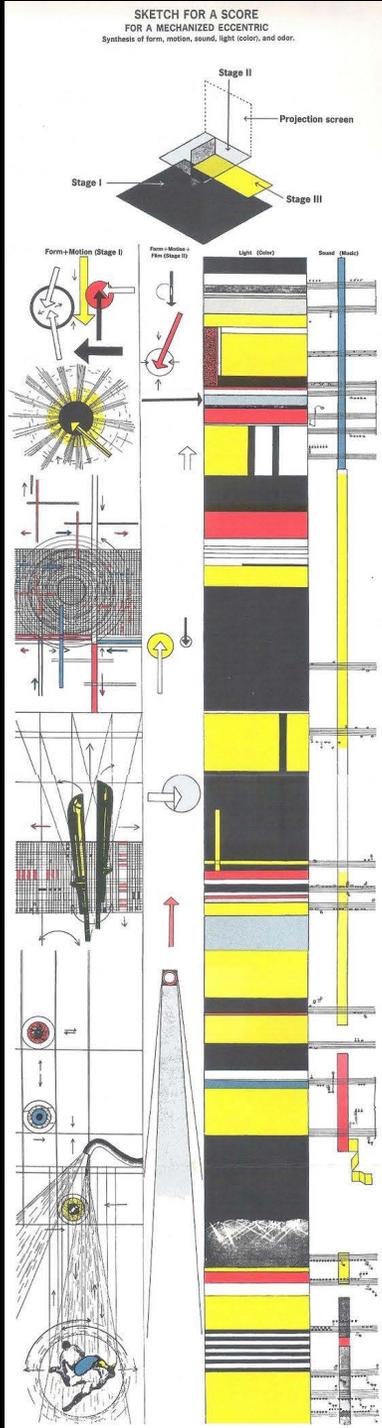
**The Founding and Manifesto of  
Futurism by F.T. Marinetti (1909)  
[continued]**

... We will sing of great crowds excited by work, by pleasure, and by riot; we will sing of the multicolored, polyphonic tides of revolution in the modern capitals; we will sing of the vibrant nightly fervor of arsenals and shipyards blazing with violent electric moons; greedy railway stations that devour smoke-plumed serpents; factories hung on clouds by the crooked lines of their smoke; bridges that stride the rivers like giant gymnasts, flashing in the sun with a glitter of knives; adventurous steamers that sniff the horizon; deep-chested locomotives whose wheels paw the tracks like the hooves of enormous steel horses bridled by tubing; and the sleek flight of planes whose propellers chatter in the wind like banners and seem to cheer like an enthusiastic crowd...



Enrico Prampolini, Design for hall, decorations, and furnishings for Aeronautica Company: Plan for Milan Triennial Installation, ca. 1932–33 (detail)

In his manifesto on Futurist scenography (1915), the twenty-year-old Prampolini called for the immediate and radical removal of all static, painted, scenery and its replacement by dynamic electromechanical scenic architecture of luminous plastic elements in motion. Prampolini was not interested in replicating natural elements of the world; he wished to dynamize the dramatic action on the stage, convinced that this would lead to corresponding effects on the minds of the audience. – Oliver Grau, *Virtual Art: From Illusion to Immersion*, 143-144



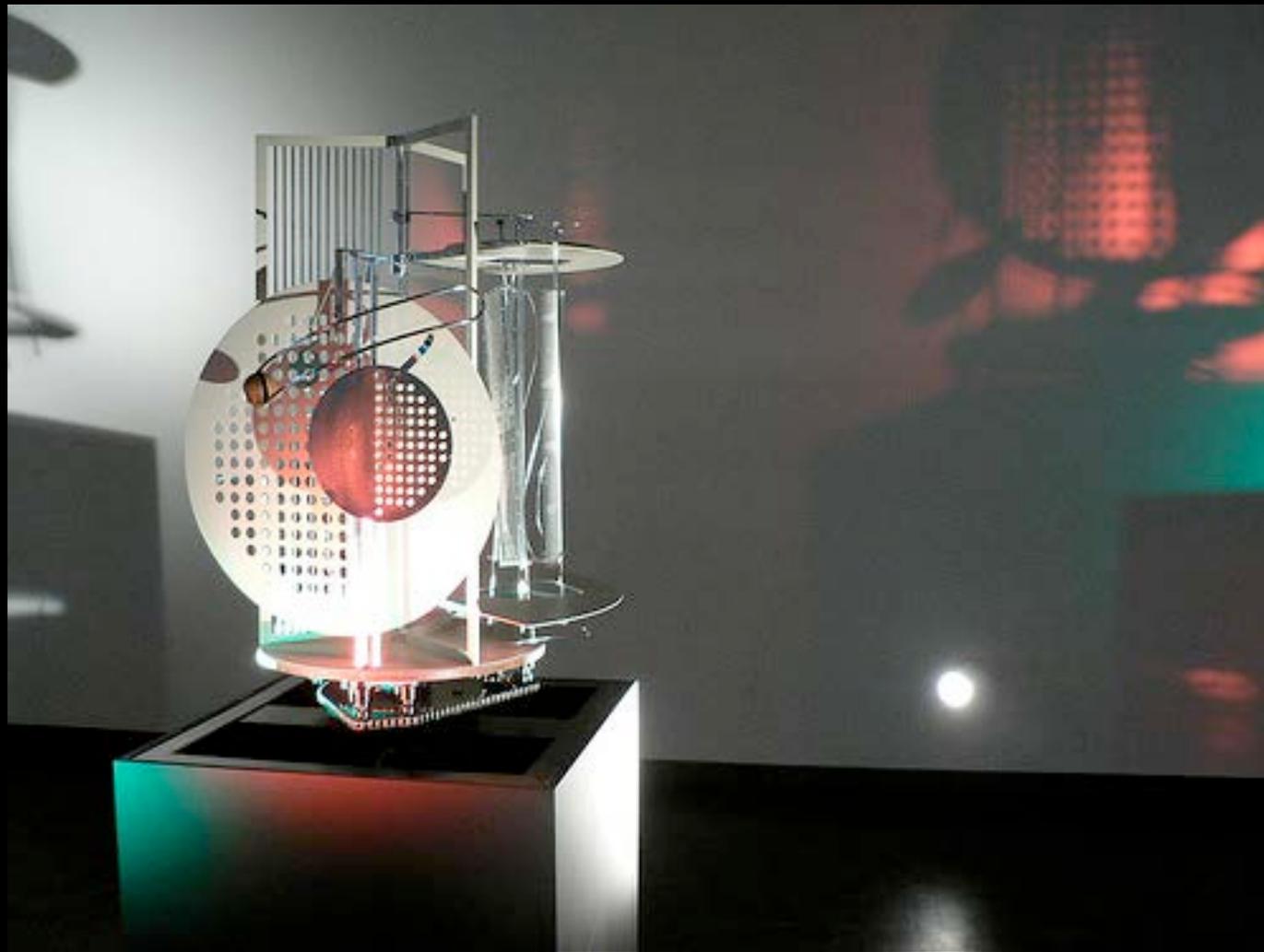
László Moholy-Nagy, Sketch  
for a Score for a  
Mechanized Eccentric,  
1925;

