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Kyiv National University of Construction and Architecture

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CRITICISM OF MODERN ARCHITECTURAL THEORIES

Lecture notes
for foreign students of the specialty
191 "Architecture and urban planning"
branch of knowledge 19 "Architecture and construction"

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The main features, trends and styles in the development of
modern architectural theory and practice are considered.

Designed for foreign students studying in the direction of
preparation 19 "Architecture and Construction", specialty 191
"Architecture and Urban Planning".

Розглянуто основні особливості, напрямки, течії та стилі в
розвитку сучасної архітектурної теорії та практики.

Призначений для студентів, які навчаються за напрямом
підготовки 19 "Архітектура та будівництво", спеціальність 191
"Архітектура та містобудування".

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INTRODUCTION

The lecture notes "Criticism of Contemporary Architectural Theories" are offered to students who are mastering the Master's program of study. The goals and objectives of this discipline are: to increase the level of theoretical and professional training of students in the field of scientific research of the problems of the development of modern theory and methodology of architectural design and urban planning through a critical analysis of existing trends and trends in theory and practice; in consideration of the peculiarities of the formation of regional and interregional architectural schools, modern styles; in the study and critical analysis of the creativity of contemporary masters of architecture and design.

The lecture course on the discipline "Criticism of modern architectural theories", based on such disciplines as "History of Architecture", "History of Art", "Theory of Architecture and Urban Planning", summarizes, complements and deepens the understanding of existing architectural theories, directions of their further development.

The lecture notes outline the preconditions for the emergence of leading architectural theories, consider their main features and ways of implementation, analyze the impact on the modern practice of design and construction. For each section of the lecture course, a list of literature recommended for a more detailed study of the material is provided.

Lecture 1

CHANGE OF ARCHITECTURAL AND URBAN IDEOLOGY IN 50-70S OF THE XX CENTURY

Lecture plan:

1. CIAM congresses and their role in the formation of modern architectural and urban planning theories.
2. The concept of total architecture and design.
3. Modern and counter-modern movement.

CIAM congresses and their role in the formation of modern architectural and urban planning theories

International Congress of Contemporary Architecture (фр. Congrès International d'Architecture Moderne – CIAM) – an international organization of architects, created in 1928 with the aim of uniting architects from Europe, for professional cooperation in the interests of the development of modern architecture. The organization's activities were expressed in a series of congresses prepared by the leading modernist architects in Europe, at which new ideas and principles were put forward in all areas of architecture – from natural surroundings and urban planning to industrial design. CIAM opposed the conservatism and eclecticism of the academic architectural schools of that time and called for the introduction of the principles of "new architecture" based on the achievements of science and technology of the twentieth century.

From 1928 to 1956, the CIAM International Architectural Congresses went through 3 stages of their development. The first period (1928 – 1933) was associated with the intensification of the activities of German architects of a socialist orientation. At the second stage (1933 – 1947), the international architectural movement was led by French architects. In the third and final period (1947 – 1956), there was a change and transfer of powers in the organization of the international activities of architects and the leadership of congresses from outstanding masters of architecture to a group of young architects who did not accept the old and strove for new ideas.

With the end of the CIAM international congresses, the era of outstanding masters of architecture ended and a new era began in its development.

The first congress, which took place in 1928 in La Saraz (Switzerland), was attended by 24 architects. The discussion focused on the problems of rationalizing (improving) the construction industry and the adoption of design and construction standards.

The second (1929, Frankfurt) and the third (1930, Brussels) congresses were devoted to the design of minimum housing and rational means of building. The third congress completed the first stage of

development, which was actually devoted to the creation of new architectural doctrines.

The fourth congress, which took place in 1933 during a Mediterranean cruise on the Patrice motor ship, examined the concept of a functional city. As a result, Le Corbusier offered the participants of the congress the text of the "Athens Charter", the development of which was preceded by an analysis of 34 European cities. The "Athenian Charter" laid down the main provisions of the universal functionalist doctrine – the consideration of a complex urban organism as the interaction of historical buildings with the four main functions (zones) of the city – with housing, recreation, work and transport.

The fifth congress, held in Paris in 1937, was devoted to the problems of housing and recreation. Other functionalist problems of urban planning, namely – the "core" and "heart" of the city – were sequentially considered at the fifth, sixth, seventh and eighth congresses held in the post-war period in 1947 – 1951 in Bridgewater, Bergamo and Hoddestone.

The Ninth Congress in Aix-en-Provence (1953) was decisive in changing the architectural ideology. This stage began with the criticism of functional theory and the "Athenian Charter" by young architects, among whom were Alison and Peter Smithson, Aldo Van Eyck, Georges Candilis and others. The letter, signed by Le Corbusier and Van Esteren, in which the powers in organizing the international architectural movement were transferred to the youth, marked the end of the era of the masters, the period of dominance of functional theories and the modern movement in general.

An end to this natural process was put at the tenth last congress of CIAM, which took place in 1956 in Dubrovnik. At this congress, a group of young architects ("Group X"), on the basis of criticism of functionalism, proposed to consider a modern city not from the standpoint of the interaction of four urban functions and corresponding functional zones, but in the aspect of the relationship of architectural and urban planning forms, such as a house, courtyard, quarter, square, street, etc. The city began to be perceived as a complex multilayer structure, which is formed according to the principle of vertical functional zoning and forms clusters

where a "bunch" of architectural and urban planning forms and functions coexist.

On this basis, a number of ideas emerged, namely – megastructural city, deck architecture (E. and P. Smithson), house-city (Van Eyck), the theory of the neighborhood of German architects, etc., – all of them became the basis for the emergence of a new ideology, which, in turn, was based on the practice of functionalism and the philosophical foundations of pluralism (diversity of opinions, views). All these changes gradually created the conditions for the emergence of a counter-modern movement in architecture with its own ideological doctrine.

Total architecture and design concept

One of the defining features of the new ideology of the counter-modern movement was the gradual blurring of the boundaries between architecture, urban planning and design. Ideas about the global continuity of the artificial environment, about its systemic nature, the dynamism and efficiency of urbanization processes – all these theories and ideas preceded the emergence of the concept of total architecture and design. The origin of this concept was the prominent American architects Buckminster Fuller and Walter Gropius.

Since 1927, B. Fuller has been working on the concept of "Dimection" (dynamism + efficiency), within the framework of which prospecting projects for a residential building (1927), a bathroom and a mobile house (1933), a geodesic dome (1959 – 1968) to cover extra-large spaces (Fig. 1).

In these projects, the idea of total design was gradually implemented, which would unequivocally cover the world of things, the world of architecture and urban planning space, creating an image of a continuous and total artificial environment that surrounds a person.

Similar, more humane and architecturally oriented ideas, became the basis for the content of the book by V. Gropius "The Circle of Total Architecture" (1955), where the design process was considered as science, art and the organization of the environment. Gradually, the

concept of the environment as a total object is included in the everyday life and vocabulary of architects, urban planners and designers.

A significant influence on the development of the concept of total design and architecture had the work of Konstantinos Doxiadis on the creation of a single world global city-ecumenopolis (Fig. 2). This concept, which later became the basis for urban planning theory, stimulated the emergence of a new science about the population of the Earth - ekistics.

The basic ideas of ekistics, like Charles Darwin's theory of biological evolution, were based on the idea of "universal happiness" of all inhabitants of din- and megalopolises, which merge together to form an artificial urban envelope of the Earth, a single global environment in the form of a "world city" – ecumenopolis.

The futuristic projects of the English group of young architects "Archigram", the Italian group "Superstudio", the Russian group NER ("New Element of Settlement" – in Russian "Novyy element rasseleniya") moved towards the search for new forms of the total artificial environment. In the search projects of these groups, megastructural images of the "City that Move", "Plug City", "Soluble City", habitat for "settled" and "nomads" were created. In all these projects, with the help of urban planning tools, architecture and design tools, the concept of a total environment, as a second artificial nature, was realized and materialized (Fig. 2, 3).

This concept, rooted in functionalism and international style, had certain drawbacks. The main ones among them are: ignoring regional peculiarities, historical traditions, too active pragmatism, priority of irreversible and rapid dynamic changes in the built environment, excessive technocracy in the choice of means of forming the environment. Representatives of the new counter-modern movement in architecture, urban planning and design tried to eliminate these shortcomings in their projects.

Modern and counter-modern movement

The modern movement in architecture is associated with the era of masters and at the same time theorists of architecture, among which the largest are representatives of the "Chicago school", professors of the Bauhaus, Vkhutemas, Russian constructivists, German functionalists

and many others. This era can be characterized as a period of social utopias, creativity of revolutionaries, inventors and innovators in architecture, the time of creation, in the words of M. Ginzburg, "new capacitors of the era". The transfer of power to the young, their harsh criticism of functionalism and international style, new post-war conditions, the emergence of the concepts of an industrial and post-industrial society, the emergence of democracy in developed countries, a wave of student revolutions – all this stimulated creative groups and individual young architects to search for new ways of developing architecture. It's time to create new approaches, concepts, doctrines and theories.

All over the world, creative groups arose that had their own ideas about innovations in architecture. Among them are the English group "Archigrem"; representatives of the so-called Viennese avant-garde – groups "Himmelblau" and "Hausrucker"; Italian bands "Tendenza", "Superstudio" and "Arkhizum"; "Talier de Architecture" by R. Bofill, "New York Five", etc. In the utopian and search projects of these groups, the philosophical and theoretical foundations of new trends, trends and styles of modern architecture were laid, such as populism and productivity, high-tech and postmodernism, neoclassicism and neorationalism (Fig. 4).

The origins of all these trends, trends and styles were formed in the theories of the post-industrial and information society, consistent with the new philosophy of postmodernism, the main principles of which were pluralism and new eclecticism.

The theoretical works of P. Portogesi, C. Jenks, R. Venturi and others appeared in architecture, which revealed the essence and language of architectural postmodernism as a direction and style, promoted the values of a post-urban lifestyle, freedom of choice and other democratic freedoms.

In 1980, the Venice Biennale was held, the program of which was authored by P. Portogesi. At this biennale under the slogan "Presence of the Past", surrounded by well-known young architects, postmodernism came into force as one of the leading trends in the development of modern architecture. At the same time, criticism of postmodernism and its basic principles arose in the works of Bruno Dzevi (architectural space), Leon Krieu and others.

Significant changes have taken place in the ideology and methodology of architectural design. The concepts of so-called "participation" (participation in the design of architecture consumers) emerged; in the works of the "Brussels School" the ideas of "advocacy", defending design were developed. At the same time, criticism of the "Brussels School" arose for its "archaic activism", the utopianism of anti-industrialism, and the absolutization of historicism.

Conclusions

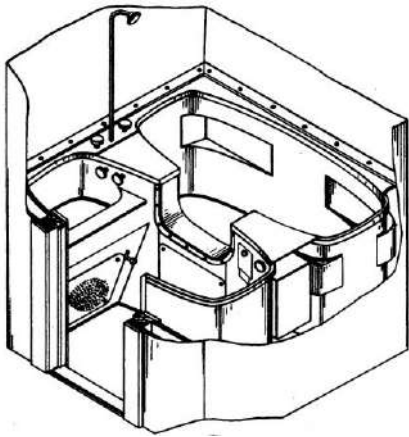
In the 50-70s XX century there was a change in the ideology of the modern architectural movement, which arose under the slogans of functionalism and international style, the basic principles of which were developed in the activities of the international congresses of CIAM. At this time, the prerequisites for the transition from the modern to the counter-modern movement in architecture arose, which at the same time combined tendencies towards a revolutionary and evolutionary path of development, totalitarianism and pluralism in ideas about the artificial environment, the emergence and interaction of the systemic and environmental approach, the formation of a new methodology in architectural design. designing.

Literature: [1, 2, 5, 10, 11, 19, 44].

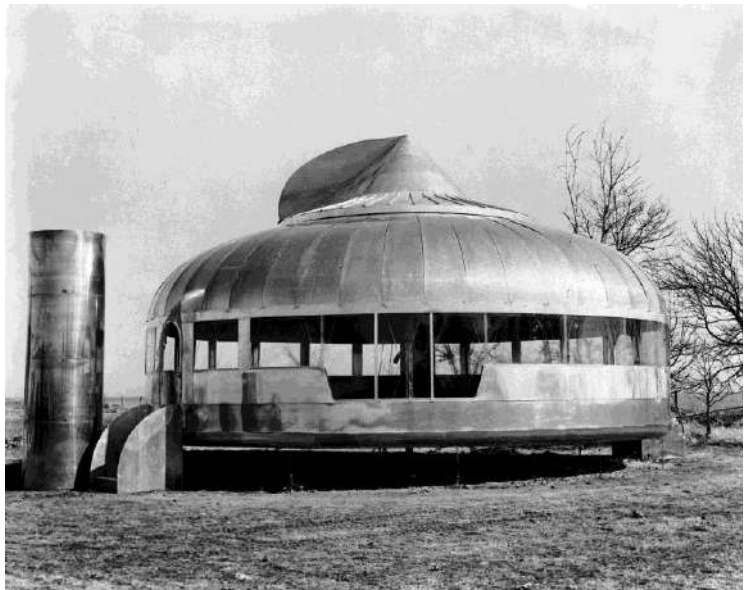
FULLER Richard Buckminster
(1895–1983)



Geodesic dome, 1958-1968

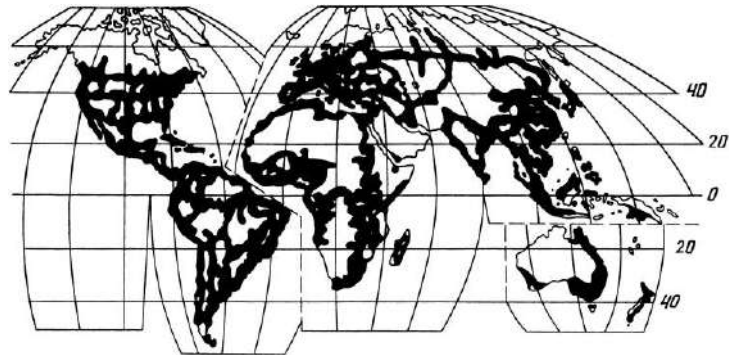


Industrial bathroom
(patent 1938-1940)

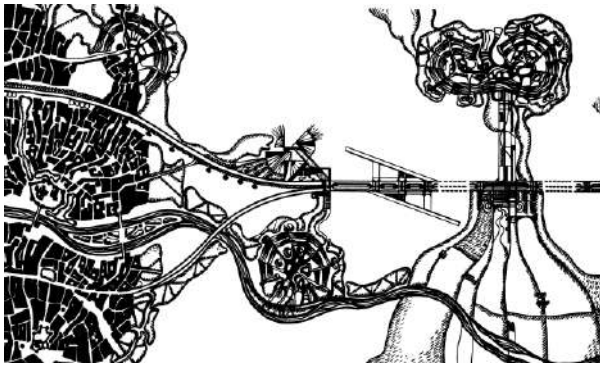


Dymaxion House, 1927

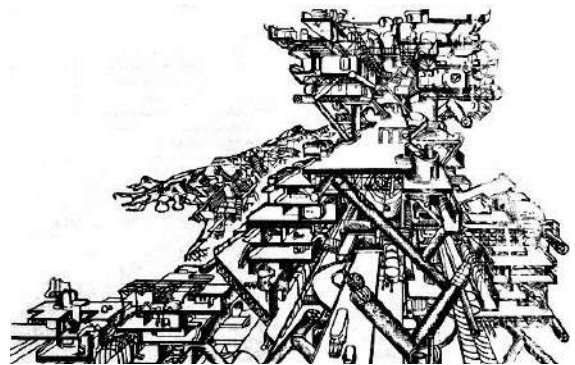
Fig. 1. Major projects of Richard Buckminster Fuller



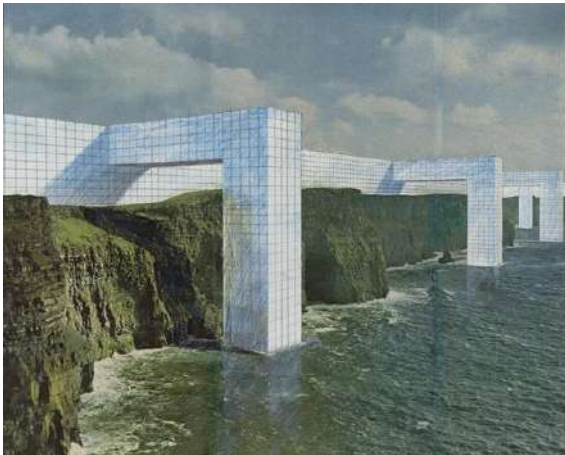
Project "World City – Ecumenopolis 2100",
architect K. Doxiadis, 1968



