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ARCHITECTURE AND CONSTRUCTION
Учебно-методическая разработка
по развитию иноязычной компетенции (английский язык)
для студентов 2-ого курса
направления подготовки 270800 «Архитектура и строительство»

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Цель настоящей учебно-методической разработки – формирование компетенции чтения оригинальной научно-технической литературы по направлению: «Архитектура и строительство».

Учебно-методическая разработка состоит из двух частей. Лексические и коммуникативные упражнения направлены на развитие у студентов компетенций грамотного перевода и умения идентифицировать и адекватно воспринимать лексический материал, а также на развитие коммуникативных навыков в ситуациях повседневной жизни и профессиональной деятельности.

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UNIT 1. ARCHITECTURE

TEXT 1. THE ART OF ARCHITECTURE

PRE-TEXT EXERCISES

Ex. 1. Guess the meaning of the following international words.

Architecture, practical, expressive, civilization, culture, primitive, element, natural, human, institution, constant, characteristic, communication, idea, form, construction, social, function, monumental, hall.

Ex. 2. Form noun by using the following suffixes:

- **ment**: to arrange, to develop, to establish, to require;
- **tion**: to civilize, to communicate, to institute, to organize;
- **ty**: activate, continue, realize, secure, stabilize, unite.

Ex. 3. Match the pairs of synonyms (A) and opposites (B).

(A) building; man; the simplest; to possess; structure; primitive; to have; a human being; concern; a work of architecture.

(B) civilized; general; with; more; primitive; particular; less; without.

Architecture is the art and technique of building employed to fulfill the practical and expressive requirements of civilized people. Almost every settled society, that possesses the techniques for building, produces architecture. It is necessary in all but the simplest cultures; without it, man is confined to a primitive struggle with the elements; with it, he has not only a defense against the natural environment but also the benefits of a human environment, a prerequisite for the development of civilized institutions. The characteristics that distinguish a work of architecture from other man-made structures are:

- the suitability of the work to use by human beings in general and the adaptability of it to particular human activities;
- the stability and permanence of the work's construction;
- the communication of experience and ideas through its form.

All these conditions must be met in architecture. The second is a constant, while the first and the third vary in relative importance according to the social function of buildings. If the function is chiefly utilitarian, as in factory, communication is of less importance. If the function is chiefly expressive, as in a monumental tomb, utility is a minor concern. In some buildings such as churches and city halls, utility and communication may be of equal importance.

Active Vocabulary

environment –	окружающая среда
structure –	структура, строй, строение
construction –	построение
prerequisite –	предпосылка
church –	церковь

suitability –	пригодность
permanence –	неизменность
tomb –	гробница
city hall –	ратуша

Ex.4. Using the information from the text, find out if the following statements are true or false.

1. Architecture should fulfill requirements of primitive people.
2. Without architecture, man is confined to a primitive struggle with the elements.
3. Structure should be built according to aesthetic and functional criteria.
4. There are no differences between a work of architecture and other manmade structures.
5. The stability and permanence of the work's construction is a constant for all types of buildings.

Ex.5. Translate into Russian.

Environment; to possess; a structure; man-made structures; human beings; the work's construction; suitability.

Ex.6. Translate into English.

Требования цивилизованных людей; борьба со стихией; природная среда предпосылка и символ; произведение архитектуры; стихия; в соответствии с общественной функцией зданий; ратуша; здание муниципалитета.

Ex.7. Match the words and their definitions.

- | | |
|-----------------|--|
| 1. culture | a) a method of doing something using special skills that one has developed |
| 2. the elements | b) a society that has its own set of ideas, beliefs and ways of behaving |
| 3. institutions | c) the weather, especially wind and rain |
| 4. technique | d) something produced by a painter, writer, etc |
| 5. work | e) an important tradition on which society is based |

Ex.8. Use the following phrases in the sentences of your own and ask your partner to translate them:

- to be of less importance
- to be of great importance
- to be of equal importance

Ex.9. Read and translate this dialogue. Make up your own dialogue, using this one as a model.

A. Excuse me!

B. Yes?

A. How can I get to the nearest underground station?

B. Cross the street and walk straight as far as the bridge. Cross the bridge and turn right.

A. Is it far from here?

B. No, not so far. Walk straight ahead 50 meters. You will not miss it.

A. Thank you.

B. You are welcome.

TEXT 2. ARCHITECTURAL PLANNING

PRE-TEXT EXERCISES

Ex.1. Guess the meaning of the following international words.

Type, attack, comfortable, control, effect, form, to discuss, element, fundamental, aesthetics, architecture, orientation, air, circulation, color, characteristics, to intensify, to produce, design, natural, function, absorption, material, pigment, balance, economic, thermal, conflict, interior, special, temperature, method, program, type, culture, individual, primitive, hall, recreation, limit, phase.

Ex.2. These words are the false friends of the interpreter. Translate them and memorize their meanings.

Technique, activity, patron, apartment, procedure, magazine.

Ex.3. Use these prefixes and suffixes to form:

a) verbs; b) nouns; c) adjectives.

with-: draw, hold, stand;

dis-: advantage, appearance, approval, comfort, order;

- **age**: cover, grill, lever, sewer, store;

- **able**: adapt, comfort, habit, change, move.

Ex.4. Match the pairs of opposites.

Absorb, dark, receive, advantage, intensity, dryness, useful, unsuccessful, high, dependent, moisture, useless, reflect, collective, disadvantage, reduce, low, individual, independent, give, light, successful.

I

An architect usually begins to work when the site type and cost of a building have been determined.

Planning the environment. The natural environment is at once a hindrance and a help and the architect seeks both to invite its aid and to repel its attacks. To make buildings habitable and comfortable, he is to control the effects of heat, cold, light, air, moisture and dryness and foresee destructive potentialities such as fire, earthquake, flood and disease. The placement and form of buildings in relation to their sites, the distribution of spaces within buildings and other planning devices discussed below are fundamental elements in the aesthetics of architecture.

Orientation. The arrangement of the axes of buildings and their parts is a device for controlling the effects of sun, wind and rainfall. Within buildings, the axes and the placement of each space determine the amount of sun it receives. Orientation may control air for circulation and reduce the disadvantages of wind, rain and snow. The characteristics of the immediate environment also influence orientation: trees, land formation, and other and other buildings create shade and reduce or intensify wind, while bodies of water produce moisture and reflect the sun.