Moholy-Nagy conceived  
this as a “concentration of  
stage action in its purest  
form,” a “humanless  
environmental field of  
lights, sounds, films, odors,  
music, mechanized  
apparatus, and simulated  
explosions”



Moholy-Nagy, Light-Space Modulator, 1923-30

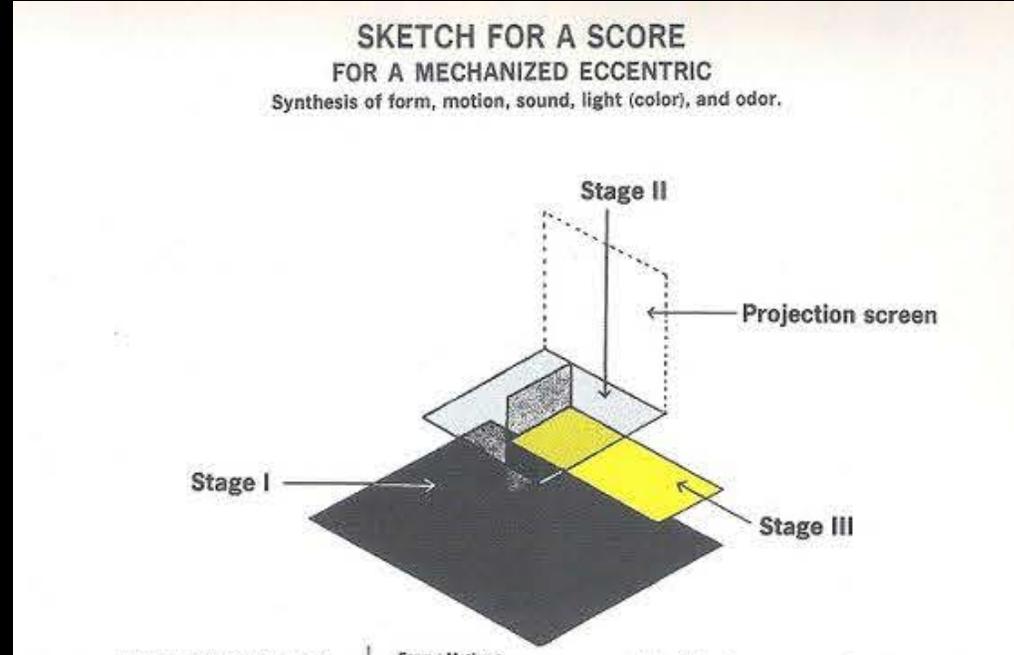
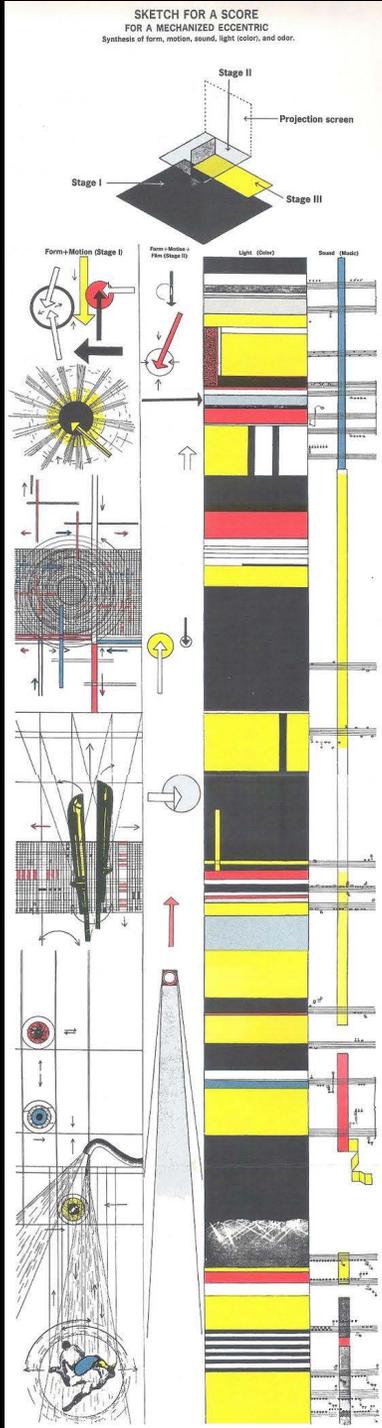
Three moveable metal and/or glass structures arranged on a rotating disc form the core of the Light-Space Modulator.



Moholy-Nagy, Light-Space Modulator, 1923-30

<https://www.youtube.com/watch?v=QYNO3DLIZe0>

<https://www.youtube.com/watch?v=nVnF9A3azSA>



László Moholy-Nagy, Sketch for a Score for a Mechanized Eccentric, 1925; conceived as a “concentration of stage action in its purest form,” a “humanless environmental field of lights, sounds, films, odors, music, mechanized apparatus, and simulated explosions.”

The four columns in this diagrammatic drawing try to demonstrate various aspects of theatre performance. In drawing these ‘columns’ Moholy-Nagy imagined how aspects of performance evolve over time. The first column Moholy-Nagy called ‘form and motion’. The second column Moholy-Nagy called ‘form motion and cinema’. The third column Moholy-Nagy called ‘light (color)’. The fourth and end column Moholy-Nagy called ‘sound (music)’. The notations of actions in each of the columns are related to one of Moholy-Nagy’s three stages: the main stage, the stage for projection and the in-between stage. Column one actions are to be performed in stage one (the main stage), column two actions are to be performed in stage two (the stage with fold-out projection screen) and the column four are actions to be performed in stage three – the in-between stage where mechanical musical instruments are situated. The lighting effects in column three affect all spaces and stages. Moholy-Nagy has separated a variety of actions within each column. These actions take place simultaneously in space on three different stages. As Moholy-Nagy suggested ‘the synchronisation in the score appears in the horizontal’. -- Ivana Wingham