Fragment of the settlement channel, NER
group, 1968



Section of the urban structure.
Arch. A. Gutnov, I. Lezhava and others



Project "The Continuous Monument on
the Rocky Coast", Superstudio, 1969

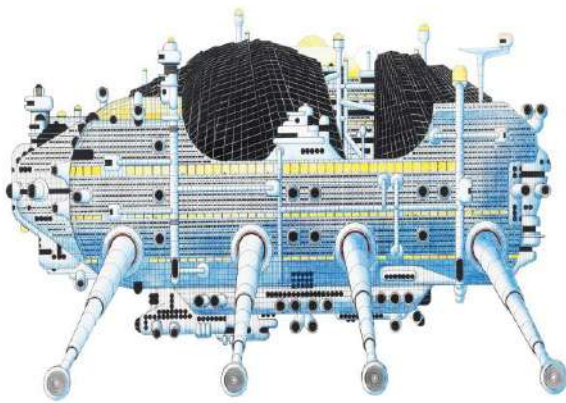


Project "Monumento Continuo",
Superstudio, 1971

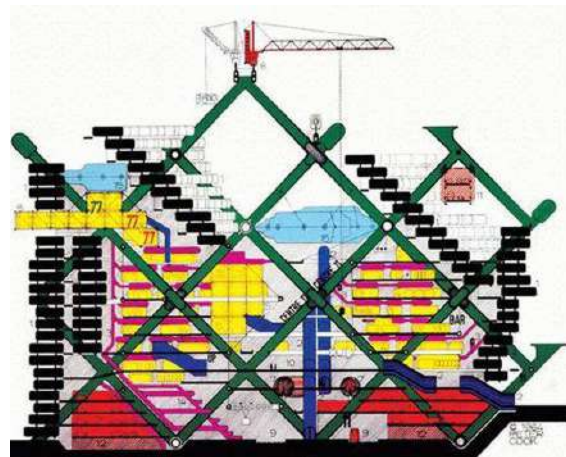
Fig. 2. The concept of total architecture in the projects of K. Doxiadis,
NER group, A. Gutnov and I. Lezhava, Superstudio

Group ARCHIGRAM

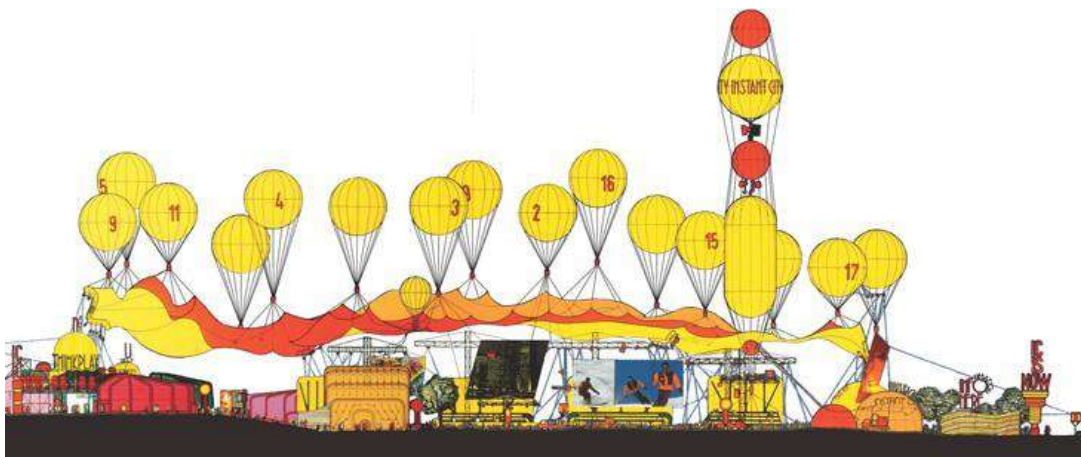
(founded in 1960)



The "Walking City" project, arch.
R. Herron, Archigram, 1964

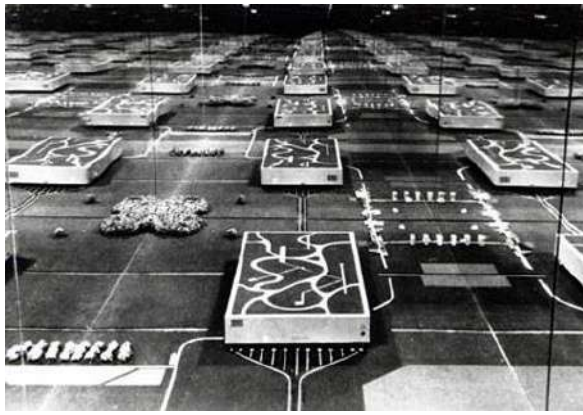


Fragment of the urban structure created
according to the "Plug-In City" system,
Archigram, 1960s

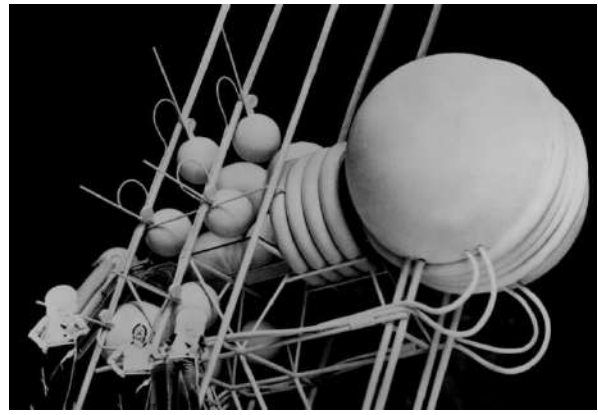


Instant City project,
Archigram, 1969

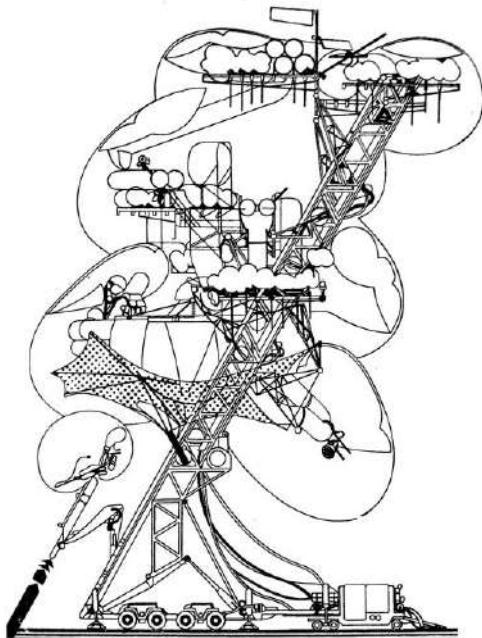
Fig. 3. The concept of total architecture in the projects of the Archigram group



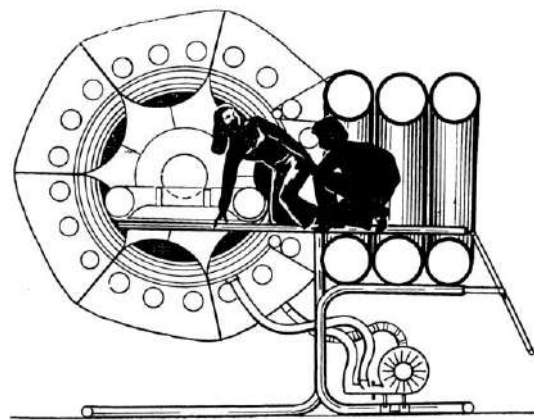
"No Stop City",
Archizoom, 1968



Pneumatic housing unit "Villa Rosa",
Coop Himmelblau, 1968



Group living organism "Sky-blue cloud",
Coop Himmelblau



Project "Yellow Heart",
Haus-Rucker



"Residential cocoon", architect D. Green,
Archigram

Fig. 4. Search projects of the groups "Archizum", "Coop Himmelblau",
"Haus-Rucker", "Archigram"

Lecture 2

ARCHITECTURAL AND ANTI-ARCHITECTURAL UTOPIA

Lecture plan:

1. Utopian thinking and classification of utopias.
2. Architectural utopias of the early to mid-20th century.
3. International exhibitions and environmental utopias.

Utopian thinking and classification of utopias

For the first time the term "utopia" in scientific circulation was used by Thomas More. Translated, this term meant "Blessed country" or "A place that does not exist".

In the history of architecture, utopian thinking was realized in treatises, search projects, in projects of ideal cities, etc. In 1804, the famous French architect Claude Nicolas Ledoux developed a project for the ideal city of Chaux, which was called "Architecture, which is an expression of art, law and law" (Fig. 5). In 1829, the famous French philosopher and scientist Charles Fourier published a work entitled "The New Economic Societal World". This work created the concept of ideal settlements – phalansters, whose social organization was built on the principle of "attraction by passion", harmonizing the life of society, its architectural and natural environment.

In 1898, the English city planner Ebenezer Howard developed the concept of an ideal garden city and, on this basis, a group of garden cities, which served as a platform for the emergence of the idea of forming a unified settlement system (Fig. 5). In 1904, the French architect Tony Garnier created a project for an "Industrial City" for 32 thousand inhabitants, the implementation of which was associated with an illustration of Emile Zola's utopian novel "Labor" (Fig. 5). In 1914, the Italian architect Sant Elia proposed a futuristic design for a dynamic home city that spurred the development of utopian thinking and exploratory design in architecture for at least the next half century (Fig. 5).

In the 20s XX century representatives of Russian functionalism and constructivism developed a number of search projects, in which they

found the implementation of the idea of "communal houses", "ideal cities", new types of public, residential buildings and structures – "new era capacitors". In 30-40s eminent masters of architecture Le Corbusier and Frank Lloyd Wright contributed to utopian design by creating the concepts of the "Radiant City", "City of Wide Horizons" and "Soluble City" in the country of Uzonía (Fig. 5, 6).

A new surge of utopian thinking occurred in the 60-70s. in the works of creative groups of young architects who belonged to the European avant-garde. Among them are the English, Italian and Austrian groups "Archigram", "Superstudio", "Archizum", "Coop Himmelblau" "Haus-Rucker" (Fig. 6).

Summarizing the development of utopian thinking, it should be noted that the classification of utopias can be carried out: according to class directions (feudal, peasant, socialist, capitalist); by content (technological, architectural, literary); by form (novel, treatise, project); by the way of organization (building a new world or transforming the old one). In modern science and practice, cosmogonic utopias, ecumenical (religious) utopias, and practopias are distinguished.

Architectural utopias of the early to mid-20th century

According to their content, utopias are divided into urban planning, architectural and design. Urban utopias include urban and de-urban exploration projects, as well as ecological utopias, where architectural, urban planning and design searches are synthesized.

The utopian projects of E. Howard, T. Garnier and Sant Elia, which for the first time presented the ideas of horizontal and vertical functional zoning of urban space and the formation of settlement systems, opened up new directions in the development of urban planning and architecture. Thanks to these works, new theories and concepts of N. Milyutin's linear city, E. Saarinen's decentralized organic development, Le Corbusier's "Charter of Athens" and "Radiant City", L. Gilberseimer's new cities, F. L. Wright's "Spatial City", ecumenopolis K. Doxiadis.

The ideas of dynamic urbanization and town planning were developed by a group of English architects "Archigram". In their search projects "Plug City", "Walking City", "Soluble City", urban functions and forms were united around the idea of creating a global, maximally

technical and computerized environment in which there were no traditional boundaries between urban planning, architectural and design components.

The problem of the global settlement of two types of communities – "nomads" and "sedentary" – was solved in their search projects by the architects of the Superstudio group. In their works, they proposed two corresponding types of artificial environment – "surfaces" and "monuments". Global settlement and total architecture became the subject of searches for the Russian group NER (New Settlement Element), in whose projects the settlement system, along with traditional historical settlements, included new cities, the so-called KVARs and NERs, which together formed "valleys" and "basins" resettlement. K. Doxiadis in his new science of science, based on the ideas of the ancient polis and the "hyperbole" of N. Ladovsky, developed the concept of the world city of ecumenopolis, which, covering the globe with an urbanized shell, integrated dinapolis and megalopolis formations consisting of agglomerations and conurbations of cities arising without regard to state borders.

The search for new forms of settlement, in which the waters of the seas and oceans, outer space, uninhabited surfaces of the globe were mastered, became the basis for the architectural fantasies of the URTEK group under the leadership of K. Tange, as well as the workshop of P. Soleri, who created a new direction in theory and practice – architectural ecology or arcology. A special place in search projects is occupied by ecological utopias, in which the emphasis is shifted from urban planning and architectural aspects to the invention of new forms of the human subject environment.

International exhibitions and environmental utopias

Just as international exhibitions in London and Paris in the late 19th and early 20th centuries influenced the development of the modern movement in architecture, the international exhibitions "Expo" and international biennials in the second half of the 20th century became the center of new architectural and antiarchitectural ideas. Among them it is necessary to highlight: exhibitions "Expo-67" in Canada and "Expo-70" in

Japan, 4 International exhibitions of design environment "Vision", an exhibition of Italian design in New York in 1970, the Venice Biennale in 1980, an exhibition "Urbanica" in Paris and others (Fig. 7).

The wave of student revolutions in Europe, the international "hippie" movement, mass culture and the implementation of the doctrine of post-industrial society – all this and much more stimulated young architects to search for new images of the human environment.

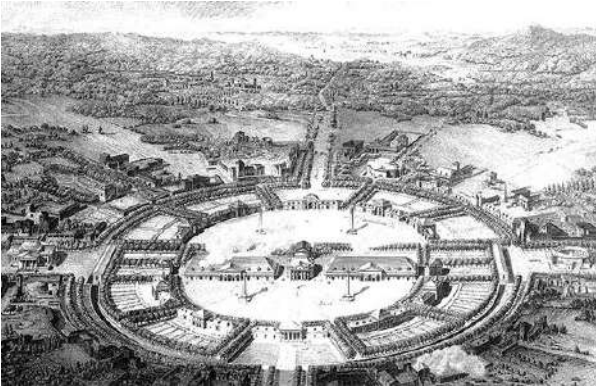
Some of them (the Austrian groups "Himmelblau" and "Hausrucker") created anti-architectural, design projects and experimental models of the mobile environment; projects of individual means of communication and isolation (glasses, helmets, spacesuits) that could replace architecture as such. Such experimental projects include an individual capsule for two in a backpack "Yellow Heart", living environment "Villa Rosa", etc. (Fig. 4).

These and similar projects have been shown at many international exhibitions. Among them should be noted the exhibition of Italian design, held in 1970 in New York. This exhibition demonstrated anti-architectural utopian proposals, in which the traditional architectural and design space was replaced by a virtual space formed by audiovisual systems and the effect of weak drugs. A series of four exhibitions entitled "Vision", conducted by the Bauer concern, began creative searches and experiments on the subject environment of a person, which were carried out under the guidance of leading designers Joe Colombo, Olivier Mourgue, Verner Panton and others (Fig. 8, 9).

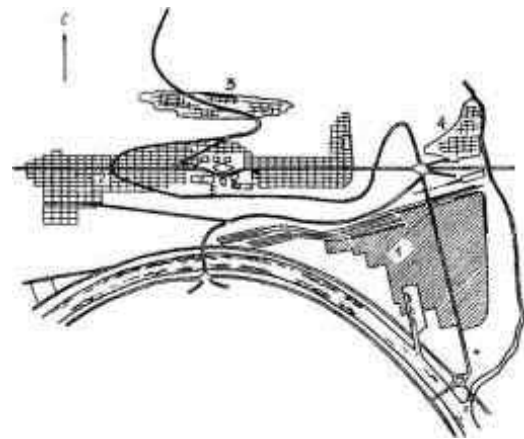
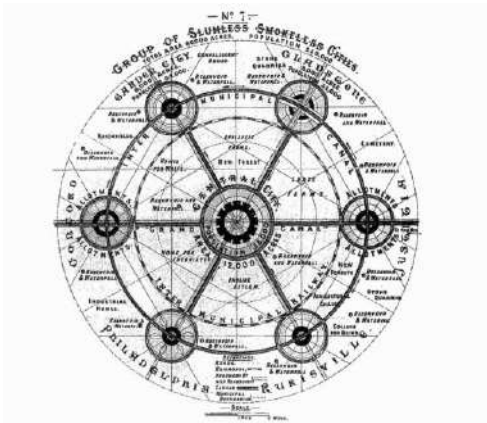
Conclusions

Mutual criticism of the theoretical foundations of modern and counter-modern movements in architecture took place against the background of the development of architectural and antiarchitectural utopias. This contributed to the intensification of exploratory design in architecture, urban planning and design, with a gradual blurring of the boundaries between them. Achievements of utopian thinking and exploratory experimental design have become the theoretical basis for the formation of new trends, directions and styles of modern architecture.

Literature: [1, 2, 4, 5, 15, 36, 45, 46].