Architectural forms. Planning may control the environment by the design of

architectural forms that may modify the effects of natural forces.

II

Colour. Color has a practical planning function as well as an expressive quality because of the range of its reflection and its absorption of solar rays. Since light colors reflect heat and dark colors absorb it, the choice of materials and pigment is an effective tool of environmental control.

Materials and techniques. The choice of materials is conditioned by their own ability to withstand the environment as well as by properties that make them useful to human beings. One of the architect's jobs is to find a successful solution to both conditions; to balance the physical and economic advantages of wood against the possibility of fire, termites, and mold, the weather resistance of glass and light metals against their high thermal conductivity, and many similar conflicts.

Interior control. The control of the environment through the design of the plan and the outer shell of a building cannot be complete, since extremes of heat and cold, light and sounds penetrate into the interior, where they can be further modified by the planning of space and by special conditioning devices. Temperature, light and sound are all subjects to control by the size and shape of the interior spaces, the way in which the spaces are connected and the materials employed for floors, walls, ceilings and furnishings. Today heating, insulation, air conditioning, lighting and acoustical methods have become basic parts of the architectural program.

III

Planning for use. While environmental planning produces comfort for senses (sight, hearing) and reflexes (respiration), planning for use or function is concerned with convenience of movement and rest.

Differentiation. The number of functions requiring distinct kinds of space within a building depends not only upon the type of building but also upon the requirements of culture, habits and activities of individual patrons. A primitive house has a single room with a hearth area and a modern one has a separate areas for cooking, eating, sleeping, washing, storage and recreation. A meeting house with a single hall is sufficient for Quaker religious services, while a Roman Catholic cathedral may require a nave, aisles, choir, apse, chapels, crypt, sacristy and ambulatory.

Economic planning. Major expenses in buildings are for land, materials and labor, in each case they are high when the commodity is scarce and low when it is abundant and they influence planning more directly when they become restrictive. When land coverage is limited, it is usually necessary to design in height the spacer that otherwise would be planned in breadth and depth, as in the ancient Roman insular (apartment houses) or the modern skyscraper. When the choice of materials is influenced by cost, all phases of architectural design are affected, since the planning procedure, the technique and the form of buildings are dependent on materials. High labor cost influence the choice of techniques and, consequently, of materials.

Active Vocabulary

hindrance – препятствие, помеха

nave – неф

moisture –	влага	aisle –	боковой неф
earthquake –	землетрясение	choir –	хоры
axis –	ось	apse –	апсида
to withstand –	противостоять	chapel –	часовня
termite –	термит	crypt –	склеп
mould –	плесень	sacristy –	ризница
shell –	каркас, остов	ambulatory –	крытая внутренняя галерея
extremes –	экстремально высокие/низкие t ⁰	abundant –	изобильный
meeting house –	молитвенный дом	skyscraper –	небоскрёб
quaker –	квакер	consequently –	следовательно
cathedral –	собор		

Ex.5. Answer the following questions.

1. When does usually an architect begin to work on the project?
2. What are the main aspects of architectural planning?
3. What are the fundamental elements in the aesthetics of architecture?
4. What must the architect control to make buildings habitable and comfortable?
5. What is the planning concerned with?
6. What are the major expenses in building?

Ex.6. Match the beginnings of the sentences to their ends.

- | | |
|---|---|
| 1. To make buildings habitable and comfortable the architect... | a) the environment by the design of architectural forms |
| 2. Trees, land formation and other buildings create..... | b) is an effective tool of environmental control |
| 3. Planning may control..... | c) room with a heat area |
| 4. Extremes of heat and cold... | d) must control the effects of the natural environment |
| 5. The choice of materials and pigments..... | e) light and sound penetrate into the interior |
| 6. A primitive house has a single..... | f) a nave, aisles, choir, apse, chapels, crypt, sacristy and ambulatory |
| 7. A Roman Catholic cathedral may require... | g) shade and reduce or intensify wind |

Ex.7. Replace the words and word combinations in (A) by their contextual synonyms in (B).

- (A) 1. The natural environment is at once a hindrance and a help, and the architect *seeks* both to invite its aid and repel its attacks.
2. The architect must foresee *destructive potentialities* such as fire, earthquake, flood and disease.
3. The placement and forms of buildings, the distribution of spaces within buildings and other planning units are *fundamental elements* in the aesthetics of architecture.

4. Orientation may control air for circulation and *reduce* the disadvantages of wind, rain and snow.
 5. Planning may control the environment by the design of architectural forms that may *modify* the effects of natural forces.
 6. The choice of materials is conditioned by their own ability to: *withstand* the environment as well as by properties that make them useful to *human beings*.
 7. One of the architect's *functions* is to find a successful solution to both conditions.
- (B) to look for, to resist, to diminish, people, subversive, to vary, basic, a task.

Ex.8. Translate into English.

Отразить атаку; пригодный для жилья; расположение, положение; результаты воздействия солнца, ветра и дождя; создавать влажность и отражать солнечные лучи; важное (эффективное) средство контроля; выбор материалов для строительства; способность противостоять воздействиям окружающей среды; отопление, изоляция, кондиционирование воздуха, освещение, акустические методы; функциональное планирование; боковой неф; склеп, ризница, часовня, расходы; влиять на выбор материалов; зависеть от требований заказчика.

Ex.9. Read and translate this dialogue. Make up your own dialogue, using this one as a model.

A. Excuse me!

B. Yes?

A. I am looking for the nearest post-office? Can you tell me how to get there?

B. Well, let me see. Take the bus number two and get off at the second stop. Turn left and walk straight on. At the end of the block you will see the post-office on your right.

A. Oh, then, I think, it is next to the cinema, isn't it?

B. No, you are not right. The cinema is just across the street.

A. Thank you very much.

B. Not at all.

UNIT II. DIFFERENT TYPES OF ARCHITECTURE

TEXT 1. EGYPTIAN ARCHITECTURE. GREAT SPHINX

PRE-TEXT EXERCISES

Ex.1. Guess the meaning of the following international words.