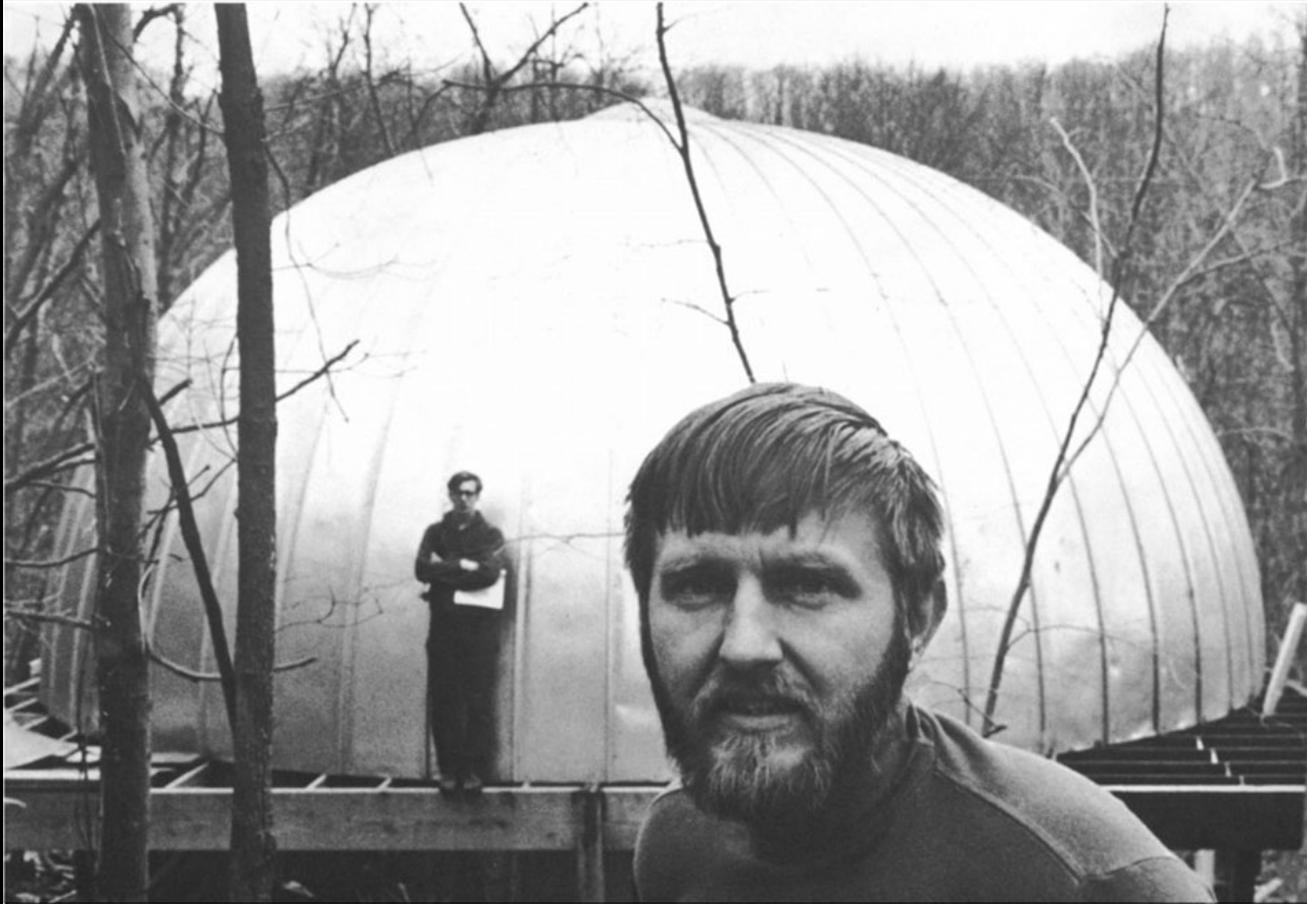
**Poor Richard's**  
PRESENTS  
**ANDY WARHOL AND HIS**  
**EXPLODING PLASTIC**  
**INEVITABLE (SHOW)**  
\*\*\*\*\* FEATURING \*\*\*\*\*  
**THE NEW SOUND OF THE**  
**VELVET UNDERGROUND**  
\*\*\*\*\* WITH \*\*\*\*\*  
**★ NICO - Pop Girl of '66**  
\*\*\*\*\*  
**JUNE 21** thru **JUNE 26**



Andy Warhol, et.al., Exploding Plastic Inevitable, 1966-67: The Exploding Plastic Inevitable, sometimes simply called Plastic Inevitable or EPI, was a series of multimedia events organized by Andy Warhol between and 1966 and 1967, featuring musical performances by The Velvet Underground & Nico, screenings of Warhol's films, and dancing and performances by regulars of Warhol's Factory. Technology: Stroboscopes (instrument used to make a cyclically moving object appear to be slow-moving, or stationary. It consists of either a rotating disk with slots or holes or a lamp such as a flashtube which produces brief repetitive flashes of light), slides and film projections onstage.

<https://www.youtube.com/watch?v=HsR4ghMfq0U>

Stan VanDerBeek, Movie-Drome,  
1957-1969



Influenced by Buckminster Fuller's spheres, VanDerBeek had the idea for a spherical theater where people would lie down and experience movies all around them. Floating multi-images would replace straight one-dimensional film projection.

From 1957 on, VanDerBeek produced film sequences for the Movie-Drome, which he started building in 1963. His intention went far beyond the building itself and moved into the surrounding biosphere, the cosmos, the brain and even extraterrestrial intelligence.