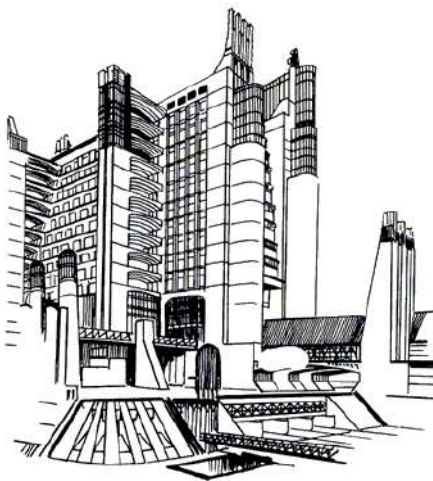


Design and implementation of the Royal Saltworks at Arc-et-Senans, architect Claude Nicolas Ledoux, 1804



"Garden City", architect Ebenezer Howard, 1902

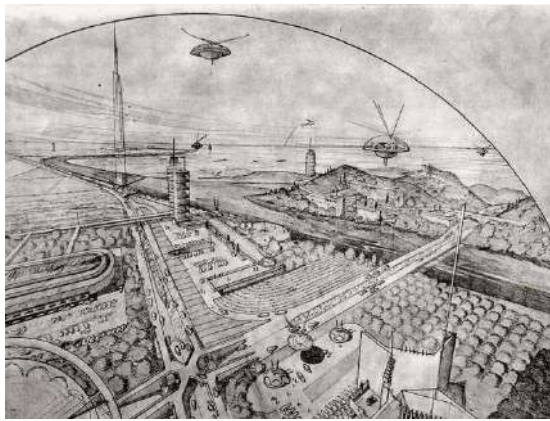
"Industrial city", architect Tony Garnier, 1904



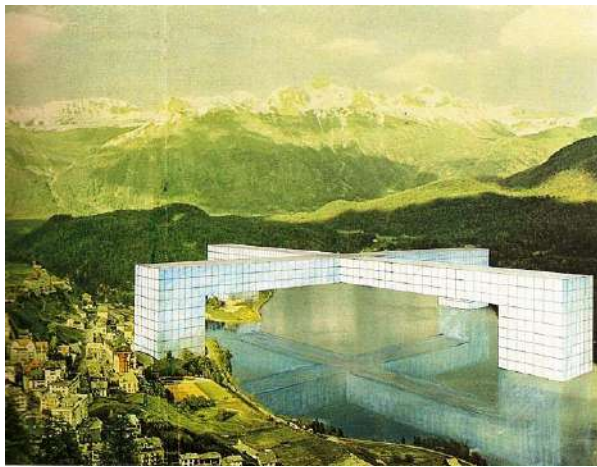
The project of a dynamic house-city, architect Sant'elia, 1914

Project "Radiant City" ("Plan Voisin"), architect Le Corbusier, 1935

Fig. 5. Utopian architecture in the projects of C.N. Ledoux, E. Howard, T. Garnier, Sant'elia, Le Corbusier



"Broadacre City" Project, Frank Lloyd Wright, 1935



Project "The Continuous Monument on the Rocky Coast", Superstudio, 1969



City project from the series
Twelve Ideal Cities, Superstudio, 1971



Project "A Cube Forest on the Golden Gate", Superstudio, 1972



Project "Histograms of architecture",
Superstudio, 1969

Fig. 6. Utopian architecture in the projects of Frank Lloyd Wright and the Superstudio group



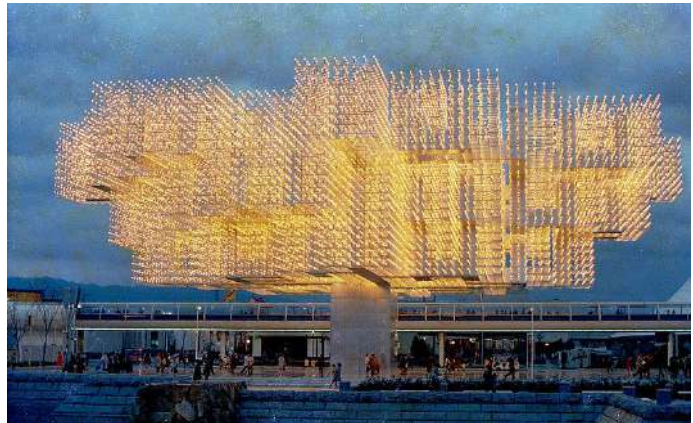
USA Pavilion,
EXPO-67



"Kodak" and "Ricoh" Pavilions,
EXPO-70, Osaka, Japan



"Toshiba-IHI" Pavilion,
EXPO-70, Osaka, Japan



Sweden Pavilion,
EXPO-70, Osaka, Japan



"The Tower of The Sun",
EXPO-70, Osaka, Japan



Fuji Pavilion,
EXPO-70, Osaka, Japan

Fig. 7. International exhibitions EXPO



Housing of the future at the exhibition "Vision", Joe Colombo, Cologne, 1969



Residential unit of the future "Total Furnishing", Joe Colombo, New York, 1972

Fig. 8. Subject design by Joe Colombo at the International exhibitions "Vision" and Italian design in New York

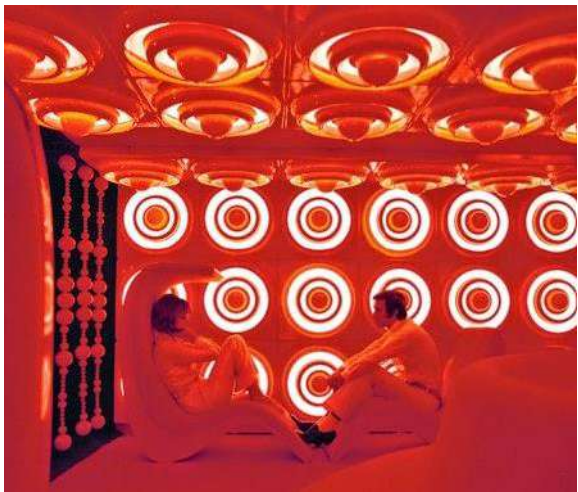
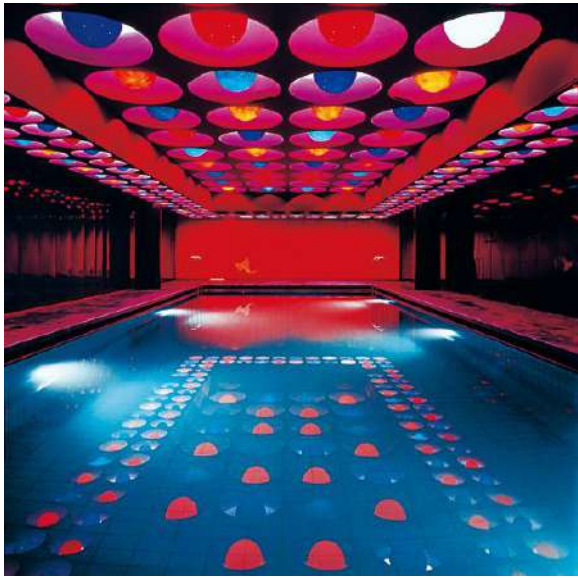
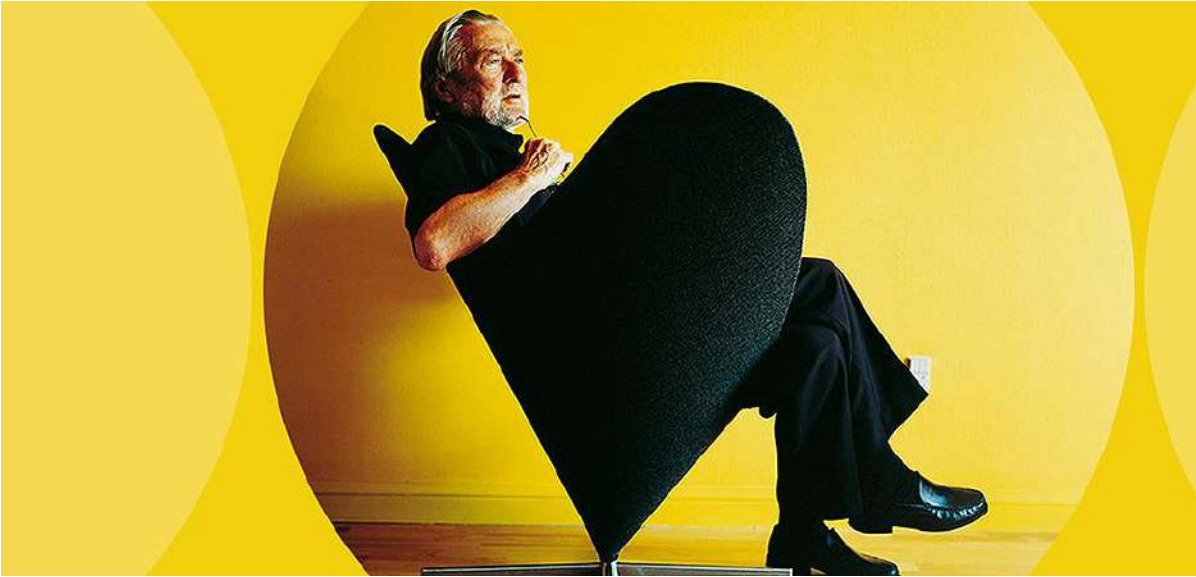


Fig. 9. Experimental design by Verner Panton at the International Exhibition "Vision-2"

Lecture 3

POPULISM – MOVEMENT TO THE ARCHITECTURE OF POST-INDUSTRIAL SOCIETY

Lecture plan:

1. Urbanization and urban context.
2. Complexity and eclecticism.
3. Symbolism, theatricality and participation.

Urbanization and urban context

The concept of a post-industrial society, formed in the works of the American sociologist Daniel Bell, was based on the following provisions: the transition from a manufacturing to a service economy, from a class to a professional division of society, a transition from an orientation to maximum profit to a quality of life.

These processes were accompanied by total urbanization, the emergence of intelligent technologies, increased control over their development; the center of policy making is moving to universities; the importance of the manager's role begins to prevail over the importance of the capitalist; there is a "middle class" and the phenomenon of "mass culture".

The development of postindustrial society led to the emergence of the phenomenon of mass culture in an urbanized society. In architecture, urbanization in most cases was perceived in a negative sense – as a loss of cultural identity (Adolf Loos), impoverishment of the architectural environment and its simplification (Camillo Sitte).

Criticism of total urbanization led to criticism of modernism and the contemporary movement in architecture, its conceptual foundations. The conceptual approach of the modern movement is being replaced by the ideology of the contextual approach of the counter-modern movement in architecture.

New ideas for the formation of the urban context are emerging. First of all, these are the ideas of "city-collage" and "city-bricollage" by Colin Rowe, city as a collage in space and time by Kevin Lynch, Alexey Gutnov.

The concept of mass culture as a daily culture of an urbanized society, as a culture of mass communication, became the basis for the formation of the artistic movement "pop-art".

A theory appeared in architecture, in which the urban environment is studied as an information system (R. Meyer), as a palimpsest structure (the text is written over the text), as an architectural kitsch, etc.

Complexity and eclecticism

The theoretical works and practice of the American architect Robert Venturi and his team were directed against the simplification of the global urbanized environment, in defense of the positive features of eclecticism. They believed that architecture is equally revolutionary and evolutionary, along with long-term programs there must be short-term plans for change, the past and the new coexist together.

Proceeding from this and the tendencies of mass culture, Robert Venturi in his book "Complexity and Contradictions in Architecture" (1966) formulated a number of provisions that are opposite to the principles of modernism and the modern movement: complexity and opposition instead of simplification; double content and tension instead of straightforward clarity; "Both" instead of "either one or the other"; dually functioning elements instead of unambiguous ones; hybrid elements instead of pure ones; helpless vitality instead of obvious unity.

These principles were complemented by important provisions in which a commitment to copying samples dominated over a disregard for historical works.

These key principles, associated with the rethinking of modernism and eclecticism of the 19th century, became the basis for the formation of new methods and postmodern practice of design and construction in the creative works of Robert Venturi, Charles Moore, Robert Stern, Michael Graves.

The eclectic parodies of American populism also include the works of representatives of "popular mechanics" and their projects of glass skyscrapers in the form of modern menhirs and dolmens.

Symbolism, theatricality and participation

In the book by Robert Venturi and Denise Scott Brown "Ugly and Ordinary Architecture or Decorated Barn" 2 types of architectural structures are distinguished: the so-called "ducks" and "decorated barns". In "ducks" the architectural systems of space, structure and function are united by the overarching symbolic form of the building. In the "decorated barn", the systems of space and construction serve as functions, and the ornament is used independently of them. If the "duck" is a symbol of sorts, then the "decorated barn" only uses the symbols as a mask.

This doctrine contrasted the theater in Sydney by Jørn Utzon and the disguise of the usual standard buildings as outstanding architectural examples (theatricality, parody and sarcasm). Rejection of not only "ducks", but also "heroic and original architecture" through the use of "decorated barn" – the main theses of populist architecture at the exhibition "Signs of Life: Symbols in the American City" (Fig. 10).

The active use of symbolization methods was present in the theory and practical works of Kenzō Tange ("City Gate" – the center of the city of Skopje, "Circus" – a residential area in Milan); Hans Scharoun (residential complex "Romeo and Juliet"); Charles Moore ("Italy square" in New Orleans); Frank Gehry ("Ginger and Fred" in Prague, "Goldfish" in Barcelona) (Fig. 10, 11).

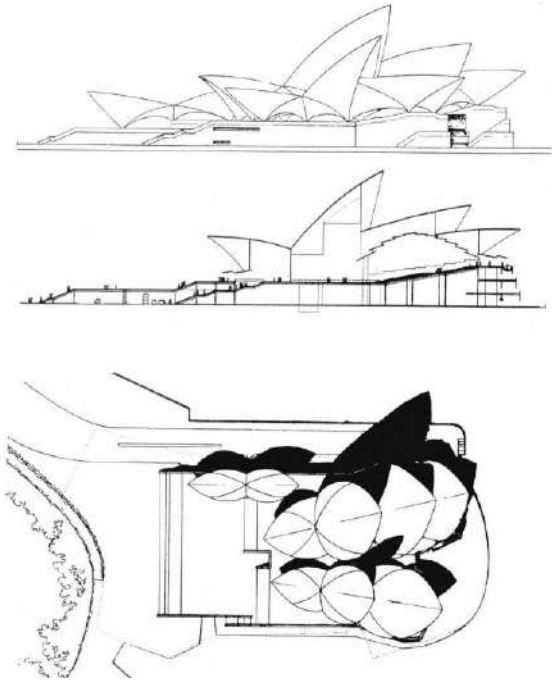
Postmodern ideology and theory stimulated the emergence of new methods within the framework of the doctrine of participation – the participation of architecture consumers in design. On this basis, methods have emerged that protect the interests of residents, the so-called "advocacy design", as well as methods of cooperation with urban communities at all stages of substantiating design decisions.

The methods of contextualizing space, scripting and theatricalization of the urban environment, hybridization and architectural symbiosis required fundamental changes in the methodology and theory of architectural design, which were used during modernism and the modern architectural movement due to their complete inconsistency with the spirit of populism of mass culture and radical eclecticism.

Conclusions

The philosophy and theory of postindustrial society and mass culture contributed to the development of postmodernism, which Charles Jencks defined as the populist-pluralistic art of direct communication. This, to a certain extent, explains the emergence of various directions and methods of the populist movement in architecture, the paths of development of postmodernism. These paths are associated with a new methodology and design methods, including methods of participation, script methods, methods of symbolization, decorativeism and ornamentation.

Literature: [1, 3, 5, 6, 7, 10, 39, 40, 44, 47].



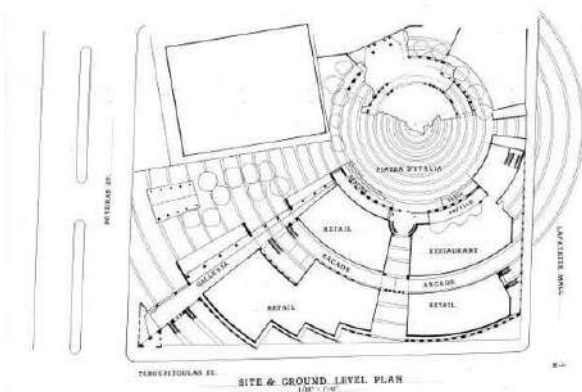
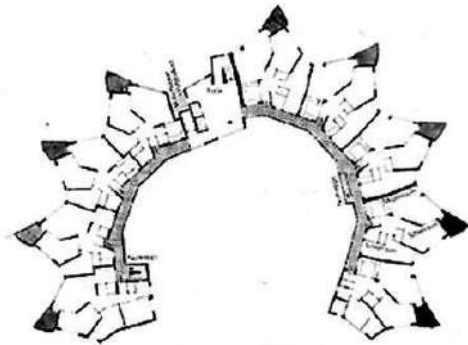
Opera House, Sydney,
architect Jørn Utzon



Reconstruction of the center of Skopje,
architect Kenzō Tange, 1965-1966



Residential complex "Romeo and Juliet", Stuttgart, architect Hans Scharoun, 1959



Italy Square, New Orleans, USA, architect Charles Moore, 1977

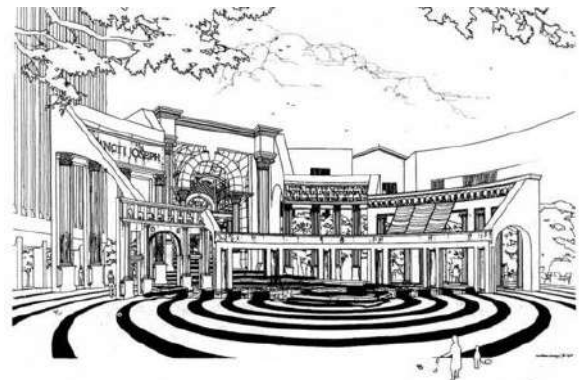


Fig. 10. Symbolization in the works of Jørn Utzon, Kenzō Tange, Hans Scharoun, Charles Moore



Frank GEHRY
(1929)



Residential building "Ginger and Fred", Prague, architect F. Gehry, 1996



Sculpture "Goldfish", Barcelona, F. Gehry

Fig. 11. Symbolization in the works of Frank Gehry

Lecture 4
MODERN RATIONALISM - THE SEARCH FOR NEW
MONUMENTALITY

Lecture plan:

1. The neorationalism of "Tendenza" and the work of Aldo Rossi.
2. "New York Five".
3. "Taller de Arquitectura" and the work of Ricardo Bofill.

The neorationalism of "Tendenza" and the work of Aldo Rossi

Within the framework of criticism of functionalism and its ergonomic foundations, a new direction arose in the development of the counter-modern movement in architecture, called rational architecture or neorationalism. This direction was headed by a group of young Italian architects "Tendenza" under the leadership of Aldo Rossi. The group included such theoreticians and practitioners as Mario Ridolfi, Alessandro Anselmi, Carlo Aymonino, Paolo Portoghesi, Ernesto N. Rogers, Aldo Rossi and Massimo Scolari – and of other members of the movement who had a particularly strong influence on the Italian scene: Salvatore Bisogni, Gianni Braghieri, Arduino Cantafora, the G.R.A.U (Groupe Romain d'Architectes Urbanistes), Edoardo Guazzoni, Antonio Monestiroli, Dario Passi, Franz Prati, Franco Purini, Uberto Siola, Franco Stella, Daniele Vitale, Giangiacomo D'Ardia et al.