Period, dynasty, metal, progress, to demonstrate, pyramid, economy, material, formal, to produce, pose, cultivation, contact, civilization, experiment, to import, universal, traditional, style.

Ex.2 These words are the false friends of the interpreter. Translate them and memorize their meanings.

Artist, court, plaster, original, mark.

Ex.3. Use the following suffixes to form nouns.

- **ment**: refine, establish, encourage, enrich, embellish;
- **tion**: cultivate, civilize, demonstrate:
- **ity**: divine, simple, stable, active.

Ex.4. Compare and explain the difference of words in italics.

1. He always *works* hard. 2. The bridge was closed for repair *works*. 3. The researchers did not conduct *experiments* on animals. 4. He often *experiments* with new materials. 5. The wide avenue *borders* the park. 6. We can not cross the *border* without documents. 7. She will *show* you all the sights of the city. 8. There was a new *show* in the theatre yesterday.

From the 15th century AD European travelers carried home tales of the mysterious and amazing remains of the civilization of Egypt. One of its most remarkable monuments, which still evokes this sense of awe and might, is the Great Sphinx of Gizeh, the oldest surviving sphinx, dating from 2550 BC, carved from a rock with the crouching body of a lion and human face.

The human head was the means of individualizing the sculpture, so that the Great Sphinx probably bears the idealized features of Khephren whose pyramid is nearby. The concept of the king as a powerful loin goes back into prehistoric times, and several ceremonial objects have survived which depict him in this guise, overthrowing his enemies. The sphinx was, therefore, a natural development, personifying the divine power of the king as a force protecting his land and repelling the power of evil.

The Great Sphinx is one of the most distinctive and dominant of all the images of ancient Egypt, which is perhaps the source of the misconception that sphinxes are of central importance in Egyptian culture. However, those that have survived are among the most impressive as well as intriguing examples of Egyptian sculpture.

Active Vocabulary

AD (Anno Domini) –	нашей эры	awe –	благоговение, трепет
to carve –	высекать	might –	мощь
BC (before Christ) –	до нашей эры	crouching –	сгибающийся
remains –	(зд.) руины	guise –	наружность, облик
to evoke –	вызывать	to overthrow –	ниспровергать
divine –	божественный, пророческий	to repel –	отталкивать, отгонять

Ex.5. Complete the sentences.

1. European travelers saw the mysterious and amazing.....
- a) ruins of the Hanging Gardens of Babylon
 - b) remains of the civilization of Egypt

- c) ruins of the Parthenon
2. The Great Sphinx of Gizeh was.....
- a) made of marble
- b) created by Imhotep
- c) carved from rock
3. The Great Sphinx has a crouching body of a lion and.....
- a) a dragon's head
- b) a human face
- c) a cow's head
4. The sphinx personified.....
- a) the divine power of the king
- b) the mighty of God
- c) the greatness of the Roman Empire
5. The concept of the kings as a powerful lion goes back into.....
- a) the Middle Ages
- b) the Archaic period
- c) prehistoric times

Ex.6. Translate into English.

15-й век нашей эры; вызывать чувство страха; идеализированные черты фараона Хефрена; доисторическая эпоха; олицетворяющий божественную силу царя; сила, защищающая родную землю и отгоняющая силы зла.

Ex.7. Replace the words by their contextual synonyms.

- (A) 1. From the 15th century AD European travelers told about *mysterious* and *amazing* remains of the civilization of Egypt.
2. The Great Sphinx of Gizeh is one of the most *remarkable* monuments of ancient Egypt.
3. The concept of the kings as a *powerful* Lion goes back into prehistoric times.
4. The sphinx personified the *divine* power of the king as a force *protecting* his land.
- (B) obscure, astonishing; outstanding, notable, distinctive; mighty, strong; defending.

Ex.8. Use the following expressions to describe the Great Sphinx of Gizeh.

- the sense of awe and might;
- carved from a natural outcrop of rock;
- a powerful lion;
- overthrowing his enemies;
- image of ancient Egypt.
- the divine power of a king;
- a force protecting his land;
- repelling the power of evil;
- the most distinctive and dominant

Ex.9. Your friend has just returned from one of the European countries. Ask him about his impressions. Make up a dialogue, using the following.

- Where did you go? – I went....
- What did you see there? – I saw....

- What places of interest did you visit? – I visited...
- What did you like? – I liked....
- What did you buy? – I bought...

TEXT 2. GREEK ARCHITECTURE. THE ATHENIAN ACROPOLIS

PRE-TEXT EXERCISES

Ex.1. Guess the meaning of the following international words.

Ruins, architectural, column, facade, design, statue, pantheon, anonymous, architect, proportion, monumental, frieze, procession, cult, motif, colonnade, construction.

Ex.2. These words are the false friends of interpreter. Translate them and memorize the meanings.

Festival, brilliant, finish, magazine, furniture

Ex.3 Analyze and explain the word-formation models.

Build – builder – building, god – goodness, fine – refine – refinement, love – lovely – loveliness, monument – monumental, grand – grandeur, parallel – unparalleled, portray – portrayal, process – procession – processional, festive – festivity – festival, honour – honourable, differ – different – differentiate, serve – service.

As one of the world's oldest cities Athens boast a wealth of splendid relics of Hellenic art, some of which are more than 3 000 years old. The Acropolis, the Greek for upper town, the gem of world architecture, stands on a low rocky hill and contains the ruins of several ancient Greek architectural monuments. The Parthenon, a stately building with an eight-column façade, was built by Ictinus and Callicrates in 447-38 BC. The temple was designed to serve as an exquisite, imposing architectural frame for a gold and ivory statue of Athena, the goddess in the Greek pantheon watching over the city.

Next to the Parthenon is another shrine, an Ionic temple of Athena, the Erechtheum, built by an anonymous architect in 421-06 BC. Its refined loveliness and proportions are as enchanting as the monumental grandeur of the Parthenon. It has the unparalleled portrayal on the frieze of the building: the procession of citizens in festival in honor of Athena. Built on an awkward site, it also had to serve different cults, which meant its architect had to design a building with three porches and three different floor levels. Its Caryatid porch, with figures of women for columns, makes use of an old Oriental motif that had appeared earlier, in Archaic treasuries at Delphi. The monumental gateway to the Acropolis, the Propylaea was designed by Mnesicles, who had to adapt the rigid conventions of colonnade construction to a steeply rising site. In the precision and finish of their execution, which complements the innovation of the design, these three buildings had no rival in the Greek world.