June 29, 1954

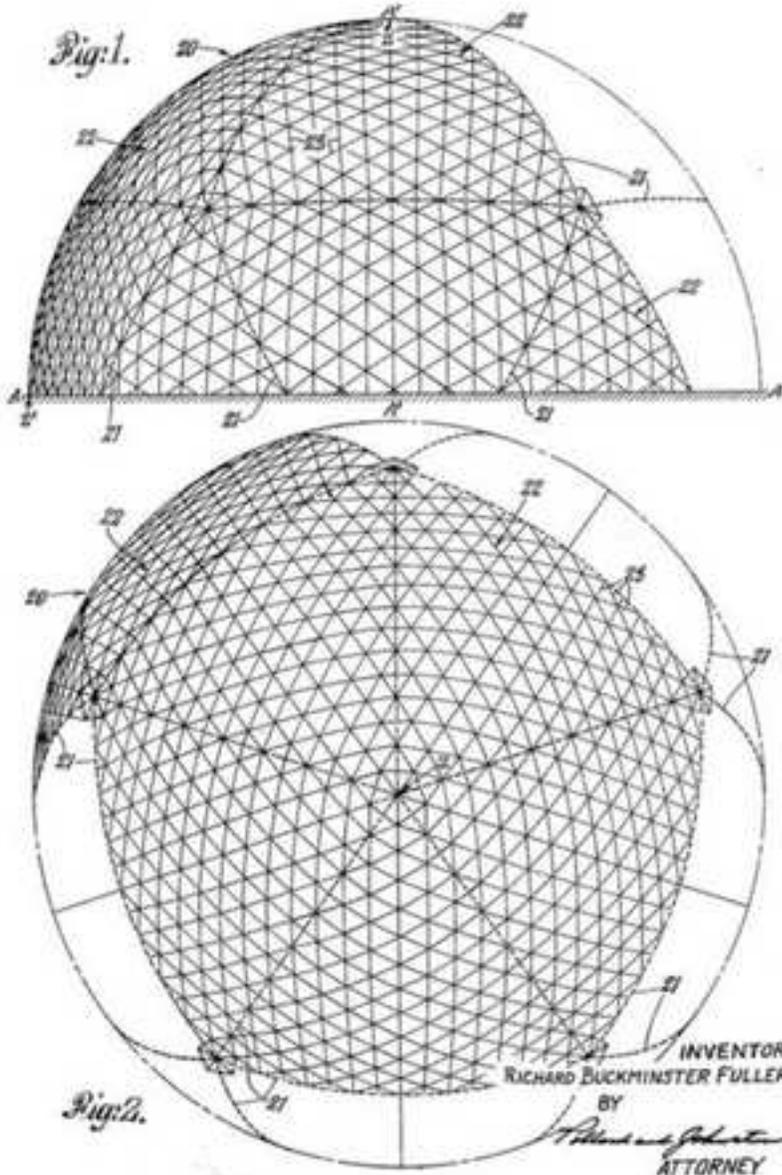
R. B. FULLER

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BUILDING CONSTRUCTION

Filed Dec. 12, 1951

6 Sheets-Sheet 1



Buckminster Fuller, Geodesic Dome, 1950  
(invented/Montreal dome being built at right)



Buckminster Fuller in front of the exhibition dome at the American National Exhibition, Moscow, 1959



Charles and Ray Eames Glimpses of the USA, American Exhibition in Moscow, 1959

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<http://www.youtube.com/watch?v=Ob0aSyDUK4A>