Claude Nicolas Ledoux, Etienne-Louis Boullée, Adolf Loos, Giuseppe Terragni are considered the harbingers of neorationalism (Fig. 12, 13). The formation of neorationalism was influenced by the ideas of French structuralism, in particular the works of Claude Lévi-Strauss. The general ideological foundations of the new movement were presented in the Rational Architecture catalog at the XV Triennial held in Milan in 1973. Conceptual provisions of "Tendenza" can be reduced to several principles: shift of emphasis from a building to a street or block; relative independence of architectural form from function; attention to historical monuments; search for primary elements of architecture.

These and other ideas and principles of architecture as a "continuous monument" were studied in the works of Aldo Rossi

"Architecture of the city" (1966), Giuseppe Grassi "The logical construction of architecture" (1967), Vittorio Gregotti "Territory of architecture" (1966), in the publications of the neorationalist journal "Contraspazio" (Fig. 13).

In his work Aldo Rossi used such principles of classical architecture as pure form, symmetry, traditional materials, classical tectonics. He built a new typology, believing that such types of objects as school, hospital, prison and cemetery are the true embodiment of the value of architecture as such. In his works Aldo Rossi widely used the method of analogies, the essence of which was the legacy of building traditions. A residential building in Gallarate (1973) served as a kind of reference to a traditional Milanese apartment building. The town hall building in Trieste (1973) had much in common with the image of the prison building. Similar principles were used in the construction of a school in Trieste (1969), a cemetery in Modena (1971-1984), a high school in Broni (1979), and Teatro del Mondo (1979) (Fig. 14).

Followers of rationalism worked in Europe and Japan. The most famous among them were Oswald Mathias Ungers and Joseph Paul Kleichus (Germany), Henri Ciriani (France) (Fig. 15). Many similar ideas of "Tendenza" can be traced in the works of a group of young American architects, the so-called "New York Five".

"New York Five"

The "New York Five", headed by Peter Eisenman, included Michael Graves, Charles Gwathmey, John Hejduk and Richard Meier, are also often referred to as "the Whites." Other architects and theorists have been associated with the group, including Werner Seligmann, Kenneth Frampton, Colin Rowe, and Gwathmey's partner Robert Siegel. If the origins of the creative searches of Peter Eisenman and John Hejduk were the works of Giuseppe Terragni and Theo van Doesburg, then the other members of the group were inspired by the puristic (conservative) works of Le Corbusier. The main theoretical and practical foundations of their work were published in the book "Five Architects" (1972) and presented at exhibitions of their work in New York (1969), in London (1975).

In their views, the architects demonstrated adherence to the ideas of autonomous architecture, dissociated themselves from the principles of functionalism; in the early stages, a series of residential buildings was created, forming the so-called "white world of architecture". This world was formed under the influence of the principles of "double structure", "cardboard architecture", purist architectural forms, the relative independence of these forms from the functional use of space.

Further adherence to the early puristic ideas of the "New York Five" can be traced in the works of Richard Meier: museums in Atlanta (1983) and in Frankfurt (1984). The creative paths of Peter Eisenman and Michael Graves were associated with their postmodern orientation in its various manifestations. An example of their work is the Portland Building (Michael Graves), as well as the buildings of Peter Eisenman in Berlin (Fig. 16).

Close in meaning to the ideas of the "New York Five" were works in the creative association OMA (Office for Metropolitan Architecture), which at that time included Rem Koolhaas, Elia Zenghelis, Zoe Zenghelis, Madelon Vriesendorp. In their work, they relied on the ideas of "new eclecticism" associated with the works of Ludwig Mies van der Rohe, Ivan Leonidov and the works of the surrealists (Fig. 17).

The combination of the ideas of new realism and surrealism was the basis for the work of "Taller de Arquitectura", which was headed by Ricardo Bofill.

"Taller de Arquitectura" and the work of Ricardo Bofill

In 1960, a group of young people, among whom were an architect, poet, actress, worker, mathematician, writer and philosopher, united in the "Taller de Arquitectura", whose work had a socialist orientation. The works of "Taller de Arquitectura" combine the rationalism of spatial organization with the surreal nature of the appearance, with a shift in scale, with a conscious deformation of ordinary architectural forms.

These methods and techniques, together with the use of traditional classical architectural structures and forms like an amphitheater, a triumphal arch, a viaduct, an arcade, an obelisk, a palace, served as the basis for the design of residential and public buildings and structures, for

the implementation of municipal construction programs, the "Versailles for the people" program.

Among the residential ensembles proposed for Paris and small French cities, it should be noted "Lakeside arcades" (1974-80), "Abraxas Palace" (1979-83), "Antigone", "Baroque stairs", "Balcony over the city", "Occitania Square", etc. (Fig. 18).

The main philosophical and theoretical positions of the group can be summarized as "the aesthetics of the excessive". Among them: the use of the "general theory of relativity of art"; the use of new artistic thinking in art after the emergence of the counter-modern movement.

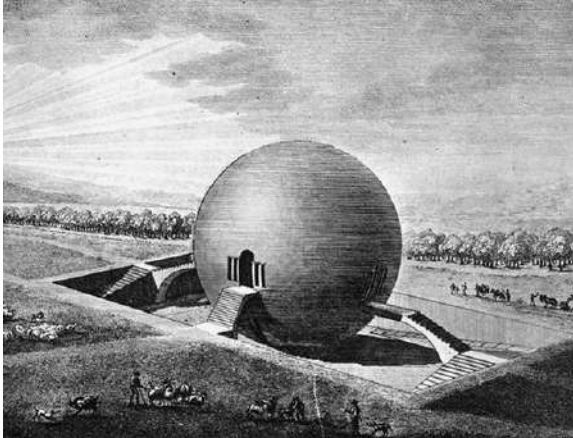
The new thinking is characterized by: preference for excessive and casual; preference for the complicated, effective and aimless; appeal to historical styles; rejection of any moderation and normativity; new attitude to technology; theatricalization and ritualization of everyday life.

Conclusions

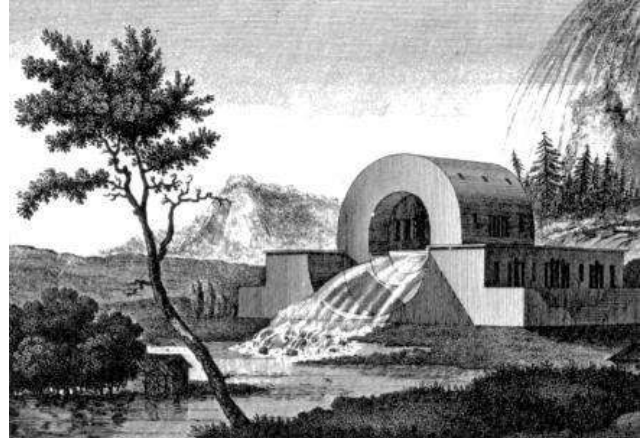
Neorationalism arose as a reaction and criticism of the basic principles of functionalism, its ergonomic provisions. The basis for the search for a new monumentality and stylistic orientation was the utopian projects of the late 19th century, the works of outstanding masters of architecture of the 20th century. At the same time, classical architectural forms and traditional typology were used in a new context and reading, forming an environment of continuous monumentality.

Literature: [1, 3, 5, 9, 10, 11, 17, 30, 34, 36].

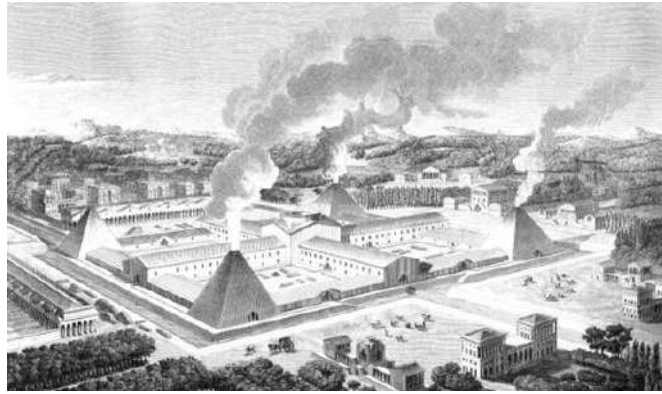
Claude Nicolas LEDOUX
(1736-1806)



Gardener's house

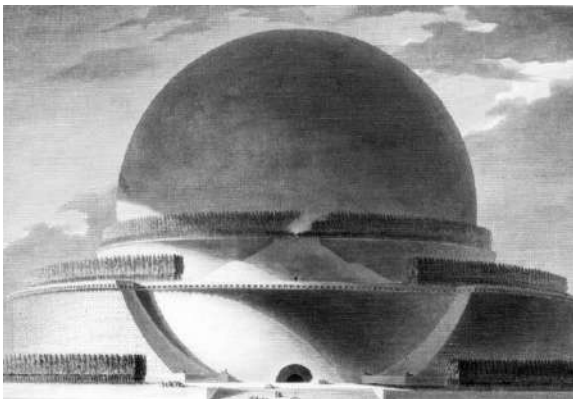


House of the director of the river

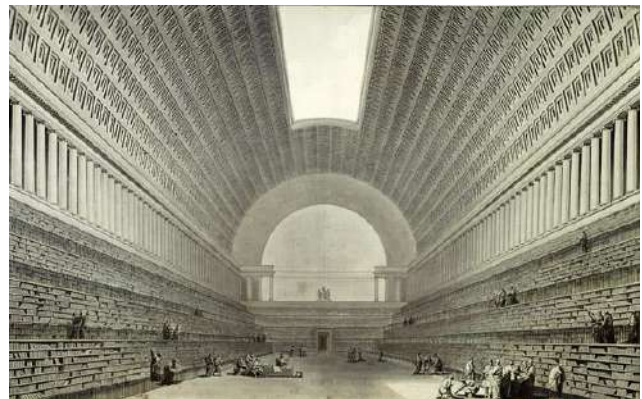


Armory

Etienne-Louis BOULLEE
(1728-1799)



Newton Cenotaph Project,
1784



National Library, Paris, 1785

Fig. 12. Harbingers of neorationalism – architects Claude Nicolas LEDOUX and Etienne-Louis BOULLEE



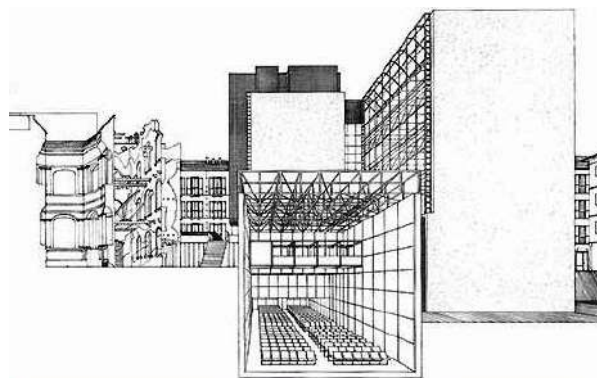
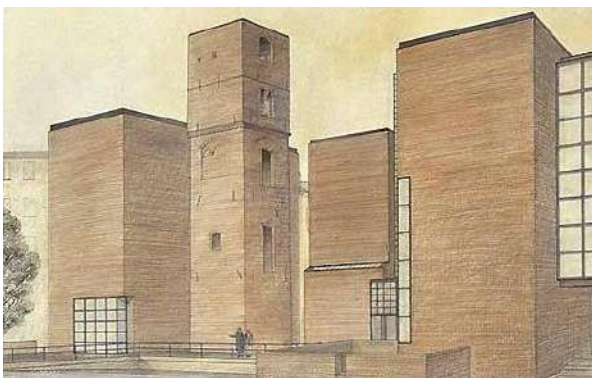
Competition project for the building of the "Chicago Tribune" newspaper, architect Adolf Loos, 1922



Villa Mueller, Prague, architect Adolf Loos, 1930

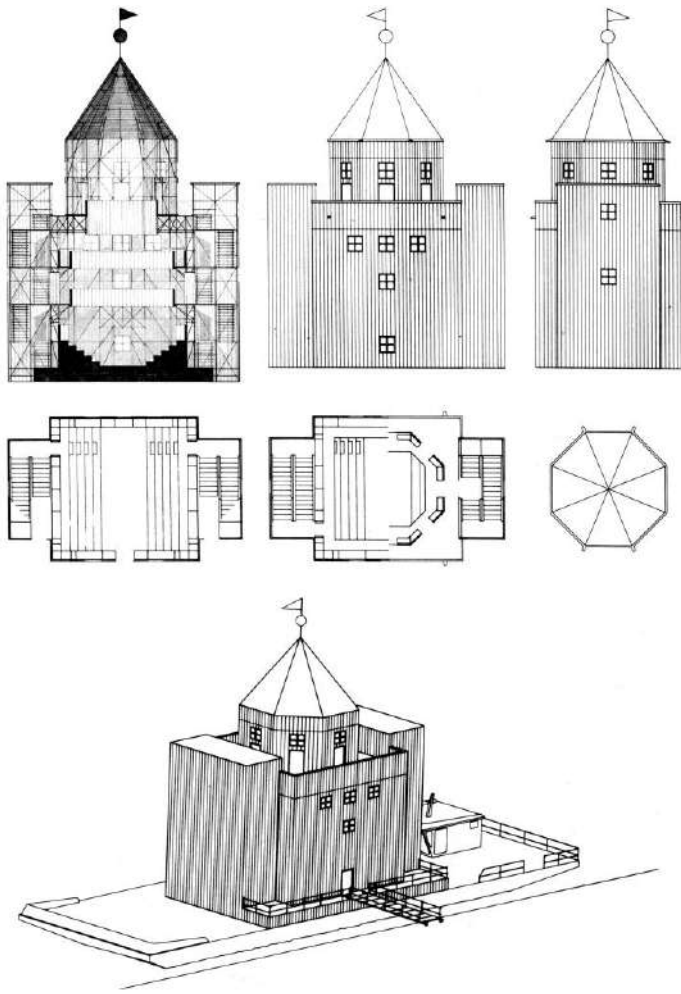


House of the beam, Como, architect Giuseppe Terragni, 1936

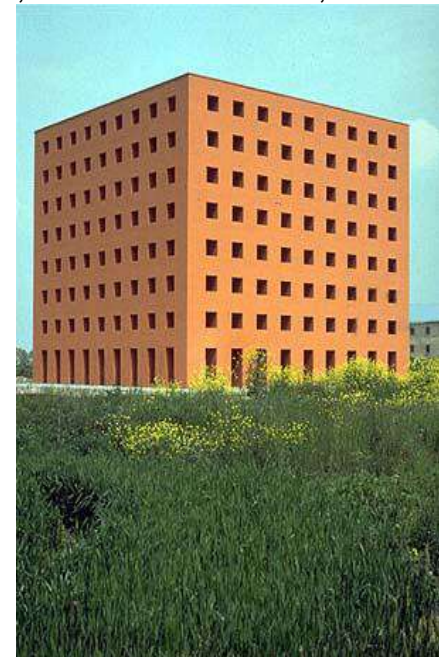
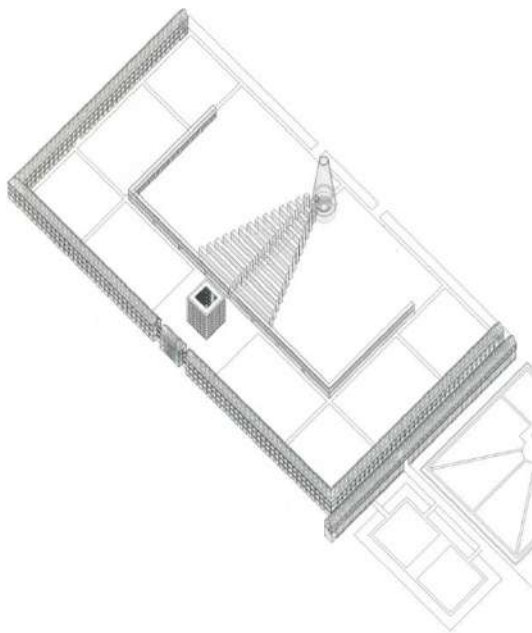


Conference hall, Milan, architect Vittorio Gregotti, 1974-1981

Fig. 13. Harbingers of neorationalism – Adolf Loos, Giuseppe Terragni and Vittorio Gregotti



Project "Teatro del Mondo" (Theater of Light), Venice, architect Aldo Rossi, 1979



Cemetery of San Cataldo in Modena, architect Aldo Rossi, 1971

Fig. 14. Creativity of architect Aldo ROSSI



Alfred Wegener Institut, Bremerhaven, architect Oswald Mathias Ungers, 1980-1984



Lütze Municipal Gallery and Museum, Germany, architect Joseph Paul Kleichus, 1987-1989

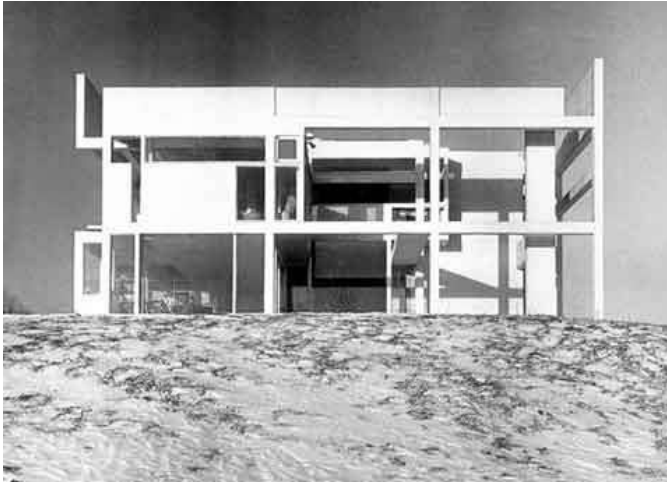


Hospital Berlin-Neukölln, Germany, architect Joseph Paul Kleichus, 1975-1986



Perimeter residential block, Berlin, architect Joseph Paul Kleichus, 1978

Fig. 15. Creativity of architects Oswald Mathias Ungers and Joseph Paul Kleichus



House II,
architect Peter Eisenman, 1969-1970



Hanselmann House,
Fort Wayne, architect Michael
Graves, 1967



Cooper Residence, Orleans,
architect Michael Graves, 1968-1969



High Museum of Art,
Atlanta, architect Richard Meier,
1983

Fig. 16. Projects of the "New York Five" (architects Peter Eisenman,
Michael Graves, Richard Meier)



REM KOOLHAAS
(1944)



Park La Villette, Paris,
architect Rem Koolhaas, 1982



Police station, Netherlands, architect
Rem Koolhaas (OMA), 1982



De Brink Apartments, Нидерланды,
Netherlands, architect Rem Koolhaas
(OMA), 1983



Bus station, Rotterdam, architect Rem
Koolhaas (OMA), 1985

Fig. 17. Projects by Rem Koolhaas as part of the OMA architectural group



**Taller de Arquitectura,
RICARDO BOFILL
(1939)**



Residential complex "Walden", Barcelona,
architect Ricardo Bofill, 1971-1975



Residential complex "Antigone",
France, arch. Ricardo Bofill, 1979-1983



Residential complex "Lake arcades", France, architect Ricardo Bofill, 1982



"Golden Ratio" Square, Montpellier,
architect Ricardo Bofill, 1984



Residential complex "Space of
Abraxas", Ricardo Bofill, 1978-1984

Fig. 18. Projects of Ricardo Bofill as part of the architectural group "Taller de Arquitectura"

Lecture 5

PRODUCTIVISM - ARCHITECTURE OF TECHNOSPHERE

Lecture plan:

1. The origins and forerunners of architectural technocracy.
2. Principles and masters of productivism.
3. Two directions of development: "shell" and "frame".