Active Vocabulary

to boast – гордиться

portrayal – изображение

gem –	драгоценный камень, жемчужина	frieze –	фриз, бордюр
temple –	храм	awkward –	неудобный
exquisite –	изысканный, утонченный	cult –	культ, поклонение
frame –	оправа, обрамление	porch –	портик, крытая галерея
ivory –	слоновая кость	treasury –	сокровищница
pantheon –	пантеон	gateway –	подход
shrine –	святилище, храм	rigid –	жёсткий
refined –	усовершенствованный	rival –	соперник
grandeur –	великолепие		

Ex.4. Answer the following questions.

1. What is the Greek for “upper town”?
2. What are the major buildings of the Acropolis?
3. Who designed the Parthenon?
4. What was the Parthenon designed for?
5. Why was the statue of Athena held in deep reverence?
6. Who designed the Erechtheum?
7. What is the Propylaea?
8. Why do you think these monuments are the finest models for all generations of architecture?

Ex.5. Translate into English.

Один из древнейших городов мира; замечательные памятники древнегреческого искусства; шедевр мировой архитектуры; небольшой скалистый холм; архитектурное обрамление; из золота и слоновой кости; жёсткие условия; была высокочтимым предметом культа; ионический храм; не имеющий себе равных; на фризе здания; в честь богини Афины; сокровищницы в Дельфе периода архаики; соперник.

Ex.6. Fill the gaps with the words from the text.

1. The Acropolis, the gem of world....., stands on a low.....
2. The Parthenon is.....with an eight-column facade.
3. The statue of Athena stood in.....of the shrine.
4. The Erechtheum is an..... temple.
5. It has the unparalleled.....of a contemporary event on the.....of the building.
6. This Oriental motif had appeared earlier..... at Delphi.
7. In the precision and finish of their.....these Acropolis buildings had noin the Greek world.

Ex.7. Find the false sentences by using the information from the text. Correct them.

1. The Parthenon is a stately building with a six-column facade.

2. The Erechtheum was designed to serve as an imposing architectural frame for a gold and ivory statue of Athena.
3. This statue has not survived.
4. The Erechtheum is a Corinthian temple.
5. The architect of the Erechtheum had to design a building with three different floor levels.
6. The Propylaea was built by Callicrates.
7. The most impressive examples of Greek architecture are the buildings constructed for the Athenian Acropolis.

Ex.8. Read and translate this dialogue. Make up your own dialogue, using this one as a model.

A. Excuse me, I am looking for the Ukraine Hotel. Do you know where it is?

B. Sure. It is down the street on the left.

A. Is it far from here?

B. No, it is not far.

A. How far is it?

B. About a mile and a half.

A. How long does it take to get there?

B. Five minutes or so.

A. Is it close to the subway station?

B. Yes, it is very close. The subway station is next to the hotel. You can walk there.

A. Thanks a lot.

TEXT 3. ROMAN ARCHITECTURE. THE ARCHITECTURAL ACHIEVEMENTS OF ANCIENT ROME

PRE-TEXT EXERCISES

Ex.1. Guess the meaning of the following international words.

Architecture, empire, fragment, theoretical, restoration, information, antiquity, composition, organization, line, mass, villa, group, central, hall, atrium, element, forum, design, exterior, park, terrace, circular, theatre, niche, bronze, acre.

Ex.2. These words are the false friends of interpreter. Translate them and memorize their meanings: Record, block, residence, scale, dome.

Ex.3. Translate the following words and analyze their word-formation model.

Derive – derivative – derivation; empire – emperor – empress; serve – preserve – preservation; store – restore – restoration; excavate – excavation – excavator; even – uneven – unevenness; engine – engineer – engineering; alter – alternate – alternation.

Modern knowledge of Roman architecture derives primarily from the remains scattered throughout the area of the empire. Some are well preserved and others are known only in fragments and by theoretical restoration. Another source of

information is a vast store of information. Especially important is “De Architectura” by Vitruvius, (27BC), the only surviving treatise of antiquity.

Pervasive Roman predilection was for spatial composition- the organization of lines, surfaces, masses and volumes in space. In Roman architecture there were three types of houses: the domus, the insulae and the villa.

The domus or town house consisted of suites of rooms grouped around a central hall or atrium. It often had further suites at the rear grouped around a colonnaded court or peristyle. The atrium, a rectangular room with an opening in the roof to the sky and its adjoining rooms were peculiarly Roman elements; the peristyle was Greek or Middle Eastern. There were few windows on the street, light being obtained from the atrium or peristyle. In Rome the chief examples of domus are the House of Vestals in the Forum in Rome and that of Livia on the Palatine Hill.

Great blocks of flats or tenements were called insulae. Excavations at Ostia, Italy, have revealed the design of these blocks. Planned on three or four floors with strict regard to economy of space, they depended on light from the exterior as well as from a central court.

The villa was an estate, complete with house, grounds and subsidiary buildings. Hadrian’s Villa Tivoli, began about AD 123, was a sumptuous residence with parks and gardens on a large scale. The unevenness of the site necessitated large terraces and flights of steps. There are remains of great bricks and concrete structures. All the buildings are Roman in style and method of construction though with Greek names. The Romans were great builders and engineers famous for their factories, roads, aqueducts, viaducts, bridges, grant thermae and amphitheatres, theatres and temples.

Active Vocabulary

to derive –	происходить	peculiarly –	особенно
remains –	остатки	excavations –	раскопки
to scatter –	разбрасывать	tenement –	дом, сдаваемый в аренду
to preserve –	сохранять	to reveal –	обнаруживать
store –	запас;	court –	двор
treatise –	трактат	estate –	поместье
pervasive –	всеобъемлющий	ground –	земля, грунт
predilection –	пристрастие	subsidiary –	дополнительный
spatial –	пространственный	sumptuous –	роскошный
surface –	поверхность	scale –	масштаб, размер
rear –	задний	unevenness –	неровность
suite –	анфилада комнат	flights of steps –	лестничный марш
peristyle –	перистиль	concrete –	бетон
rectangular –	прямоугольный	aqueduct –	акведук
adjoining –	примыкающий	viaduct –	виадук
atrium –	внутренний двор	thermae –	термальные источники
opening –	отверстие	temple –	храм

Ex.4. Choose the proper meaning of the words from the text.