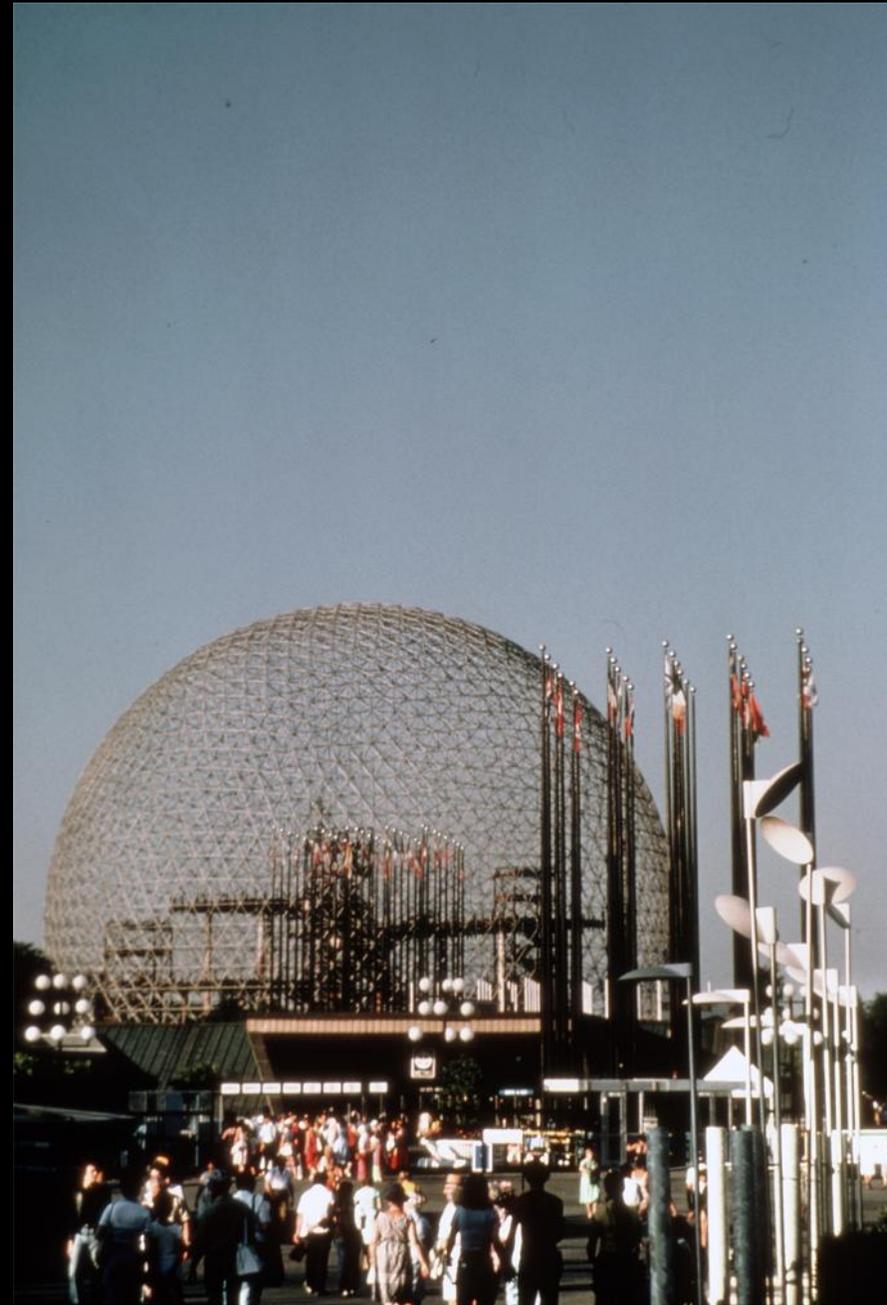


Northland Center, Detroit, Michigan, 1954

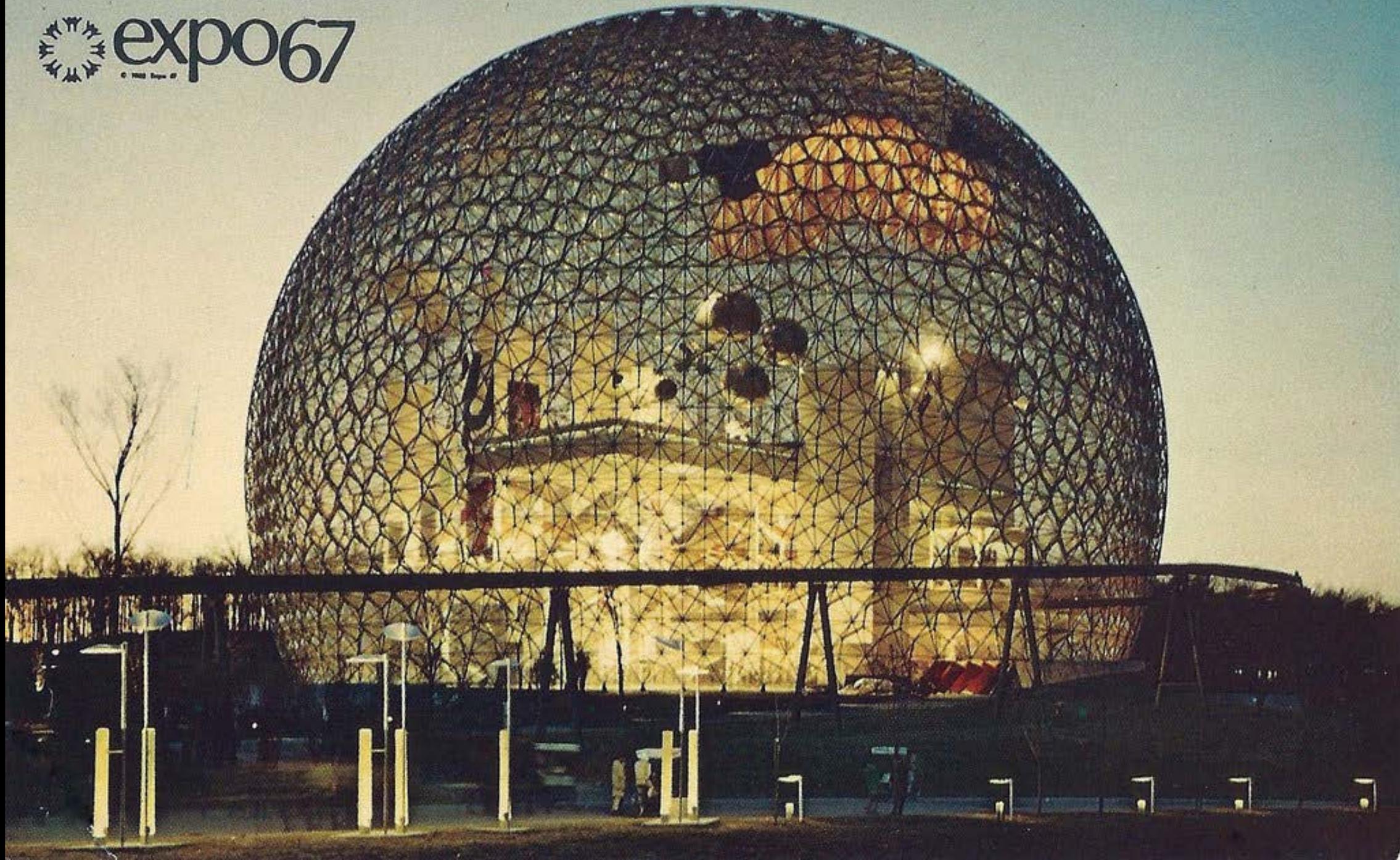


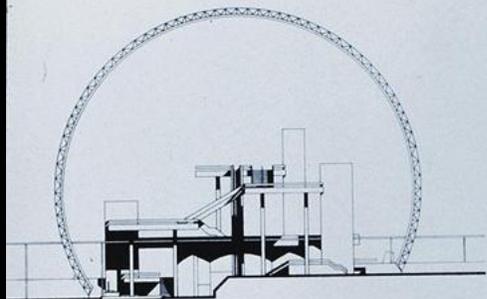
Accordion Truss, Northland Center, Detroit, Michigan, 1954

Buckminster Fuller and Shoji Sadao, United States Pavilion, Montreal World's Exposition, 1967

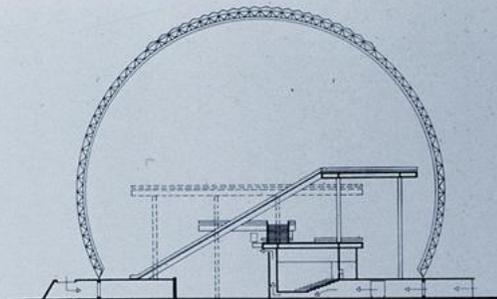


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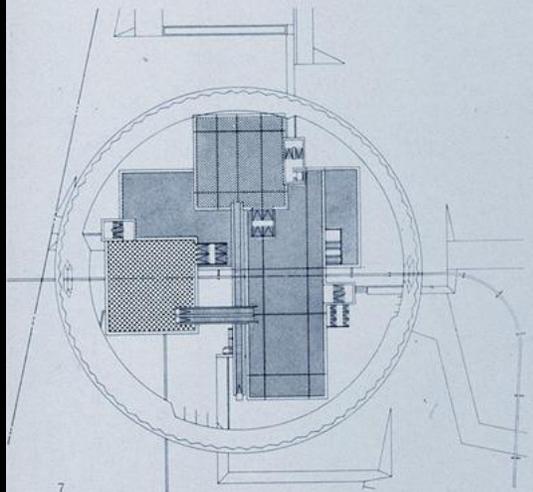