The origins and forerunners of architectural technocracy

Productivism, as a trend in modern architecture, combines the ideas of functionalism and constructivism, universal space and integrated infrastructure. In some aspects, this direction acts as the opposite of populism.

In its quest, productivity relied on advances in architecture that were associated with new materials and technologies in construction and design. The listed achievements include: Joseph Paxton's Crystal Palace; works by Auguste Perret, Ivan Leonidov, Eero Saarinen and Ludwig Mies van der Rohe; the Ford Foundation and the United Nations Plaza Hotel in New York by Kevin Roche; design center in Los Angeles and public publishing center in Vienna Cesar Pelli (Fig. 19). Among the forerunners of productivity, one should highlight the search projects of the Archigram and the Viennese avant-garde, the projects of Buckminster Fuller, industrial structures for space research at Cape Canaveral, super-large metallurgical and chemical plants, etc.

Architectural productivity was based on the key spatial ideas of post-war architecture, among which – the universal space of the department store and the labyrinth-like space of the office premises "bureau landscape".

Productivity is characterized by the presence of a multi-storey gallery interior space and the centralization of service functions. It was these ideas, as well as the ideas of the building as a "product form", as a gigantic form of industrial design, that were the basis for the development of the Central Becher projects in Amsterdam (architect Herman Hertzberger); factories in Swindon, office building in Ipswich,

Sinesbury – center at the University of East Anglia (architect Norman Foster).

Principles and masters of productivism

In these and other projects and structures, the principles (according to Kenneth Frampton) of productivity were formed. Among them, the most important are:

- undecorated shed or hangar (the most flexible gallery-type structures);
- integrated infrastructure (engineering equipment: electricity and heat supply, lighting and ventilation, air conditioning, audio and video systems, computerization);
- distribution of structures and equipment in accordance with the principle of Louis Kahn regarding the allocation of buildings and structures for servicing and servicing;
- the formation of a "product-form": an expression in the architectural form of the technological process of production and construction (naked construction of American minimalists, consumer "skin" of facades and interiors);
- "frame" and "shell" as the main expressive means of forming an artistic image.

These principles are most fully implemented in the work of the outstanding architects-producers – Richard George Rogers, Renzo Piano, Norman Foster. Among their works should be noted: the house of the insurance company Lloyd in London (Richard George Rogers), the Center Pompidou of Contemporary Art in Paris (Richard George Rogers, Renzo Piano), Kansai airport in Osaka (Renzo Piano), Renault factory in Swindon, bank in Hong Kong, airport in Hong Kong, Millennium tower in Tokyo, Reichstag in Berlin (Norman Foster) (Fig. 20).

Two directions of development: "shell" and "frame"

Productivism as a "modernist" position, as an architectural work, similar, in the words of Kenneth Frampton, "elegant engineering, a product of industrial design of a giant scale", has two directions of development – "shell" and "frame".

The first direction was based on the development of pneumatic and awning structures. Among them are the developments of Frei Otto: the pavilion in Hamburg, the pavilion of the Federal Republic of Germany at Expo-67 in Montreal, the complex of buildings and structures of the Munich Olympics. Similar developments include the Fuji pavilion at Expo-70 in Osaka (Yutaka Murata), the American pavilion at the same exhibition, Renzo Piano's awning designs, etc. The "shell" architecture of productivity should include the Kansai airport in Osaka (Renzo Piano), the early works of Norman Foster, the work of the Paris "Architectural Agency", for example, the building of the European Parliament in Strasbourg (Fig. 21).

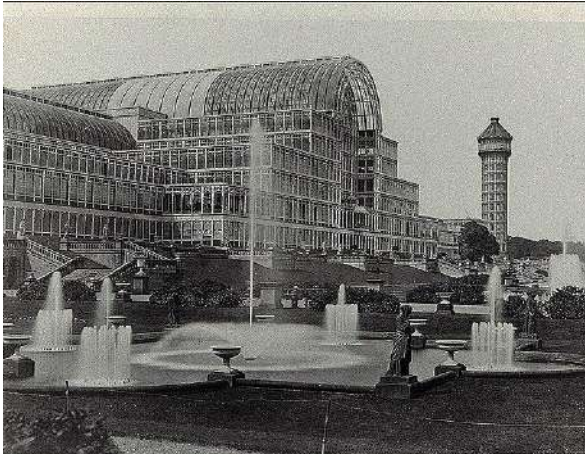
The second direction of the development of productivity is associated with the formation of structures and buildings, the artistic-figurative basis of which is the structure and infrastructure. Among these structures, such techniques stand out: The Center Pompidou of Contemporary Art in Paris (Richard George Rogers, Renzo Piano), banks in Hong Kong and Frankfurt am Main (Norman Foster), the office of the DEU corporation in Seoul (Norman Foster), etc.

In the development of these projects, the experience of machine-building and aircraft-building design, methods of calculating statically indefinite structures, etc. were used, which in turn necessitated the formation of a new methodological doctrine of architectural design.

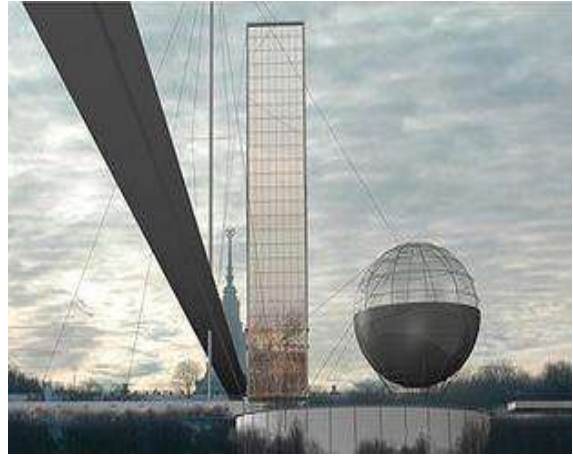
Conclusions

The architecture of productiveism emerged as one of the branches of the minimalist trends in the development of artistic means; widespread use of prototypes of industrial architecture; as a reaction to populism and the "decorated barn" concept. Buildings and structures began to take on the appearance of designer works of a gigantic scale. It was not the structure that was put forward to the fore in the formation of the architectural image, but the infrastructure of the building or structure, the formation of which took place on the basis of the use of the latest technologies and design methods of design.

Literature: [1, 4, 8-11, 14, 19, 35, 38, 42, 46].



Crystal Palace,
architect Joseph Paxton, 1851



Lenin Institute, architect Ivan Leonidov,
1927



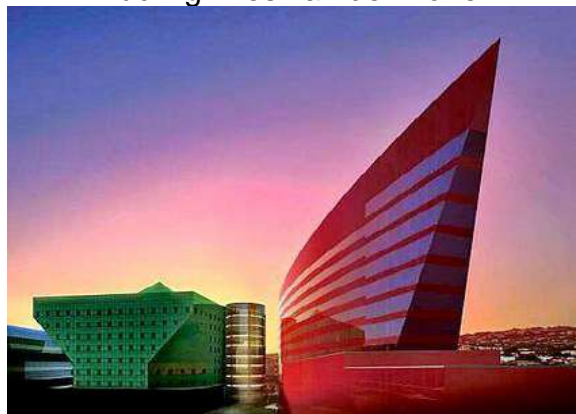
Seagram Building, New York, architect
Ludwig Mies van der Rohe, 1958



Model Glass Skyscraper, architect
Ludwig Mies van der Rohe



Millennium Hilton New York One UN
Plaza, architect Kevin Roche, 1975



Pacific Design Center, architect Cesar
Pelli

Fig. 19. Projects-harbingers of productivity (Joseph Paxton, Ivan Leonidov, Ludwig Mies van der Rohe, Kevin Roche, Cesar Pelli)



Lloyd Insurance Building, London, architect Richard George Rogers, 1978-1986



Bank building "HSBC TOWER", Hong Kong, architect Norman Foster, 1986



The Center Pompidou of Contemporary Art, Paris, architects Richard George Rogers, Renzo Piano, 1972-1976



Millennium Tower, Tokyo, architect Norman Foster, 1987-1991



Reconstruction of the Reichstag, Berlin, architect N. Foster, 1992-1999

Fig. 20. Masters of productiveism: R. Rogers, R. Piano, N. Foster



European Parliament, Strasbourg, "Architectural Agency", 1999



Bank building, Frankfurt,
architect Norman Foster, 1991



Olympic Stadium, Munich,
architect Frei Otto



Kansai International Airport, Osaka, architect Renzo Piano, 1994

Fig. 21. Masters of productiveism: the "Architectural Agency" group,
architects Norman Foster, Frei Otto, Renzo Piano

Lecture 6
POST-AVAN-GARDE – THE POPULISTIC-PLURALISTIC ART OF
COMMUNICATION

Lecture plan:

1. Venice Biennale and the beginning of the postmodern movement.
2. Basic principles and methods of postmodernism.
3. American and European versions of postmodernism.

**Venice Biennale and the beginning of the postmodern
movement**

Charles Jencks in his book "The Language of Postmodern Architecture" (1978) gave a broad definition of postmodernism as a populist-pluralistic art of direct communication between people. As further development showed, this definition covered not only postmodernism as a style, but also many of its ramifications, which in the aggregate, according to Kenneth Frampton, can be defined as post-avant-gardism. Thus, post-avant-garde is a direction of counter-modern, that is, after the avant-garde, development of architecture.

Post-avant-gardism has a close relationship with the architectural practice of such masters of architecture as Hans Hollein, Josef Paul Kleihues, Leon Krier, Robert Venturi, Michael Graves, Robert Stern and others. This and other creative experience were summarized in the above-mentioned books by Charles Jencks and Robert Venturi, as well as in the book by Charles Moore "Body, Memory and Architecture" (1977). In the listed theoretical works, the development of the post-avant-garde movement was analyzed from the standpoint of historicism and regionalism, conceptualism and contextualism, metaphoricity and multi-content, and in general, from the standpoint of the pluralism of a new direction in the development of architecture and the ideas of programmed eclecticism.

These and other ideas were discussed at the 1980 Venice Biennale, the program for which was compiled by Paolo Portoghesi under the general title "Presence of the Past". Many architects took part in the Biennale, among whom were the proponents of the postmodern

ideas of a "decorated barn", "packaging" of architectural forms, "citation" of historical forms and their conceptualization and dematerialization. The doctrine of the deliberate destruction of style, the destruction of architectural forms and theoretical dogmas, dogmas of functionalist architecture, and architecture of modernism was brought to the forefront (Fig. 22).

Basic principles and methods of postmodernism

In his three books "Complexity and Contradictions in Architecture" (1966), "Ugly and Ordinary Architecture or a Decorated Barn" (1971), "Lessons from Las Vegas" (1972), Robert Venturi and his collaborators presented the main postulates of post-avant-garde ideology and postmodernism. Among them: complex and contradictory architecture instead of simple and understandable; poeticization of the ugly and ordinary, openness of architecture for further development; architecture without an architect – the concept of natural "chaos as architecture".

The basic principles of the postmodern approach, similar to the Vitruvian triad, were formulated in 1977 by Robert Stern. Among them are the principles: contextualism (a separate building as a fragment of a larger whole, as a subject of "adhokism" methodology); allusionism (architecture as a historical and cultural echo) ornamentalism (wall as a medium of architectural significance).

Charles Jencks in his book "The Language of Postmodern Architecture" (1978), on the basis of the principles of "double coding" and "radical eclecticism" formulated the main provisions of postmodernism. The leading principles among them are: historicism (return of the lost connection with culture and tradition); retrospectivism (reproduction of architectural forms of the past); a new appeal to local traditions; "Adhokism" (taking into account a specific place); "Contextualism"; the revival of metaphorical thinking; the playful and theatrical nature of the architectural space.

Charles Moore in his work "Five Design Principles" (1979) formulated the following provisions: buildings can and should speak; buildings need freedom of speech; buildings must be adapted to the life of the body and mind; buildings should satisfy our sympathy; buildings connect with the past and evoke memories.

Generalization of the theoretical positions and methods of the masters of the counter-modern movement in architecture makes it possible to formulate the defining features, principles and methods of postmodernism. Among them: the universality of the semantics of traditional architectural forms, their archetypes; method of "card index" and "bibliographic search"; method of "citing" architectural samples; the principle of contextuality and pluralism; programmable eclecticism; principles of playfulness in time and space, in the form and content of the architectural environment; dialogue with natural chaos, collisions of scales and fragmentation of the environment.

American and European versions of postmodernism

In America and Europe, postmodernism developed in two directions, associated with reminiscences of the themes of classical traditional architecture and classical modernist architecture. These two directions existed among the representatives of American postmodernism. If Robert Venturi, Robert Stern and Charles Moore associated their work with radical eclecticism and historicism, then the New York Five in their first searches focused on the puristic architecture of Le Corbusier and the representatives of the "De Style" group.

Among the works of Robert Venturi, Guild House (1963), Mother's House in Chesnut Hill (1964), Trebek House (1970) should be noted. The student of Robert Venturi – Robert Stern in his works continues to experiment with the concept of a "decorated barn". His projects include Lang House (1974), a competition design for a Phoenix City Center (1984), and a residential building in New York. In the early 80s Charles Moore was a professor at Yale and California Universities and led two architectural firms. These firms operated under the motto "customer service". The main buildings of Charles Moore include: his own house in Orenda (1964), in New Haven; residential complex in New Haven (1964); Crunch College in California; Square of Italy in New Orleans (1975-1981); competition project of Henle harbor in West Berlin (1982), etc.

In 1969, the "New York Five" arranged an exhibition of their works at the New York Museum of Modern Art. The exhibition featured the "white light" of programmed individual houses. Among the works of the "five" should be highlighted "Portland House" Michael Graves (1982),

Disney Center (1985-1989), Museum of Fine Arts in Atlanta Richard Meier (1980-1983), Getty Center (1984-1996), the Museum of Decorative Arts in Frankfurt am Main (1979-1985), etc. (Fig. 23).

Among the works of European postmodernism, the works of Aldo Rossi stand out: the cemetery in Modena (1971-1973), the Dwelling house in Galaretez (1969-73); works by Mario Botta: bank in Lugano (1988), commercial and residential complex in Lugano (1991), Daro House (1992) (Fig. 23).

The works of Hans Hollein had a significant impact on the development of postmodern tendencies. Among them: the "Ratty" candle shop in Vienna (1965), the "Section H" store in Vienna (1971), the Austrian Tourist Office (1978), the Haas House in Vienna (1998) (Fig. 23).

In the development of the European line of postmodernism, "Taller de Arquitectura", headed by Ricardo Bofill, took an active part. Among the works of the architectural group, it should be noted: residential complexes "Lake arcades" (1972-1975), "Abraxas" (1978-1983), "Antigone" (1979-1986), "Baroque staircase" (1979-1985).

One of the branches of postmodernism is deconstructivism, a direction of development, whose representatives rely on the compositional motives of constructivism, deforming them in the direction of destruction of tectonics and traditional spatial representations. In his projects, Daniel Libeskind was guided by the work of El Lissitzky. In the creative search of Rem Koolhaas and Zaha Hadid, one can trace the influence of the "anti-gravity" architecture of Ivan Leonidov, compositions by Nikolai Ladovsky, Kazimir Malevich, Wassily Kandinsky (Fig. 24).