Concrete structure

- a) based on facts and information;
- b) a hard substance used in building made by mixing cement, sand, small stones and water.

Flight of steps

- a) a journey through air or space in vehicle such as a plane;
- b) a movement through the air by a bird or object;
- c) a set of stairs going from one level to another.

Light from the peristyle

- a) brightness from the sun or from light which allows you to see things;
- b) a piece of electrical equipment that produce brightness;
- c) not weighing much.

Ex.5. Match the beginnings of the sentences to their ends.

- | | |
|--|---|
| 1. Some remains are well preserved and... | a) grouped around atrium |
| 2. "De Architectura" is..... | b) others are known in fragments and by theoretical restoration |
| 3. The domus consisted of suites of rooms... | c) the main source of information |

Ex.6. Translate into English.

Организация линий, поверхностей, масс и объёмов в пространстве; группироваться вокруг перистилия; отверстие в крыше; примыкающие комнаты; раскопки в Остии; неровная поверхность участка; лестничные пролеты; метод строительства.

Ex.7. Read and translate the dialogue. Compose your own dialogue, using this one as a model.

A. Is your place of work far from your home?

B. Oh, yes, quite a long way off.

A. How long does it take you to get there?

B. It takes me about thirty minutes to get there by bus. I take bus number 7 and go as far as Pushkin Square, where I change to bus number 45.

A. And how far is the office from the bus stop?

B. It is just a five-minutes' walk.

A. And can you get there by tram?

B. Yes, quite easily. It is even more convenient to go by tram, for the tram takes me right there.

A. Then why do you go by bus?

B. Just to save time. I am always in a hurry. Good bye.

A. Bye-bye.

TEXT 4. MEDIEVAL ARCHITECTURE. GOTHIC CATHEDRALS

PRE-TEXT EXERCISES

Ex.1. Guess the meanings of the following international words.

Architecture, association, style, technical, plan, phase, perpendicular, design, result, final, vertical monument, Catholic, form, basis, monastery, provincial, traditional.

Ex.2. Use the following prefixes and suffixes to form

a) verbs, b) nouns.

sub-: divide, contract, due, merge;

-sion: conclude, divide, decide, precise, provide:

-tion: associate, describe, decorate, contribute, invent, protect.

Ex.3. Translate the following words with the suffix -al which may be

a) adjectives, b) adjectives and nouns, c) nouns.

1) functional, conventional, continental, cultural, environmental, national;

2) capital, diagonal, horizontal, metal, professional, spiral, vertical;

3) animal, arrival, festival, pedestal, rival, revival, survival.

Ex.4. Match the pairs of a) synonyms, b) opposites.

1) style, heavy, emphasis, to import, pattern, multiple, extraordinarily, important, dense, fashion, to borrow, influential, design, numerous, stress, extremely;

2) to dislike, earliest, light, usually, to import, heavy, latest, to export, extraordinarily, to like.

The architecture of the central Middle Ages termed Gothic during the Renaissance because of its association with the barbarian north. Now this term is used to describe the important style of buildings and art wide spread in Europe between the 12th and the 15th centuries. At the technical level Gothic architecture is characterized by the ribbed vault, the pointed arch and the flying buttress. One of the earliest buildings in which these techniques were introduced in a highly sophisticated architectural plan was the abbey of Saint- Denis, Paris. It is considered to be “the first Gothic building”. In France and Germany this style is subdivided into the Early, High and Late Gothic. The French Gothic middle phase is called Rayonnant, the late phase- Flamboyant. In England one speaks of Early English Gothic, the Decorated and Perpendicular styles. Early English Gothic developed from 1180 to 1280. The most influential building in the new fashion was the choir of Canterbury cathedral (1175- 1184). The other examples are Salisbury, Lincoln and Wells cathedrals, and Westminster Abbey. Its main features are lancet windows without tracery and multiple attached colonnetes. When Rayonnant tracery designs were imported, English architects combined with the existing repertoire of colonnettes, attached shafts and vault ribs. The result which could be extraordinary dense was called the English Decorated style (1280-1350) e.g., Exeter cathedral, east parts of Bristol and Wells cathedrals, the Lady Chapel at Ely. English Gothic came to an end with the final flowering of the Perpendicular style (1350-1550). It was characterized by vertical emphasis in structure and elaborate fan

vaults e.g., St.Stephen`s Chapel, Westminster, St.George`s Chapel, the Chapel of Henry VII at Westminster Abbey. Gothic was the main style of the Catholic countries of Europe. It was also carried to Cyprus, Malta, Syria and Palestine.

Active Vocabulary

rib –	ребро	lancet window –	стрельчатое окно
vault –	свод	attached colonette –	полуколонка
pointed arch –	остроконечная арка	tracery –	ажурная каменная работа; узор;
shaft –	ствол	flying buttress –	аркбутан, арочный контрфорс
repertoire –	репертуар	sophisticated –	утончённый,
abbey –	аббатство	Rayonnant –	лучистый (стиль)
dense –	густой, плотный	Flamboyant –	«пламенеющий» (стиль)
chapel –	часовня	emphasis –	акцент
choir –	место хора в соборе	to elaborate –	развивать

Ex.5. Answer the following questions.

1. When did Gothic architecture develop?
2. Why is this style called Gothic?
3. In what countries did the Gothic style develop?
4. What are the characteristic features of this style?
5. What is considered to be the first Gothic building?
6. What are the major monuments of Gothic architecture in England?

Ex. 6. Translate into Russian.

The ribbed vault; because of its association with the barbarian north; the pointed arch; the flying buttress; a highly sophisticated architectural plan; attached shafts; the final flowering; vertical emphases in structure.

Ex.7. Translate into English.

Ребристый свод; стрельчатая арка; арочный контрфорс; аббатство; лучистый (стиль); «пламенеющий» (стиль); ажурная каменная работа; место хора в соборе; часовня.

Ex.8. Replace the words in italics (A) by synonyms (B).