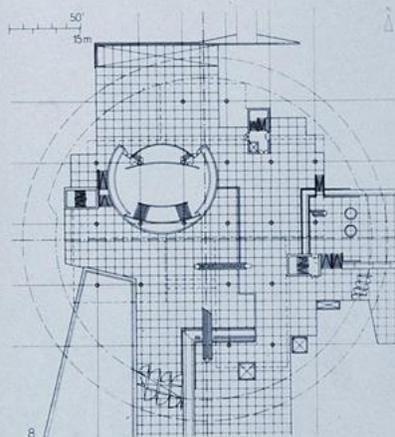
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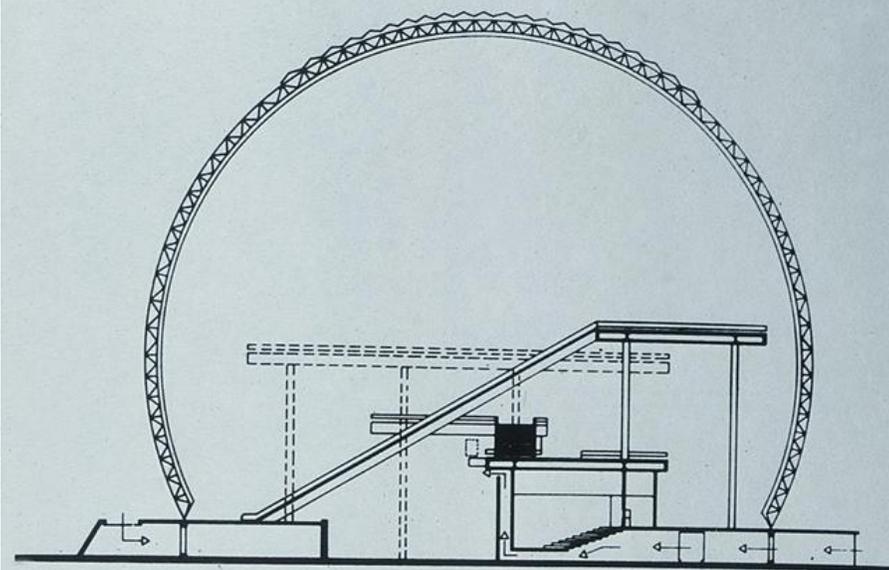
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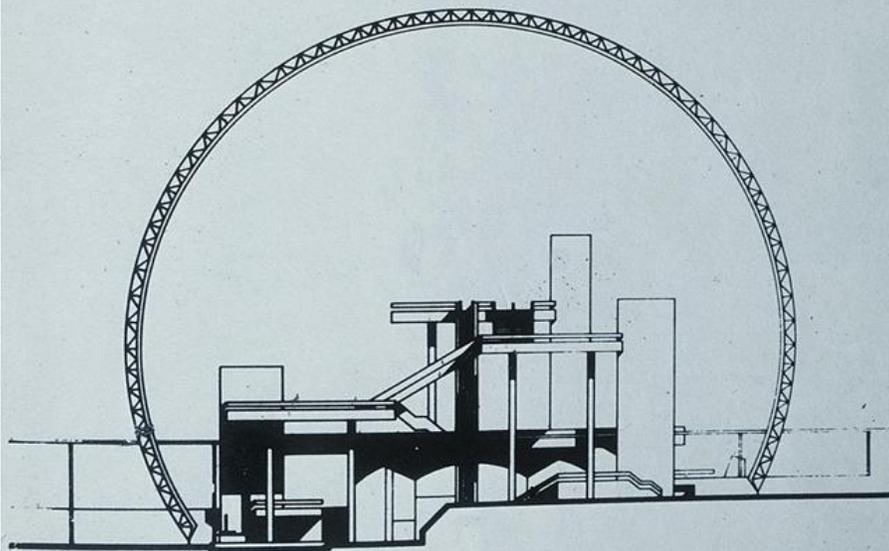
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5. Indoor equipment, seen from the south.
6. Cross-section in the north-south direction, with the 123 ft. long escalator leading to the highest platform.
7. Plan with the four upper platform levels.
8. Plan with the three lower platform levels.
9. In spite of the manifold spatial interpenetrations and intersections of platforms, ramps and display boards (this photograph shows a view from the historic section upwards to the exhibition of contemporary paintings displayed on high, narrow wall panels), the dome was impressive from every vantage point. The dynamic effect was reinforced by the escalators and the 'Minirail' system which provided local transportation through the Pavilion.
10. Almost playfully, space travel was displayed on the highest platform. The dominant feature under the spacious dome was provided by the three orange-white striped parachutes of the Apollo capsule.
11. Instead of pedagogic pedantry, wit and self-deprecation were the dominating features. The section entitled "The American Spirit" contained selected samples of folk art: branding irons of cowboys, sprouting like flowers; guitars of pop singers, and a tower of home-made dolls.
12. In the "Film" section, Hollywood is gaily debunked: Among film stills Ben Hur's Roman chariot of 1925, Charlie Chaplin's garbage bin, and Greta Garbo's golden bed.

5. Ansicht der Pavilloneinbauten von Süden.
6. Schnitt in Nord-Süd-Richtung mit der 37,5 m langen Rolltreppe zur obersten Plattform.
7. Grundriß mit den vier oberen Plattformebenen.
8. Grundriß mit den drei unteren Ebenen.
9. Trotz vielfältiger räumlicher Durchdringungen und Überschneidungen von Plattformen, Schrägrampen und Ausstellungstafeln (hier ein Blick aus der historischen Abteilung hinauf zur Ausstellung zeitgenössischer Malerei, auf hohen schmalen Wänden) war die Kugelhülle von jedem Standpunkt aus erlebbar. Rolltreppen und die quer durch den Pavillon fahrende Minirail-Einschienebahn verstärkten den dynamischen Effekt.
10. Fast spielerisch präsentierte sich die Raumfahrtschau auf der obersten Plattform. Stärkster Akzent unter der weiträumigen Kuppel waren die drei orange-weiß gestreiften Fallschirme der Apollokapsel.
11. Statt lehrhaften Ernstes dominierten Witz und Selbstironie. Die Abteilung »Der amerikanische Geist« operierte mit ausgesuchten Volkskunst-Beispielen: Brenneisen von Cowboys, wie Blumen sprießend, Gitarren der Volksänger und ein Turm aus selbstgemachten Puppen.
12. Im Sektor »Film« heitere Entmythologisierung Hollywoods: zwischen Filmbildern Greta Garbos goldenes Bett, Ben Hurs römischer Wagen von 1925 und Charlie Chaplins Mülltonne.