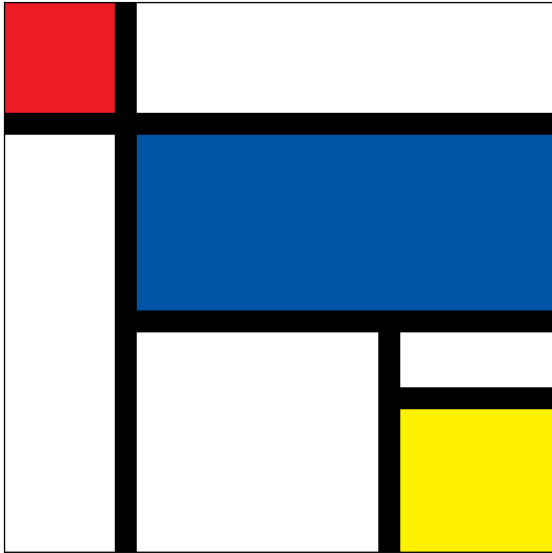
The principles of deconstructivism were most clearly manifested in Bernard Tschumi's project for the Park La Villette in Paris, in separate pavilions of this park, in the "City of Music" by architect Christian de Portzamparc (1990) and others. The principles of deconstructivism and postmodernism were widely embodied in projects for the reconstruction of Potsdamer Platz and Prazhskaya Square in Berlin at the end of the 90s, carried out by leading modern architects.

Deconstructivism includes the later works of the American architect Frank Gehry, as well as residential and industrial buildings of the Vienna group "Coop Himmelblau".

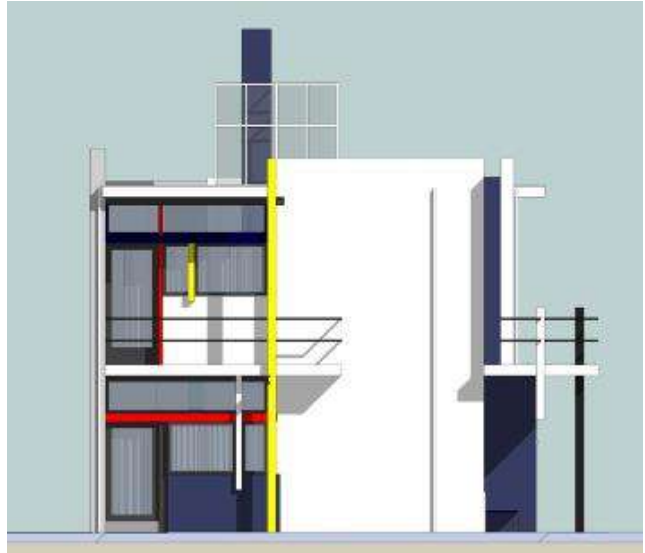
Conclusions

The post-avant-garde combined various architectural styles, their directions and ramifications, stylistic trends in a complex interweaving of art and culture of the 1970s-80s. The post-avant-garde in many ways sought to build a certain historical tradition, filled with interpretation and eclecticism, stylization of already established architectural styles and their trends. The most striking components of post-avant-garde in architecture are American and European postmodernism (historicism, regionalism, conceptualism, contextualism, metaphoricality, multi-content, eclecticism) and deconstructivism (deformation and destruction of the tectonics of traditional spatial representations).

Literature: [1-3, 5, 6, 9, 10, 11, 24, 29, 33, 34, 40, 44, 45, 47, 48].



Piet Mondrian, "Compositions in red, yellow and blue", neoplasticism, 1921



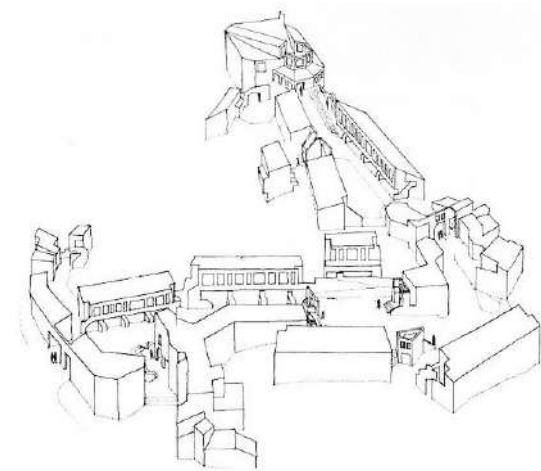
House Schroeder, Netherlands, arch. Gerrit Rietveld (group "Style"), 1924



Vanna venturi house, Philadelphia, architect Robert Venturi, 1959-1964



Moore house, California, architect Charles Moore, 1964



Kresge college, California, architect Charles Moore, 1972-1974

Fig. 22. Precursors and representatives of post-avant-garde art: the work of Piet Mondrian, Gerrit Rietveld, Robert Venturi, Charles Moore



Portland building, Orlando, architect Michael Graves, 1980



Haas-haus, Vienna, architect Hans Hollein, 1985-1990



Walt disney world resort, Orlando, architect Michael Graves, 1990



The Getty Center, Los Angeles, architect Richard Meier, 1984-1997



Museum of Decorative Arts, Frankfurt am Main, architect Richard Meier, 1981-1984



Banca del Gottardo, Switzerland, architect Mario Botta, 1988

Fig. 23. Postmodernism in the works of Michael Graves, Hans Hollein, Richard Meier, Mario Botta



Netherlands Dance Theater, architect Rem Koolhaas, 1987



Denver Art Museum), architect Daniel Libeskind, 2006



El Lissitzky, graphics, 1922



Guggenheim Museum, Bilbao, architect Frank Gehry, 1997



Reconstruction of the attic of a residential building, Vienna, Coop Himmelblau, 1988



Confluence Museum, Lyon, Coop Himmelblau, 2014

Fig. 24. Deconstructivism in the works of Rem Koolhaas, Daniel Libeskind, Frank Gehry, Coop Himmelblau

Lecture 7

METABOLISM AND NATIONAL JAPANESE TRADITION

Lecture plan:

1. Prerequisites for the emergence of the metabolic theory.
2. Metabolism in architecture and urban planning.
3. Development of the metabolic theory in the work of Japanese architects.

Prerequisites for the emergence of the metabolic theory

The emergence of metabolism as a direction, theory and style in modern architecture is associated with criticism of the basic principles of functionalism. First of all, the principle "form corresponds to function". This criticism gave rise to a new understanding of the relationship between function and form, which in turn led to the emergence of new directions in modern architecture, the essence of which lies in the principles: form is not determined by function; the form is determined by the context; the shape is determined by the place; form is determined by form; form is determined by technology (product-form); the shape is determined by the structure; the shape is determined by the infrastructure.

The principle that forms is primarily determined by the dynamics of functional and infrastructural changes has become the basis of metabolic theories and searches. For the first time, the dominance of dynamic changes was announced by Louis Kahn, who can be considered a harbinger of metabolism. In his works, it was proposed for the first time to analyze the dynamics of changes between two types of space – auxiliary and main; emphasized the role of infrastructure in the formation of an architectural image; the idea of a new dynamic monumentality was created.

These and other principles were implemented in Louis Kahn's projects, including: Richard's medical laboratories at the University of Pennsylvania (1957-1969), the research center of the J. Salk Institute in Lo-Yolla (1959-1965), a government complex and a hospital in Dhaka,

Bangladesh (1962-1974), Institute of Management in Ahmedabad, India (1962-1974) and others (Fig. 25).

The forerunners of metabolism should include the search architectural and urban planning projects of Russian constructivists, the European avant-garde of the 60-70s XX century, urban utopias of Soviet architects, the search for representatives of the so-called architectural bionics, and finally, the work of modern Japanese architects.

Metabolism in architecture and urban planning

New metabolic ideas were first presented at the International Congress of Architects (Tokyo, 1960) by a group of young Japanese architects Kiyonori Kikutake, Kisho Kurokawa, Fumihiko Maki, Masato Otaka, Kavadzoe Noboru, who were joined in 1961 by Kenzo Tange and Arata Isozaki, creating the "Seven Metabolists" group. Their doctrine was based on the following principles: the principle of development in time, which stimulates periodic "metamorphic transformation" and "metabolic renewal"; the principle of identity of form formation in architecture and urban planning with a shift in emphasis in search of new forms to the megastructures of the future; the principle of inheritance of national architectural traditions.

The metabolists' focus has been on urban issues. In the theory of group form by Masato Otaka and the theory of collective form by Fumihiko Maki, the hierarchical development of town-planning forms was considered. During this period, projects were created for the reconstruction of Tokyo in the bay (Kenzo Tange, 1960), urban planning clusters (Arata Isozaki, 1960), Tokaido-Megapolis (Kenzo Tange, 1965), the International Exhibition "Expo-70" in Osaka, where metabolic architects participated in the concept of the environment and development.

Urban development projects include the projects of Kenzo Tange and the Urbanists and Architects Team (URTEC group): general plan of Kyoto (1968), reconstruction of Skopje (1965), reconstruction of Bologna (1970).

Urban planning ideas were implemented in architectural projects. Among them are Kenzo Tange's projects: the Yoyogi sports complex (1964), the radio broadcasting center in Kofu (1966), the buildings of the

Shizuoka company in Tokyo (1968-1970); works by Arata Isozaki: the library in Oita (1966), the women's lyceum in Oita (1964); Kiyonori Kikutake's projects: a hotel in Kaika (1965), the Miyakokojo community center (1966); Kisho Kurokawa's developments: Hawaiian Dreamland (1967), Fukuoka Bank in Tokyo (1976) and others (Fig. 26).

Development of the metabolic theory in the work of Japanese architects

In their subsequent works, leading Japanese architects continued to develop the philosophical foundations of metabolism and the rationale for the provisions of this theory. Among them, Kenzo Tange singled out three main aspects of the metabolic method: metamorphic transformation involves the transition from centric to linear (vertebrate) schemes of space organization; metabolic theory focuses on the gradual evolutionary nature of changes in the internal structure of space; spatial structure (artificial nature) is realized by external growth and development; the cluster structure is replacing the traditional schemes of organizing space; the functional method is replaced by the method of symbolizing space.

These and other provisions were gradually transformed, acquiring new qualities in the further works of the masters of Japanese architecture. Among them are the works of Kenzo Tange: the international airport in Algeria (1976), the Sogetsu art center in Tokyo (1977), the office of Fuji in Tokyo (1996); Kisho Kurokawa's projects: the Nakagin Hotel in Tokyo (1972), the Museum of Art in Nagoya (1987), the Museum of Contemporary Art in Hisimi (1995); developments by Arata Isozaki: museum in Nagana (1988), Disneyland in Orlando (1990), cultural center in Mito (1990); Fumihiko Maki's projects: spiral building (1985), gym in Tokyo (1990), TEPIA center in Tokyo (1989) (Fig. 27).

Conclusions

Metabolism, as a doctrine, direction and style, combined the desire to introduce the achievements of the natural branches of knowledge into architecture and urban planning. Based on the criticism of functionalism, representatives of this architectural movement created their own original

doctrine of three-dimensional urban space – artificial nature and its dynamics, which obeys the aesthetic principle of "completion in the unfinished". Metabolic ideas have had a significant impact on the development of modern architecture, urban planning and design.

Literature: [1, 10, 25, 32, 36, 37, 38, 40, 48, 49].



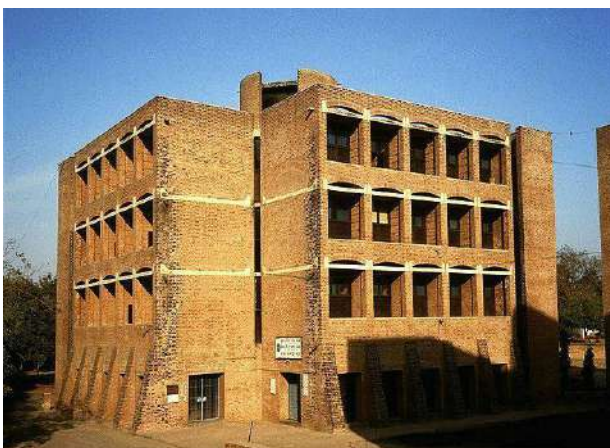
Richard's Medical Laboratories,
Pennsylvania, architect Louis Kahn, 1957-
1969



Salk Institute Research Center,
California, architect Louis Kahn, 1966



National Assembly, Bangladesh, architect Louis Kahn, 1964-1974



Institute of Public Administration, India, architect Louis Kahn,
1962-1979

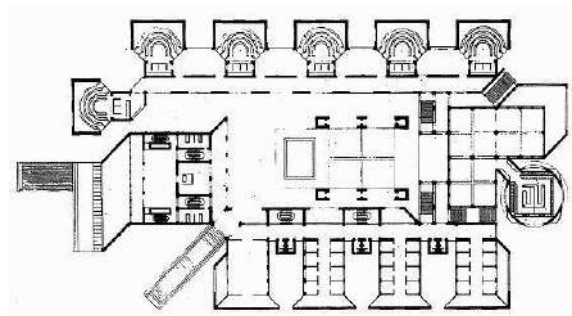


Fig. 25. Dynamics of changes as the basis of metabolism in architecture
on the example of the work of Louis Kahn



Tokyo reconstruction project, architect Kenzo Tange, 1960



Reconstruction of Skopje, Yugoslavia, architect. Kenzo Tange, 1965-1966



Yoyogi National Gymnasium, Tokyo, architect Kenzo Tange, 1964



"FUJI" TV company, Tokyo, architect Kenzo Tange, 1966



Oita Prefecture Library, architect Arata Isozaki, 1964-1966



Miyakonojo civic Hall, architect Kiyonori Kikutake, 1966

Fig. 26. Metabolism in architecture and urban planning (Kenzo Tange, Arata Isozaki, Kiyonori Kikutake)



Sogetsu Kaikan Arts Center, Tokyo, architect Kenzo Tange, 1977



Nakagin Capsule Tower, Tokyo, architect Kisho Kurokawa, 1972



Nagoya City Art Museum, architect Kisho Kurokawa, 1987



Hiroshima City Museum of Contemporary Art, architect Kisho Kurokawa, 1989



Team Disney Orlando office building, architect Arata Isozaki, 1990
Fig. 27. Metabolism in Japanese architecture (Kenzo Tange, Kisho Kurokawa, Arata Isozaki)

Lecture 8

ACHIEVEMENTS AND PROSPECTS OF STYLE OF HIGH TECHNOLOGY (HIGH-TECH)

Lecture plan:

1. The main directions of the style of high technology.
2. Development of style in the works of leading masters of architecture.
3. Creativity of the "Architecture-Studio".

The main directions of the style of high technology

The high-tech style (hi-tech) became the last stage of the aesthetic development of new technical forms, which was founded by the constructivists in the 1920s and continued by the structuralists of the 60s. The roots of hi-tech can be found in the work of such famous modern architects as Ivan Leonidov, Yakov Chernikhov, Ludwig Mies van der Rohe, Louis Kahn, Philip Johnson, as well as architects engaged in industrial architecture, aerospace complexes, etc. (Fig. 28, 29).

In the 60-90s XX century hi-tech has gone through several stages of its development, which were most clearly manifested in the work of the outstanding architects Richard George Rogers, Renzo Piano, Norman Foster (Fig. 29). In the The Center Pompidou of Contemporary Art in Paris (Richard George Rogers, Renzo Piano, 1972-1977) in a latent form were veiled further directions of high-tech development associated with: the traditionally expanded composition of the house of the insurance company Lloyd in the City of London (Richard George Rogers, 1986); a clearer and more coherent composition around the multi-storey courtyard of the Shanghai Bank building in Hong Kong (Norman Foster, 1986); with the so-called "slick-tech" (style of glossy glass facade), present in the projects of Philip Johnson, Norman Foster, John Portman, Cesar Pelli.

Glass "undecorated" sheds or hangars did not contain "skin and bones", as it was in the works of Ludwig Mies van der Rohe, but only "skin". The "greenhouse" theme of glass mirror surfaces has become an advertisement and a visiting card of successful firms and banks in many countries.

Development of style in the works of leading masters of architecture

Norman Foster and his company are considered to be one of the leaders of high-tech, which in their work used the experience of aircraft construction, aerospace construction, military institutions, bridge construction, etc. In the work of the master, all the above directions in the development of the style were intertwined. His creative searches opened up new horizons and perspectives for high-tech.

Among the most famous works of Norman Foster are the following: the Stansted airport terminal in London (1981-1991), the Nimy Center for the Arts (1987-1993), the Faculty of Law in Cambridge (1993-95), the reconstruction of the Reichstag in Berlin (1994-1999), the building of "Commerzbank" in Frankfurt am Main (1992-1994), the terminal of Chek Labetiv Kok airport on an island near Hong Kong (1992-1998) (Fig. 30).

A similar terminal at Kansai Airport on an artificial island in Osaka was built by Renzo Piano (1988-1994). These and other huge airports and train stations have opened up new horizons in the development of style. Among them: The Waterloo terminal in London (Nicholas Grimshaw, 1990-1993), stations in the UK and France of the Eurostar railway lines, the new Oriente station in Lisbon (Santiago Calatrava, 1993-1998) (Fig. 30).

Among the followers of high-tech are architects Helmut Jahn (tower in Frankfurt am Main, 1985-1991; center of Illinois in Chicago, 1979-1985); Jean Nouvel (Institute of the Arab World in Paris, 1981-1987; reconstruction of the opera house and Lyon, 1987-93; Cartier building in Paris, 1991-1994; conference center in Lucerne, 1992-1999) (Fig. 31).