- (A) 1. The most influential *building* in the new fashion was the choir of Canterbury cathedral.
2. Colonettes became *extremely* popular with English architects.
3. They retained a *liking* for heavy surface decoration.
4. The architectural effects achieved were more inventive generally than those of contemporary *continental* buildings.
5. Other *major* monuments were St.Stephen`s Chapel, Westminster and St. George`s

Chapel.

6. Gothic was also *carried* to Cyprus, Malta, Syria and Palestine.

(B) very; chief; preference; European; structure; transferred

TEXT 5. THE BAROQUE AND ROCOCO

PRE-TEXT EXERCISES

Ex.1. Guess the meaning of the following international words.

Period, architecture, color, mass, structure, element, minimum, contrast, conflict, formal, national, artistic.

Ex.2. Analyze the following word formation models.

Apply – application; derive – derivation – derivative; scheme – schematic; perfect – imperfect – imperfectly; illusion – illusionist – illusionistic; luxury – luxurious; direct – direction – directional – directionality; art – artist – artistic.

Ex.3. Use the following suffixes to form adjectives.

- (i)an**: Australia, Austria, Bohemia, Paris;
- ese**: China, Malta, Portugal, Japan;
- ish**: England, Poland, Spain, book, new, small.

Baroque and late Baroque, or Rococo, are terms applied to European art of the period between the early 17th century and the mid 18th century. During the Baroque period (1600-1750) architecture, painting and sculpture were integrated into decorative ensembles. Architecture and sculpture became pictorial, painting became illusionistic.

Baroque architects made architecture a means of propagating faith in church and in the state. Baroque space, with directionality, movement, positive moulding, contrasted markedly with the static, stable and space of High Renaissance and with the frustrating conflict of unbalanced spaces of the preceding Mannerist period. The Baroque rapidly developed into two separate forms: the strongly Roman Catholic countries (Italy, Spain, Portugal, Bohemia, and Austria) tended toward freer and more active architectural forms and surfaces; in Protestant regions (England, the Netherland and the remainder of Northern Europe) architecture was more restrained and developed a quiet monumentality impressive in its refinement. The greatest works of this style are the church of Santa Susanna (Maderno, 1597), Versailles (Le Vau), National Palace in Madrid (Sacchetti, 1736) and Royal Palace at Caserta (Vanvitelli, 1752).

A principal current, generally known as Rococo, refined the robust architecture of the 17th century to suit elegant 18th century tastes. Vivid colors were replaced by pastel shades; diffuse light flooded the building volume; violent surface relief was replaced by smooth flowing masses with emphases only at isolated points. Churches and palaces still exhibited an integration of the three arts, but the building structure was lighted to render interiors graceful and ethereal. Rococo architects obtained unified spaces, emphasized structural elements, created continuous decorative schemes and

reduced sizes to a minimum. In churches, the ceilings of side aisles were raised to the height of the nave ceiling to unify the space from wall to wall (Church of the Carmine, Turin, Italy, 1732, by Filippo Juvarra; Pilgrimage Church, Steinhausen, near Biberach, Germany, 1728, by Dominikus Zimmermann; Saint-Jacques, Luneville, France, 1730, by Germain Boffrand).

Active Vocabulary

to apply –	относиться, обращаться	diffuse –	рассеянный
aisle –	боковой неф храма	to flood –	литься потоком
to exhibit –	выставлять, показывать	violent –	ужасный, неправильный
moulding –	лепное украшение	shade –	оттенок
directionality –	направленность	integration –	объединение
restrained –	сдержанный, ограниченный	to render –	изображать
to refine –	делать более изящным	ethereal –	лёгкий, неземной
robust –	крепкий, сильный	ensemble –	ансамбль
pictorial –	живописный, яркий	nave –	неф

Ex.4. Find the false sentences using the information from the text. Correct them.

1. Baroque is a term applied to European art of the early 15th century.
2. Architecture became a means of antireligious propaganda.
3. The Baroque style had very much in common with the High Renaissance and Mannerism.
4. Rococo architects used only vivid colors.
5. Churches and palaces still exhibited an integration of the two arts.

Ex.5. Translate into English.

Европейское искусств, декоративный ансамбль, лепное украшение, заменить пастельными оттенками, разрозненные части, потолки боковых нефов, объединить пространство.

Ex.6. Read the text once more and write questions to these answers.

1. Architecture, painting and sculpture were integrated into decorative ensembles.
2. A means of a propagating faith in church and in the state.
3. It developed in two separate forms.
4. The robust architecture of the 17th century.
5. An integration of three arts.
6. To unify the space from wall to wall.

Ex.7. Read the following dialogue, say in what situations it is possible, learn it by heart and act it out.

Andrew: Excuse me, please.
 Passer-by: Yes?
 Andrew: Could you tell us how to get to the Drama Theatre?
 Passer-by: Oh, well, let me see, walk down the road. Take the second turn

to the left and walk straight until you come to the river.

Andrew: River?

Passer-by: Yes. You can't quite see it clearly from here. When you come to it, there is a bridge. Just walk across it.

Andrew: Down the road, turn to the left, then straight again and across the Bridge. Am I right? Thank you very much.

Passer-by: Not at all.

TEXT 6. NEOCLASSICISM

PRE-TEXT EXERCISES

Ex.1. Guess the meanings of the following international words.

Classicism, period, architecture, intellectual, characterize, illusion, ornament, centre, actor, academy, monument, geometric, organization, form, dramatic, contrast, detail.

Ex.2. Use the following suffixes and prefixes to form

a) nouns, b) adjectives, c) verbs, d) adverbs.

-tion: articulate, contribute, describe, explore, investigate, manifest;

-ful: art, beauty, cheer, forget, grate, truth;

un - : able, adorned, answered, clear, forgetful, truthful;

-ly : active, correct, great, manifest, stylistical, archaeological.

Ex.3. Match the pairs of synonyms.

To search, appearance, serenity, crucial, emergence, to look for, vital, tranquility.

The classicism that flourished in the period of 1750-1830 is often known as Neoclassicism, in order to distinguish it from the classical architecture of ancient Rome or of the Renaissance.

The search for the intellectual and architectural truth characterized the period. Stylistically this began with an onslaught on Baroque architecture, which – with its emphases on illusion and applied ornament – was felt to be manifestly untruthful.