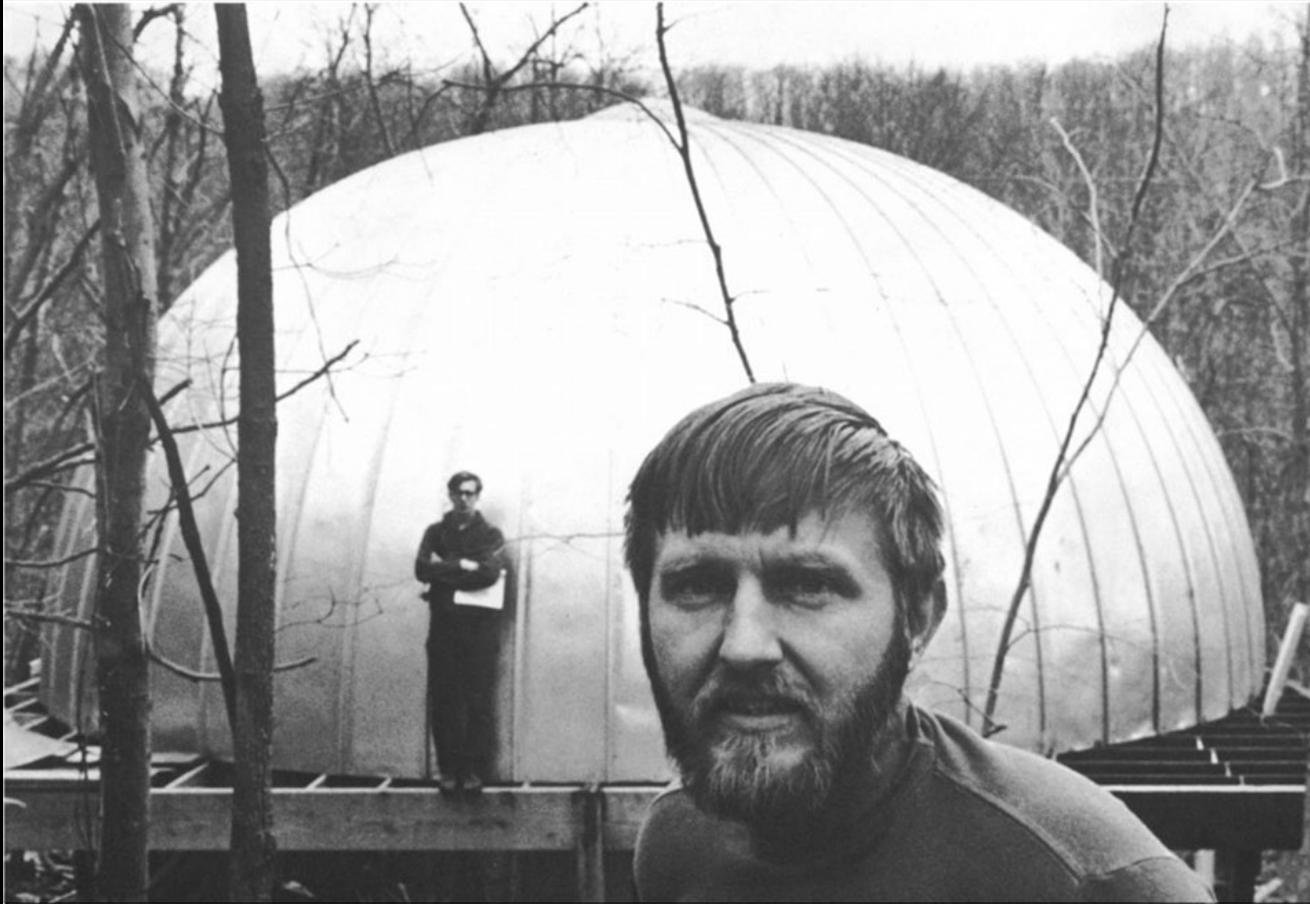
Cross section in the north-south direction, with the 123-foot long escalator leading to the highest platform.



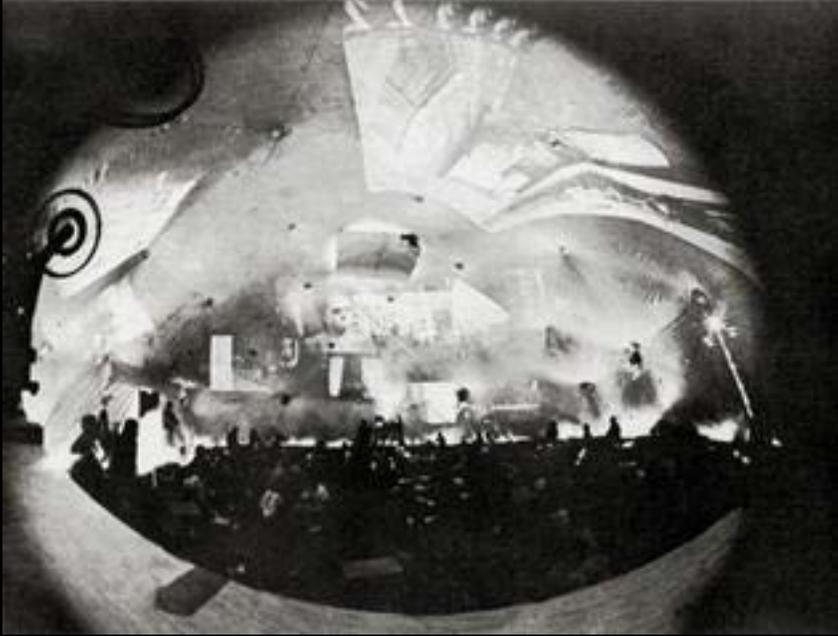
Indoor equipment seen from the south.



Stan VanDerBeek, Movie-Drome,  
1957-1969



Influenced by Buckminster Fuller's spheres, VanDerBeek had the idea for a spherical theater where people would lie down and experience movies all around them. Floating multi-images would replace straight one-dimensional film projection. From 1957 on, VanDerBeek produced film sequences for the Movie-Drome, which he started building in 1963. His intention went far beyond the building itself and moved into the surrounding biosphere, the cosmos, the brain and even extraterrestrial intelligence.



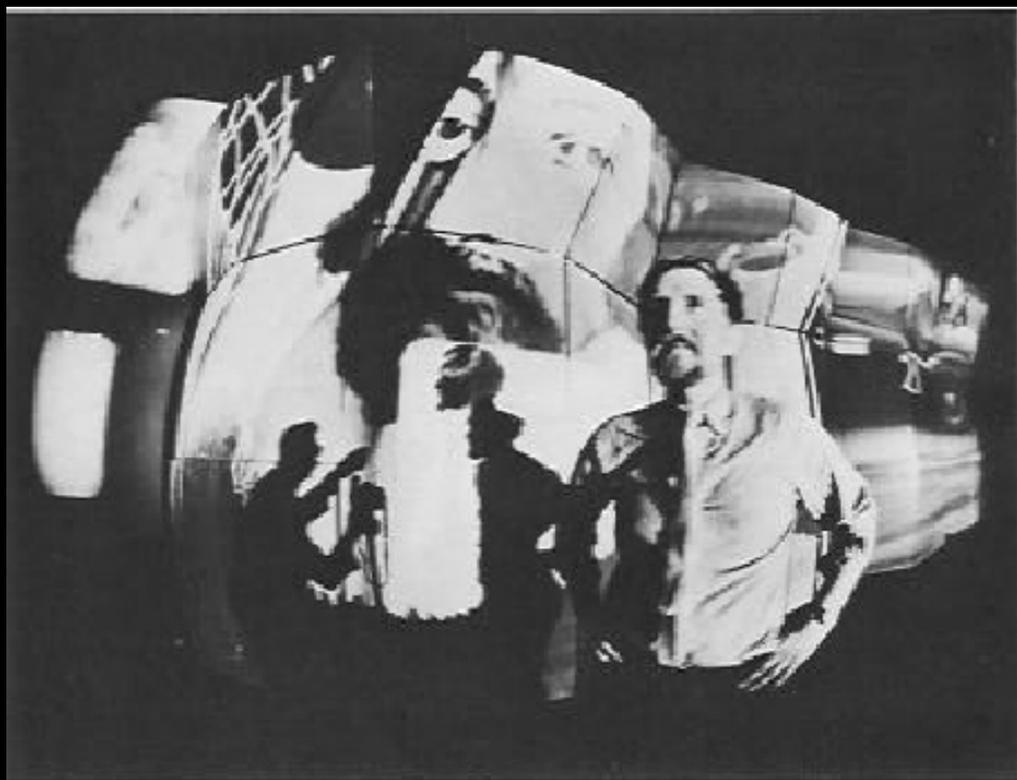
The Movie Drome was a grain silo dome transformed by VanDerBeek into an **'infinite projection screen'**. Viewers entered the dome through a trap-door in the floor; then, after entering, they were invited to spread out over the floor and lie with their feet pointing towards center of the space. Then the audience experienced a dynamic and distributed set of movies and images around them, created by over a dozen slide and film projectors filling the concave surface with a thick collage of moving imagery. These experiences consisted of many random image sequences and continuities, with the result that none of the performances were alike. In this way, the analogue imagery mimics algorithmic image loops.