Creativity of the "Architecture-Studio"

A group of French architects consisting of Martin Robain (the founder), Rodo Tisnado (since 1976), Jean-François Bonne (since 1979), René-Henri Arnaud (since 1989), Alain Bretagnolle (since 1989), Laurent-Marc Fisher (since 1993), Marc Lehmann (since 1998), Roueida Ayache (since 2001), Gaspard Joly (since 2009), Marica Piot (since 2009), Mariano Efron (since 2009), Amar Sabeh El Leil (since 2009), Romain Boursier (since 2018), and Widson Monteiro (since 2018)

formed an association that began its path in architecture through victories in competitions. Trends and methods that are inherent in many modern architectural trends and styles are intertwined in the work of the "Architecture-Studio". These are methods of metaphorical search, symbolization, new monumentality, scenario. But the most important technique of the "Architecture-Studio" is the use of the latest design and construction technologies.

An example of the introduction of high technologies was the complex of the European Parliament in Strasbourg (1991-1999). The main principles of high-tech were embodied in a series of lyceums: Lyceum J. Verne (Cergy-le-Haute, 1991-1993), Lyceum Arena in Toulouse (1991), Lyceum de Futur (Jaini-Klan, 1986-1987), school of miners (Albi-Karma, 1992-1995) (Fig. 32).

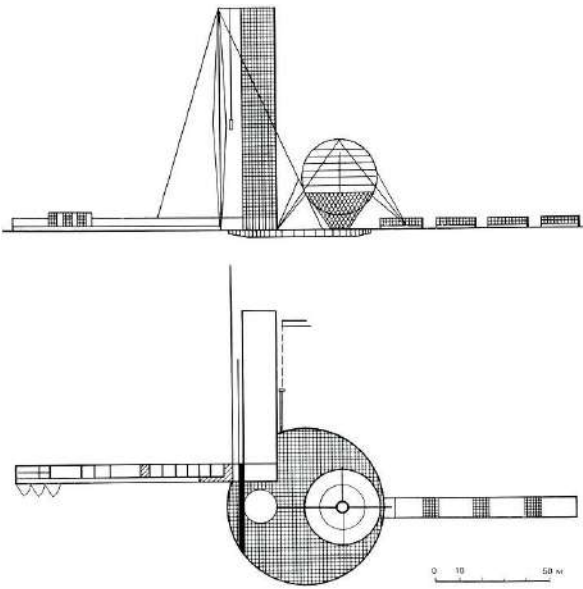
High-tech features are observed in projects: a football stadium in Paris (1994-1998), a church in Rome (1994), a church in Paris (1986-1994), an exhibition park in Paris (1993), Frankfurt Square in Lyon (1992), Renault Technology Center (1990).

High-tech style features are inherent in projects of university complexes: a restaurant in Dunkirk (1990-1993), a hostel in Paris (1989-1996), the Institute of Judaism in Paris (1988-1996), Citadel University in Dunkirk (1987-1990).

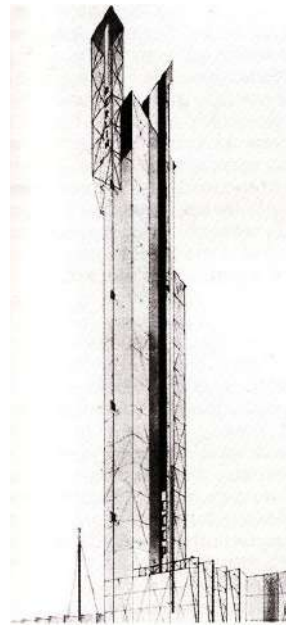
Conclusions

The high-tech style has become a logical continuation of the development of constructivism and "glass" architecture, the achievements of industrial construction and new spatial ideas, the achievements of the "international style", the experience of building super-large structures. The internationalization of the high-tech style was facilitated by the system of international competitions and the work of masters of architecture outside their countries. "Undecorated barn", "skin" and "bones" or, in other words, – pure forms, frames and shells – became the basis for the development of hi-tech, which, based on the principle of feedback, influenced the development of modern architecture and design.

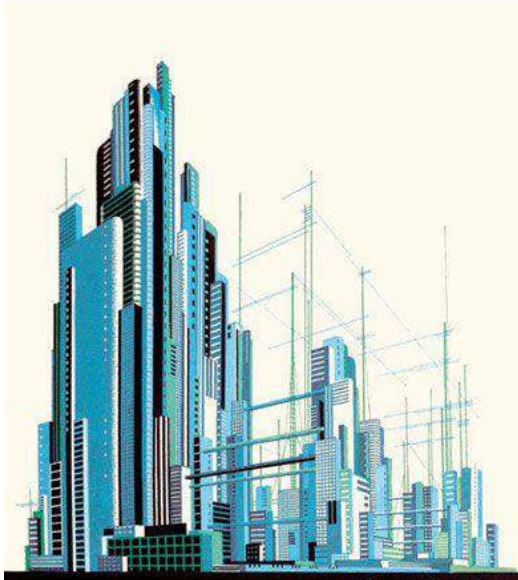
Literature: [1, 3-5, 8-11, 17-19, 29, 44, 47-49].



Lenin Institute of Library Science, Moscow, architect Ivan Leonidov, 1927



Project of the Printing House of the Izvestia newspaper, architect Ivan Leonidov, 1925



Architectural fantasies, architect Yakov Chernikhov

Fig. 28. Creative works of Ivan Leonidov and Yakov Chernikhov



Lake Shore Drive Apartments, Chicago, architect Ludwig Mies van der Rohe, 1948-1951



AT&T Corporate Headquarters office building, New York, architect Philip Johnson, 1958

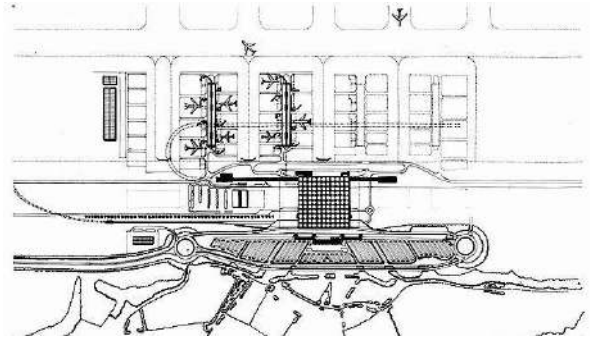


Glass House, USA, architect Philip Johnson, 1949



Office building "30 St Mary Ax", London, architect Norman Foster

Fig. 29. The style of high technology in the works of Ludwig Mies van der Rohe, Philip Johnson, Norman Foster



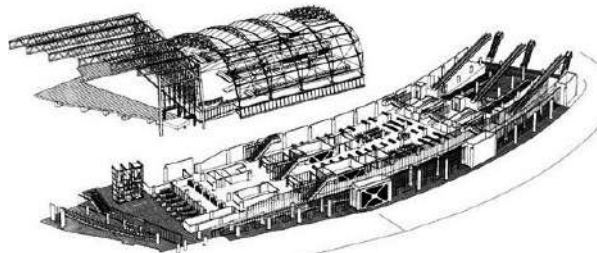
Terminal of the airport "London stansted airport", architect Norman Foster, 1981-1991



Center for the Arts Carre d'art, Nimes, France, architect Norman Foster, 1993



University of Cambridge Law School, architect Norman Foster, 1990-1995



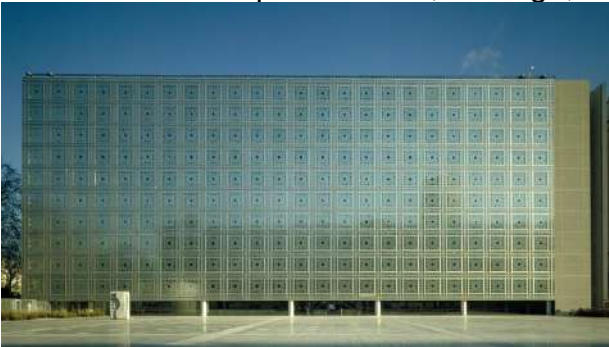
Waterloo International Station, London, architect Nicholas Grimshaw, 1993
 Fig. 30. High-tech style in the works of Norman Foster, Nicholas Grimshaw



Station Oriente, Lisbon, architect Santiago Calatrava, 1998



J. Thompson Center, Chicago, architect Helmut Jahn, 1979-1985



Arab World Institute, Paris, architect Jean Nouvel, 1987

Reconstruction of the Lyon Opera, Lyon, architect Jean Nouvel, 1986-1993



Fondation Cartier, Paris, architect Jean Nouvel, 1991-93

Fig. 31. The style of high technology in the works of Santiago Calatrava, Helmut Jahn, Jean Nouvel

"ARCHITECTURE-STUDIO"
(Founded in 1973)



Jules Verne high school, France, 1991-1993



Arena high school, Toulouse, 1989-1991



Citadel University,
France, 1987-1990



High school of the Future, France, 1987-1990



Our Lady of the Ark of the Covenant
church, Paris, 1986-1998



Student canteen for 700 seats,
Dunkirk, France, 1990-1993

Fig. 32. The style of high technology in the works of the "Architecture-Studio"

Lecture 9

REGIONALISM IN MODERN ARCHITECTURE

Lecture plan:

1. General features of regionalism.
2. Features of the architecture of the northern and central regions.
3. Features of the development of the southern regions.

General features of regionalism

Regional architecture, according to Kenneth Frampton, is actually the process of creating viable architectural forms of regional culture while simultaneously using the world heritage of civilization, or, in other words, – "crossing of local culture and world civilization". At the same time, regionalism is largely shaped by the architectural schools of a particular region, whose main task is to maintain anticentrism in an effort to preserve their own originality and identity. Regionalism is associated with an approach that emphasizes the importance of sensory experience and the "genius loci" – "spirit of the guardian of the place".

Regional architecture, as a local manifestation of world culture, is in opposition to the total processes of modernization, fighting for independence and survival. In this sense, in modern architectural theory, regionalism is often interpreted as critical regionalism – a combination of the result of progress (technology development) with local characteristics (climate, materials, traditions).

Kenneth Frampton highlighted the characteristic features of regionalism inherent in all regions. The most important among them are:

- the fragmented and marginal nature of critical regionalism pushes it towards chamber rather than large-scale projects;
- deliberate strengthening of the role of "place";
- conscious emphasis of natural and climatic factors, lighting and construction factors;
- deliberate opposition to the concept of mass culture, in which information supplants experience, incl. experience of perceiving architectural space;
- the desire to create a "world culture" that has regional roots;

- the development of critical regionalism is carried out outside the zones of influence of the centers of world civilization – its formation occurs between these zones.

Thus, critical regionalism, developing in all corners of the world, complements and makes more diverse the general picture of the evolution of world civilization and culture.

Features of the architecture of the northern and central regions

The development of modern architecture in the countries of the northern hemisphere was complemented by the development of regional architecture. Creative impulses for this development can be traced in the works of Frank Lloyd Wright, primarily in the "prairie houses", as well as in the works of Louis Kahn (Fig. 33). A significant contribution to the development of regional architecture was made by the architects of the Nordic countries: Alvar Aalto, Reima and Raili Pietilä, Hendrik Petrus Berlage, Jacobus Oud, Erick van Egeraat, Jaap Bakema, Gerrit Rietveld, Eero Saarinen (Fig. 33). Among contemporary architects, the work of Jorn Utzon should be highlighted. Regional features were most prominent in Bagsverd Church near Copenhagen (1976). In the central part of Europe, the famous architects of Italy, such as Vittorio Gregotti, Carlo Scarpa, Giancarlo De Carlo, Mario Botta, Aldo Rossi, can be referred to as regionalist architects (Fig. 34, 35).

In his works, especially in the house of Riveau-Saint-Vitale (1972-1973), Mario Botta implemented the principles of "building up a plot" and the creation of "cities in miniature", which together compensate for the loss of the historic city. In these and other works, he used traditional types of folk and public buildings, for example, "rocoli", "belvedere", "viaduct". The principles of regional architecture became the basis of Aldo Rossi's creativity, they were introduced in his projects of residential buildings, schools, cemeteries and monuments.

Features of the development of the southern regions

The development of regional architecture in the southern and south-central countries was based on the work of famous architects:

Oscar Niemeyer, Affonso Eduardo Reidy, Carlos Raúl Villanueva, Richard Neutra, as well as the works of Louis Kahn, Frank Lloyd Wright, Kenzo Tange, made for the southern countries of Asia and Africa (Fig. 36).

In modern architecture, the features of regionalism are inherent in Spanish architects, among whom are Josep Antoni Coderch, Oriol Bohigas, Alvaro Siza. Among the works of Alvaro Siza, the Beres residential house in Povoia do Varzin (1973-1976), the Buse residential complex in Porto (1973-1977), the Pinto Bank in Olivera de Azemeins (1974) stand out. Echoes of Catalan regionalism can be traced in the works of Ricardo Bofill and his "Taller de Arquitectura": the Xanadu complex in Calni (1967), "Walden-7" in Barcelona (1970-1975). This area also includes the works of the Mexican architect Luis Barragan, including: gardens for residential areas Los Arbomage (1958-1961) and Los Clubs (1961-1964), a group of skyscrapers in Mexico City (1957) (Fig. 37).

A significant contribution to regionalism is associated with the work of Japanese metabolic architects: Kenzo Tange, Kiyonori Kikutake, Arata Isozaki, Kisho Kurokawa. The theory of architectural symbiosis proposed by Kisho Kurokawa greatly contributed to the development of regional architecture not only in Japan, but also in other countries. This theory, based on the synthesis of cultures, was built on the following principles: balance of the rights of the whole and the part (capsule space); reversibility of internal and external; the introduction of a "third space" uniting the contradictions between the whole and the part; search for elements of symbiosis; returning the value of the role of an architectural detail.

Conclusions

Regionalism, fighting for the right to independence in opposition to the total phenomena of modernization of the environment and mass culture, in its content acquires features of criticality. Critical regionalism in all corners of the world, having specific features and common features, as it develops, complements and makes the overall picture of the evolution of world civilization and culture more understandable and diverse.

Literature: [1, 5, 7, 10, 11, 12, 13, 17, 18, 22, 24-28, 31, 32, 34, 39].



Frederick Robie house,
Chicago, architect Frank Lloyd Wright,
1909



Willits' house in Highland Park, Illinois,
architect Frank Lloyd Wright, 1902



Taliesin West House,
Scottsdale, Arizona, architect Frank Lloyd
Wright, 1937



First unitarian church, New York,
architect Louis Kahn, 1959-1967

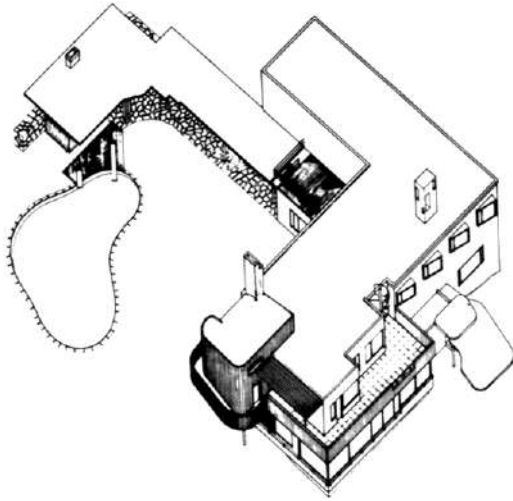


Library in Vyborg, architect Alvar Aalto,
1927-1935



Sanatorium for tuberculosis patients,
Paimio, architect Alvar Aalto, 1929

Fig. 33. Regional architecture of the northern and central regions (Frank Lloyd Wright, Louis Kahn, Alvar Aalto)



Villa Mayrea
Normark, architect Alvar Aalto, 1939



National Pensions Building, Helsinki,
architect Alvar Aalto, 1957

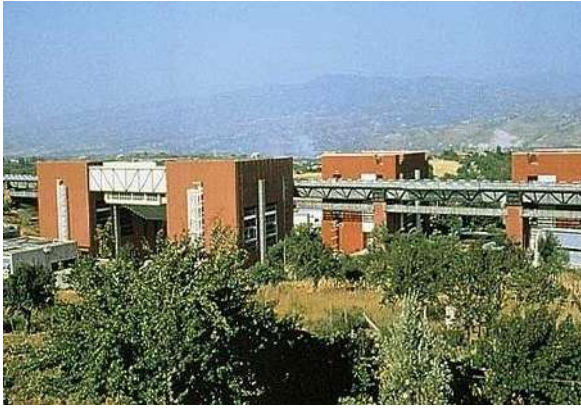


Residence of Riva San Vitale,
Switzerland, architect Mario Botta, 1973



Cannaregio residential area, Venice, architect Vittorio Gregotti, 1981-2002

Fig. 34. Regional architecture of the northern and central regions (Alvar Aalto, Mario Botta, Vittorio Gregotti)



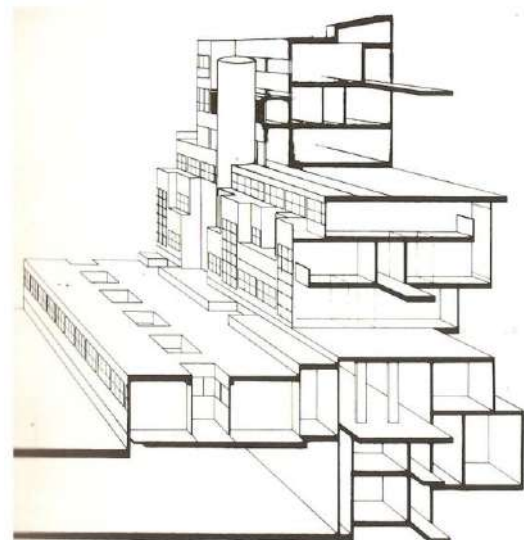
University of Calabria, Cosenza, Italy, architect Vittorio Gregotti, 1973-1979



Olympic Stadium, Barcelona, architect Vittorio Gregotti, 1984-1988



Free university, Urbino, Italy, architect Giancarlo De Carlo, 1962-1983



Residential complex Monte Amiata, Milan, architect Aldo Rossi, 1967-1972

Fig. 35. Regional architecture of the northern and central regions (Vittorio Gregotti, Giancarlo De Carlo, Aldo Rossi)



Palace of the National Congress, Brasilia, architect Oscar Niemeyer, 1960



Government Palace, Brasilia, architect Oscar Niemeyer, 1960



Cathedral of Brazil, architect Oscar Niemeyer, 1970



Kaufmann desert house, California, architect Richard Neutra, 1946



Lovell house, Los Angeles, architect Richard Neutra, 1928



Busa residential complex project, Portugal, architect Alvaro Siza, 1973-1977

Fig. 36. Regionalism in the architecture of the southern regions (Oscar Niemeyer, Richard Neutra, Alvaro Siza)



Residential complex "Xanadu", Spain, architect Ricardo Bofill, 1968-1971



Auroville, India, 1968



Towers of the satellite city, Mexico City, architect Luis Barragan, 1957-1958



Petronas towers, Kuala Lumpur, arch. Cesar Pelli, 1998

Fig. 37. Regionalism in the architecture of the southern regions (Ricardo Bofill, Auroville, Luis Barragan, Cesar Pelli)

Lecture 10

ARCHITECTURAL COMPETITIONS OF THE MIDDLE-END XX CENTURY AND THEIR INFLUENCE ON MODERN ARCHITECTURAL AND URBAN PLANNING THEORY

Lecture plan:

1. The specifics of competitive design at the present stage.
2. International architectural competitions of the 70-80s of the XX century.
3. International architectural competitions 80-90s of XX century.