Essentially representing a new taste for classical serenity and archaeologically correct forms, 18th century classicism manifested itself in all the arts.

The discovery, exploration and archeological investigation of classical sites in Italy, Greece and Asia Minor were crucial to the emergence of Neoclassicism.

The center of the international Neoclassicism was Rome. The cradle of Italian antiquities, it provided the stage, but the leading actors in the Neoclassical drama were French, German or English; very little was contributed by Italians to this new movement. The center of activity was the French Academy. The winners of the Academy's Prix de Rome went to Italy to study the monuments firsthand. The projects produced by the French Prix de Rome winners are characterized by their grandeur of scale; strict geometric organization; simplicity of geometric forms; Greek or Roman detail; dramatic use of columns, particularly to articulate interior spaces

and create urban landscapes and a preference for blank walls and the contrast of formal volumes and textures. The same qualities describe Neoclassicism architecture as it emerged throughout Europe and in America.

Active Vocabulary

to flourish –	процветать	firsthand –	собственноручно
formal –	(зд.) правильный, симметричный	dramatic –	(зд.) волнующий, эффективный
search –	поиски, исследования	grandeur –	грандиозность, величие
onslaught –	нападение	to distinguish –	различать
serenity –	ясность	simplicity –	простота
crucial –	решающий, критический	to articulate –	соединять
cradle –	колыбель	blank –	глухая (стена)
antiquities –	древности	strict –	строгий

Ex.4. Answer the following questions.

1. When did Classicism come into being?
2. Why is this style often called Neoclassicism?
3. What is the difference between the architecture of Neoclassicism and that of the Baroque?
4. How did this style manifest itself?
5. Where was the center of international Neoclassicism?

Ex.5. Translate into Russian.

The search of intellectual and architectural truth; classical serenity; to manifest oneself; discovery, exploration; classical sites; to study monuments firsthand; grandeur of scale; dramatic use of columns; a preference for blank walls; the same qualities.

Ex.6. Find the false sentences using the information from the text. Correct them.

1. Neoclassicism flourished in the period from 1750 to 1830.
2. It was a reaction against the architecture of the Renaissance.
3. Paris was the center of international Neoclassicism.
4. This style was characterized by a new and more scientific interest in classical antiquity.
5. The leading actors in the Neoclassicism drama were mainly Italians.

Ex.7. Match the words and their definitions.

- | | |
|--|---------------------|
| 1) the style of absolutism | a) Rome |
| 2) objects in nature | b) the Renaissance |
| 3) the late phase of the Baroque | c) the Baroque |
| 4) the rebirth of classical style | d) ruins |
| 5) the center of international Neoclassicism | f) the Rococo style |

Ex.8. You are looking for:

the department store

the post-office

the book store

the art gallery

the cinema

the railway station

the market

the hotel

1. Ask somebody where it is situated. Begin with "Excuse me..."

2. Ask if it is far to walk there; how far it is; if you should take a bus.

TEXT 7. THE ARCHITECTURE OF THE TURN OF CENTURIES. ART NOUVEAU

PRE-TEXT EXERCISES

Ex.1. Guess the meaning of the following international words.

Style, modern, decorative, ornamental, line, result, imitation, material, terracotta, panel, exotic, balcony, plastic, façade, individual, mass, social, theory.

Ex.2. Analyze the following word formation models.

Affect-affectation-affectionate; vary-variable-variably-invariably; refer-reference; engrave-engraver; produce-product-production; imitate-imitation-imitative; treat-treatment; inspire-inspiration-inspirator.

Ex.3. Translate the following sentences paying attention to the words in italics.

1. The *aim* of this project is to give support to young architects.

2. We *aim* at reducing expenses to the minimum.

3. On exhibition are the original prints of modern *masters*.

4. You should *master* the art of communication.

5. The roofs of the houses *rise* above the trees.

6. They could see a car coming over the top of the *rise*.

Art Nouveau was a style of art, decoration and architecture which affected many European countries and North America between 1890 and 1910. Often referred to simply as the style 1900, Art Nouveau expresses an essentially decorative trade that aims to highlight the ornamental value of the curved line, which may be floral in origin (Belgium, France) or (Scotland, Austria). This line gives rise to two-dimensional, slender, undulating and invariably asymmetrical forms. The applied arts were the first to be affected.

Among the most characteristic products of Art Nouveau were: the houses built by Th. Sluyterman and L.A.H. Wolf in the Netherlands, Guimard's Castel Beranger (1897- 1898), entrances to the Metro stations and the auditorium of the Humbert de Romans building (1902, destroyed) in Paris and the former Hotel Solvay (1895-1900) in Brussels.

In Russia Art Nouveau is represented by the works of F. Schechtel: Ryabushinsky Mansion, Yaroslavsky Railway Station, Ryabushinsky Printshop and many others.

All these works are the result of an attempt to put an end to imitations of past styles; in its place is offered a florid type of architecture. It uses such materials as faience cabochons, stained glass, stoneware, terracotta panels, as well as exotic veneers, moulded stonework, grilles, wrought iron fences and gates; bow and horseshoe windows, etc.

Art Nouveau was first and foremost an aesthetic undertaking, based on social theories and inspired by such as Ruskin, Morris and Oscar Wilde. It was born of a reaction to the rise of industrialism.

Active Vocabulary

trend –	направление	stained glass –	витраж
to highlight –	выделять	invariably –	неизменно
stoneware –	керамические изделия	veneer –	(кирпичная) облицовка
two-dimensional –	двухмерный	stonework –	каменная кладка
slender –	тонкий, стройный	grill –	решётка
undulating –	волнообразный	wrought iron –	ковка, мягкая сталь
the applied art –	прикладное искусство	fence –	забор, изгородь
floral –	цветочный	gate –	ворота, калитка
to engrave –	гравировать	bow window –	полукруглый эркер
entrance –	вход	horseshoe –	подковообразный
auditorium –	зрительный зал, аудитория	to inspire –	вдохновлять
florid style –	витиеватый стиль	undertaking –	дело, предприятие
cabochon –	кабошон		

Ex.4. Translate into Russian.