<https://www.youtube.com/watch?v=-Vp1xJdWrOk>

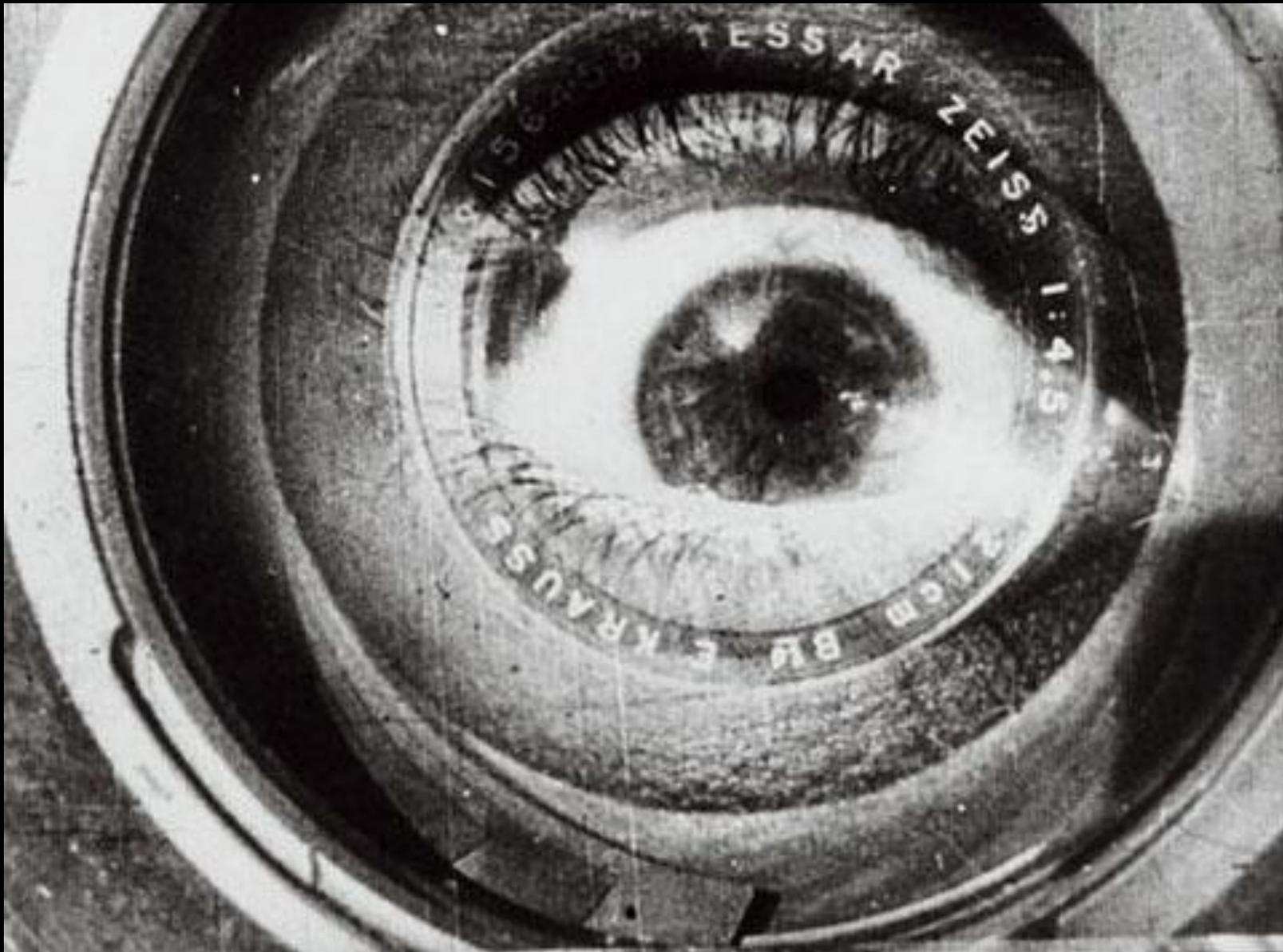
## The Artist as Ecologist, from *Expanded Cinema* by Gene Youngblood (1970)

For some years now the activity of the artist in our society has been trending more toward the function of the ecologist: one who deals with environmental relationships. Ecology is defined as the totality or pattern of relations between organisms and their environment. Thus the act of creation for the new artist is not so much the invention of new objects as the revelation of previously unrecognized relationships between existing phenomena, both physical and metaphysical. So we find that ecology is art in the most fundamental and pragmatic sense, expanding our apprehension of reality.

Artists and scientists rearrange the environment to the advantage of society. Moreover, we find that all the arts and sciences have moved along an evolutionary path whose milestones are Form, Structure, and Place. In fact, man's total development as a sentient being can be said to follow from initial concerns with Form or surface appearances, to an examination of the Structure of forms, and finally to a desire to comprehend the totality of relationships between forms, that is, Places. Since it generally is thought that art represents the avant-garde of human insight, it is interesting to note that science itself has evolved through Form, Structure, and Place appreciably in advance of the arts.



L: Stan VanDerBeek with multifaceted surface for multiple-projection intermedia environment. Photo: Richard Raderma; R: He presides over intermedia presentation at his Movie Drome in Stony Point, N.Y. Photo: Bob Hanson.



Dziga Vertov, *Man with a Movie Camera*, 1929  
<https://www.youtube.com/watch?v=BtTlgxtoqhg>