The specifics of competitive design at the present stage

The competition movement acquired particular intensity in the 20s of the XX century, when, after wars and revolutions, the search for new architectural ideas and concepts, images of "capacitors of a new era" took place at the international level. International architectural exhibitions and competitions were held in the Soviet Union, the United States, Germany, and France.

A new wave of intensification of international competitions began in the post-war period. The competition movement was aimed at solving predictive-futurological, predictive-design and design problems. The leading architectural magazines of the world made a great contribution to the development of the competition movement and "paper architecture": "Japanese Architect", "Progressive Architecture", "Domus", "Architecture" and others.

Recently, at international competitions, the latest heuristic methods and approaches have been worked out, a new philosophical and theoretical vision of the ways of development of modern architecture has been proposed. Among these methods, the most important are: the method of brainstorming, organizational-active play, methods of associative and metaphorical search, scriptwriting, inversion, etc.

The use of these methods and new theoretical provisions contributed to the formation and development of style trends in modern architecture: postmodernism, neorationalism, hi-tech.

International architectural competitions of the 70-80s of the XX century

It was during this period that the ongoing competitions most clearly reflected the ideas of both modern and counter-modern movement in architecture, modernism and postmodernism. The winners of international competitions demonstrated the best examples and purity of such styles as expressionism, hi-tech, neorationalism, deconstructivism in urban planning and architecture.

In the urban planning projects of the master plan of Brasilia (Lucio Costa, 1956-1957) and the public park of La Villette in Paris (Bernard Tschumi, 1976-1982), the features of constructivism and deconstructivism, rationalism and high-tech were most clearly manifested (Fig. 38, Fig. 39).

Elements of populist and at the same time futurological architecture were traced in the competition project of the Entertainment Center in Monte Carlo, the authors of which were the Archigram group (1969-1970) (Fig. 40).

The basic principles of hi-tech are most clearly reflected in the The Center Pompidou of Contemporary Art in Paris (Richard George Rogers, Renzo Piano, 1970-1971) and in the building of the Shanghai Bank in Hong Kong (Norman Foster, 1979).

A significant contribution to the development of neorationalism and the formation of the theoretical positions of the "Tendenza" group is associated with the victory of Aldo Rossi in the international cemetery competition in Modena (1971-1974).

The first contribution to the postmodern architecture of Paris was made by Carlos Ott, who won the international competition for the building of the Bastille opera in Paris (1982-1983) (Fig. 40).

International architectural competitions 80-90s of XX century

During this period, two projects stand out for their monumental style: The Grand Arch of Défense in Paris (Johann Otto von Spreckelsen, 1989) and the Metropolitan Hall in Tokyo (Kenzo Tange, 1985-1986). In the first competitive project, the tendency of

neorationalism sounded, and in the second, the ideas of metabolism were embodied.

The most widespread during this period were the ideas of deconstructivism. They are to some extent present in the Pin-Club projects in Hong Kong (Zaha Hadid, 1982-1983), the International Building Exhibition in Berlin (Oriol Bohigas, Peter Eisenman, Oswald Mathias Ungers, Bruno Reichlin, Aldo Rossi, Daniel Libeskind et al., 1980-1987), the European Museum in Berlin (Daniel Libeskind, 1988-1989), the Center for Japanese Culture in Paris (Masayuki Yamanaka, Kenneth Armstrong, Adrian Smith, 1989-1999).

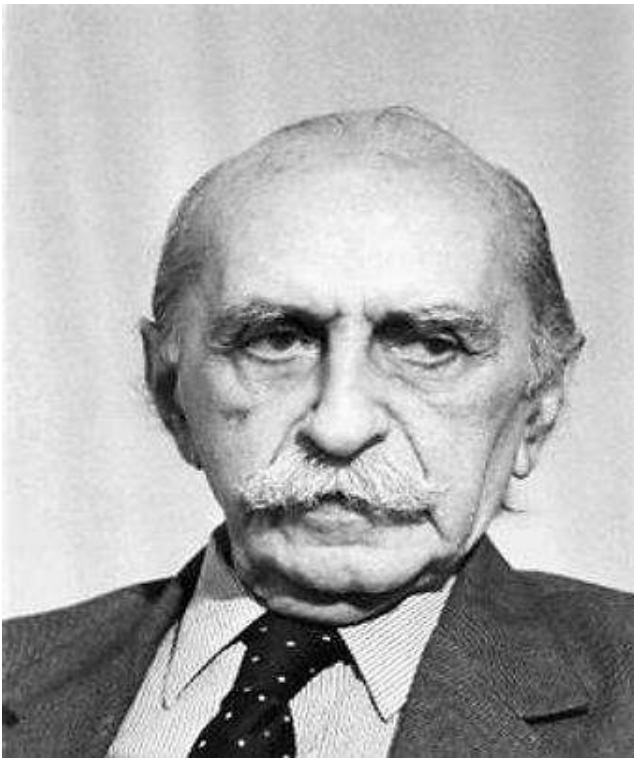
Ideas close to high-tech were embodied in the projects of the Shonandai Cultural Centre in Fujisawa (Itsuko Hasegawa, Katsuhiro Kobayashi, Shin Takamatsu, 1985-1986), as well as in the reconstruction of the Reichstag in Berlin (Pi de Bruijn, 1992).

Ideas based on the principles of postmodernism and neorationalism found their continuation. Among these works, the project of the city hall and the library in The Hague should be highlighted (Rem Koolhaas and Richard Meier, 1986-1989); project of the German Historical Museum in Berlin (Aldo Rossi, 1987-1988) (Fig. 41).

Conclusions

International competitions held in the second half of the 20th century were aimed not so much at obtaining the highest quality project proposals, as they were associated with the declaration and the emergence of new philosophical and theoretical ideas. In this aspect, they contributed to the further development of branched currents and trends in modern architecture, urban planning and design, while enriching modern architectural theory.

Literature: [1, 3, 4, 5, 8, 10, 14, 15, 20, 29, 32, 44, 46].



LUCIO COSTA
(1902-1998)

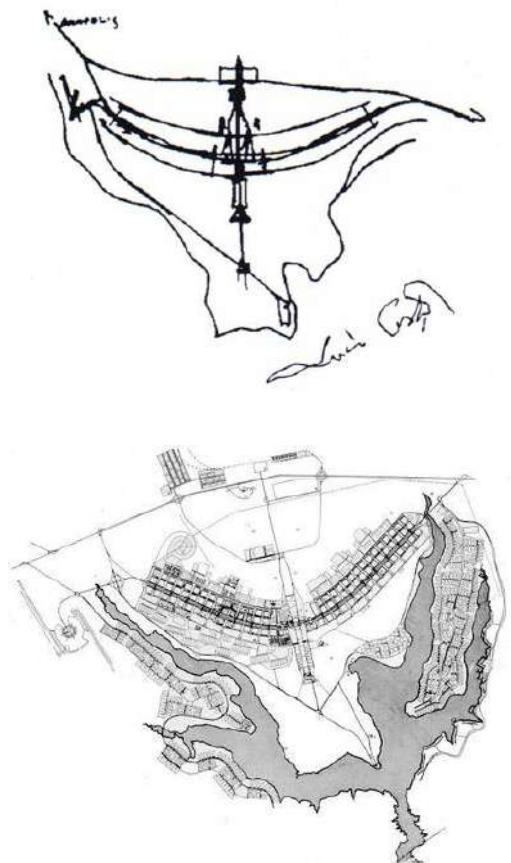
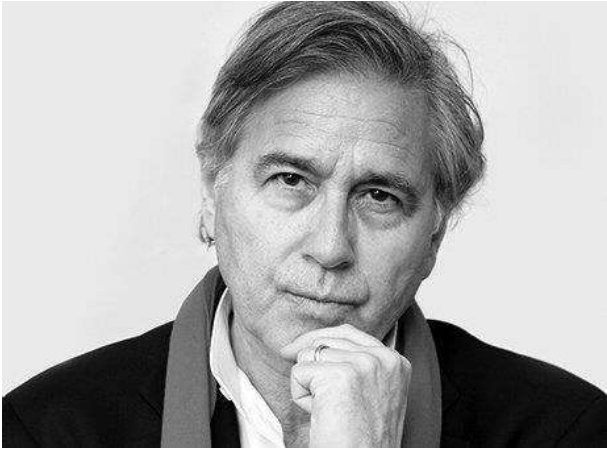


Fig. 38. General plan and main axis of the city of Brasilia, architect Lucio Costa, 1957



BERNARD TSCHUMI
(1944)

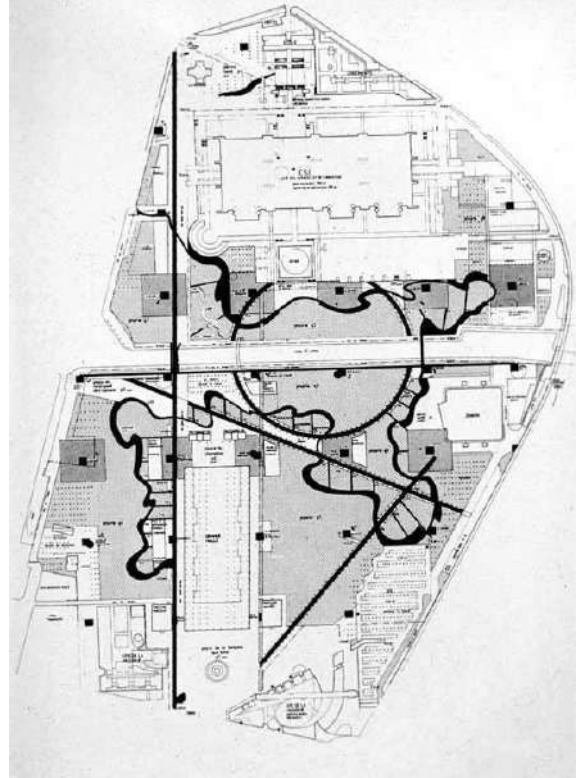
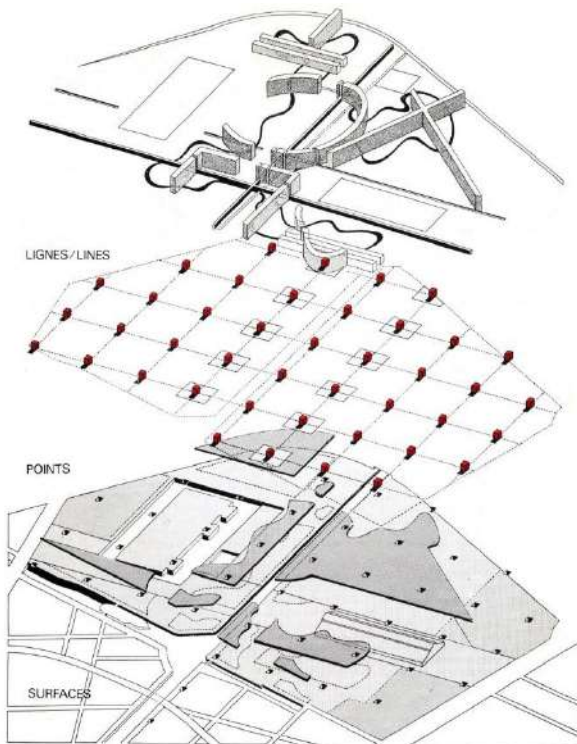


Fig. 39. The public park of La Villette, Paris, architect Bernard Tschumi, 1976-1982



Monte Carlo entertainment center project, Archigram, 1969-1970



La grande arche de la Defense, Paris, architect Johann Otto von Spreckelsen, 1989



Opera de la Bastille, Paris, architect Carlos Ott, 1983-1989



Metropolitan Hall in Tokyo, architect Kenzo Tange, 1985-1986

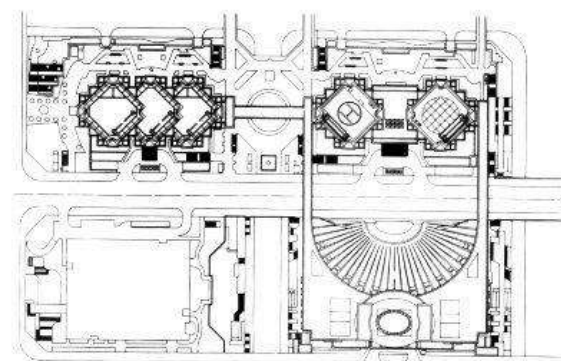


Fig. 40. International architectural competitions

Questions to check

1. What stages of development took place in the history of CIAM?
2. What role did CIAM congresses play in the development of modern architectural theories?
3. Describe the concept of total design.
4. To reveal the content of functionalism as a direction of development and style of modern architecture, urban planning and design.
5. Describe the work of Buckminster Fuller and his followers.
6. Give a general description of the modern and counter-modern movement in the architecture of the XX century.
7. What is the meaning of the concept of "advocacy design"?
8. What features are inherent in social and architectural utopias?
9. On what grounds do utopias differ?
10. To reveal the content of architectural utopias of the late XIX - early XX centuries.
11. What theoretical features are inherent in the works of architects, representatives of the European avant-garde 60-70s XX century?
12. To describe the urban planning utopias of the late XIX - early XX centuries.
13. In what directions did environmental utopias develop in the 20th century?
14. Give a general description of the search projects of the Archigram group.
15. What ideas were declared in their works by representatives of the Viennese avant-garde of the 60-70s XX century?
16. To reveal the content of search projects of the architectural groups "Himmelblau" and "Hausrucker".
17. What concepts have been implemented in the international exhibitions "Vision"?
18. Give a general description of the architecture of the post-industrial society.
19. Determine the basic principles of the development of architectural populism.
20. What features characterize the creativity of Robert Venturi and Charles Moore?

21. Which architects were involved in the formation of the doctrine of "participation" and "movement towards the consumer"?
22. What theoretical positions were developed by representatives of modern rationalism?
23. Who was part of the architectural group "Tendenza" and what theoretical foundations were used by the representatives of this group?
24. What was the essence of the architectural theory of Aldo Rossi?
25. Identify the influence of the "New York Five" on modern trends in the development of architectural theory and practice.
26. To reveal the creative credo of the "Taller de Arquitectura" group.
27. To what was Ricardo Bofill's creative work and social activities directed?
28. What followers of the concept of rationalism "Tendenza" worked in Europe?
29. Describe the "new typology" of Aldo Rossi.
30. What residential complexes have been built by the "Taller de Arquitectura" group?
31. What are the features of the development of avant-garde ideas of the early XX century in the work of modern architects?
32. List the main provisions and principles of architectural productivity.
33. What is the concept of architectural technocratism based on?
34. Describe the two directions of development of architectural productivity.
35. The creativity of which masters of modern architecture became the basis for theoretical generalizations of productivity?
36. Features of the architectural creativity of Renzo Piano.
37. Describe the works of Norman Foster.
38. Give a general description of post-avant-garde.
39. What impact did the Venice Biennale have on postmodernism?
40. What are the basic principles and methods of postmodernism?
41. What are the features of the American version of postmodernism?
42. What are the features of the development of the European branch of postmodernism?
43. To reveal the content and principles of architectural metabolism.
44. Describe the theoretical and practical developments of Kenzo Tange.

45. What features are inherent in the work of Kisho Kurokawa?
46. What are the achievements and prospects of the high-tech style?
47. Describe the main directions of the style of high technology.
48. Describe the most significant buildings and complexes that influenced the formation of "high-tech".
49. Give a general description of regionalism.
50. What are the features of the development of the countries of the Northern and Central regions?
51. Determine the features of the architecture of the countries of the Southern region.
52. What is the essence of the concept of critical regionalism?
53. What are the specific features of competitive architectural design?
54. What are the main stages in the development of international architectural competitions?
55. What international architectural competitions were held in the 70-80s of the XX century?
56. What international competitions in 80-90 s influenced the development of modern architecture?
57. What are the main directions of architectural theory will determine the prospects for the development of modern architecture?

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