Ornamental value of the curved line; to give rise; the applied arts; wood-engraved title page; to put an end; a reaction to the rise of industrialism

Ex.5. Match the pairs of synonyms.

architectural products	instead
in its place	to make use of
diverse	trend, fashion
to exploit	to suggest
style	notable, outstanding
distinguished	buildings, structures, edifices
modern	dissimilar
to offer	recent
to call	to name
slender	decorative
form	shape
ornamental	slim

Ex.6. Prove the following statements by using the information from the text.

1. Art Nouveau is also known as the style 1900.
2. The curved line was the essential element of this decorative trend.
3. At first Art Nouveau manifested itself in the applied arts.
4. A wide diversity characterized the architecture of the Art Nouveau.
5. Various colored materials were used by a florid type of architecture.

Ex.7. Discuss the following questions in form of a dialogue.

1. When did Art Nouveau appear?
2. What are its sources?
3. Why was Art Nouveau a diverse phenomenon?
4. What outstanding architects of Art Nouveau do you know?

UNIT III. SUPPLEMENTARY TEXTS

Text 1. The Renaissance

The Renaissance style really begins in England in the middle of the 16th century in architecture built for the circle of the Lord Protector Somerset. A typical example of the Renaissance style of England is to be found in the quadrangle that John Caius added to Gonville Hall at Cambridge. The architecture of the new court was basically Tudor Gothic, but Caius planned three gateways in connection with the court, two of which were in Italian style. The three gates were to mark the progress of the student through the university. At the entrance was the Gate of Humility (1565), a modest doorway, now in the Master's garden. The Gate of Virtue (after 1565), opening into the new quadrangle, is a fine classical portal with Ionic pilasters, but with a Tudor Gothic many – centered arch for the opening. Finally, the Gate of Honour (1573) is a separate tiny triumphal arch leading out toward the schools for the final disputation and degree. So the Renaissance style of architecture made a very timid appearance in England.

(864 pr.ch.)

Text 2. The Development of the Baroque in England

The latest designs of Inigo Jones for Whitehall Palace and Queen's Chapel in London introduced English patrons to the prevailing architectural ideas of northern Italy in the late 16th century. Although he was influenced heavily by the 16th century architects such as Palladio, Serlio and Vincenzo Scamozzi, Jones approached the Baroque spirit in his late works by unifying them with a refined compositional vigour. Sir Christopher Wren presented English Baroque in its characteristic restrained but intricate form in St. Stephen's Walbrook, London, with its multiple changing views

and spatial and structural complexity. Wren's greatest achievement, St. Paul's Cathedral, London, owes much to French and Italian examples of the Baroque period. Wren is notable for his large building complexes (Hampton Court Palace and Greenwich Hospital), which, in continuing the tradition of Inigo Jones, paved the way for the future successes of Sir John Vanbrugh.

(844 pr.ch)

3. The Winter Palace

In Russia the Baroque was created by Bartolomeo Rastrelli. His father, famous sculptor Carlo Rastrelli, was invited to Russia by Peter the Great. His sixteen-year-old son had no professional training when he came to Russia. He learned at the construction sites of St. Petersburg masters and became an architect of world renown, the designer of many magnificent palaces and churches in the Russian capital. The Winter Palace executed in the taste and on a gigantic scale is Rastrelli's masterpiece. He himself made the drawings and plans of the palace, designed the ornamentation patterns for window platbands, carvings, sculptures, lattices, parquet, interiors and furniture. The palace building is nearly two kilometers long in perimeter. Originally it had 1,050 chambers, 117 staircases, 1886 doors and 1,945 windows. The project was started in the reign of Elizabeth, Peter the Great's daughter who was fond of Baroque, so the Winter Palace is lavishly adorned with columns, stucco window platbands and sculptures over the roof cornice.

(895 pr.ch)

Text 4. Design Criteria

When the basic theory of static equilibrium for forces acting in any direction was first applied in structural design in the 18th century, the criterion of a safe design seemed obvious enough. The structure would be safe if it could support its own weight and perhaps the weight of a wagon passing over it or of machinery on a floor, without overloading any crucial element – arch rib, beam, column, masonry pier or tie rod. The strength of these elements could be assessed by loading specimens to failure or by similarity loading specimens of the proportion. During the 19th century, loads other than the weight of the structure itself became more important. The development of elastic theories of the behavior of the main structural elements and some complete structural systems required further criteria to bypass the reliance on strength tests of elements and systems. In the 20th century, design criteria for some classes of structure were codified for normal design in terms of design loads and allowable stresses.

(870 pr.ch.)

Text 5. Different Forces Acting on Any Member of a Building

The ultimate purpose of building techniques is to create a stable structure. In mechanical terms, structures are stable when all their parts are in a state of equilibrium or rest. Walls and roofs can buckle, crack and collapse if they are not properly designed. These movements are caused by forces that tend to push or pull bodies in a given direction. Forces acting on any member (part) of a building are first, its own weight and second, the loads it carries, principally from other members but also from persons, furnishing, wind, etc. Their action encounters a reaction in opposite forces that hold the member in place by resisting at its joints. These forces may be active in all directions and they must be balanced for stability. They tend to crush, pull apart and bend the member-in other words to change its size and shape. Within the member itself there are forces, too, that tend to resist any deformation. They are called stresses and they vary according to the strength of materials and the form of the member. The kinds of stress under consideration are compression, tension and bending.

(960 pr.ch.)

Text 6. Arches

The arch has been the chief means of overcoming the spanning limitations of single blocks of stone or lengths of timber. There were three types of arches in ancient architecture. One, which survives today in Mycenae cyclopean construction, consisted of only three rough blocks of stone, the central one somewhat larger than the gap between the other two and wedged them. A second, of which monumental examples survive in Egypt from the 3rd millennium BC, consisted of only two long blocks inclined toward one another as an inverted V-shape. This form was probably constructed even earlier in timber. The third, of which surviving examples are very widespread, was what is commonly known as the false or corbel arch. None of these early forms was very efficient.

From the 1st century AD the Romans began to use concrete in place of cut stone all the longer spans. Later brick and stone arches departed from Roman precedents mainly in adoption of other profiles. The most important were the pointed profiles of Islamic and of Gothic arches. Later steel and reinforced-concrete arches have been appeared in boxlike or tubular cross sections.

(951pr.ch.)

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