

Т. А. Саркисян

**ПРОФЕССИОНАЛЬНЫЙ АНГЛИЙСКИЙ АРХИТЕКТОРА  
В АКТИВНЫХ МЕТОДАХ ОБУЧЕНИЯ**

Учебное пособие

Нижний Новгород  
2021

Министерство науки и высшего образования Российской Федерации  
Федеральное государственное бюджетное образовательное учреждение высшего образования  
«Нижегородский государственный архитектурно-строительный университет»

Т. А. Саркисян

ПРОФЕССИОНАЛЬНЫЙ АНГЛИЙСКИЙ АРХИТЕКТОРА  
В АКТИВНЫХ МЕТОДАХ ОБУЧЕНИЯ

Утверждено редакционно-издательским советом университета  
в качестве учебного пособия

Нижний Новгород  
ННГАСУ  
2021

ББК 85.11  
С20  
УДК 811.111

*Печатается в авторской редакции*

Рецензенты:

**О.Г.Красикова** – канд. пед. наук, зав. кафедрой иностранных языков и культуры речи ФГКОУ ВО «Нижегородская академия Министерства внутренних дел Российской Федерации»

**О.И.Ваганова** – канд. пед. наук, доцент кафедры профессионального образования и управления образовательными системами ФГБОУ ВО «Нижегородский государственный педагогический университет имени Козьмы Минина»

Саркисян, Т. А. Профессиональный английский архитектора в активных методах обучения [Текст]: учеб. пособие / Т. А. Саркисян; Нижегор. гос. архитектур. - строит. ун - т – Н. Новгород: ННГАСУ, 2021. – 98 с. ISBN 978-5-528-00446-4

Пособие направлено на развитие двух направлений в обучении: формирование базовых знаний по специальности и овладение профессионально-ориентированным английским языком. Заложенные в основу пособия активные методы обучения, способствуют развитию критического мышления и формированию иноязычной профессионально-речевой компетенции студентов второго курса Факультета архитектуры и дизайна. Учебное пособие состоит из разделов, освещающих различные аспекты профессиональной деятельности архитектора

Предназначено для студентов бакалавриата очного отделения по направлению подготовки 07.03.01 Архитектура, профили: Архитектурное проектирование, Градостроительное проектирование, Реставрационное проектирование и 07.03.03.: Дизайн архитектурной среды, профиль Дизайн архитектурной среды при подготовке к практическим занятиям по дисциплине «Иностранный язык в профессиональной деятельности»

ББК 85.11

ISBN 978-5-528-00446-4

© Саркисян Т.А.,2021  
© ННГАСУ, 2021

## Введение

С появлением стандартов третьего поколения, нацеленных на компетентностно-ориентированное образование, одной из приоритетных целей современного иноязычного образования становится формирование умения осуществлять профессиональную деятельность на иностранном языке. Студент нелингвистического вуза должен овладеть коммуникативными умениями, необходимыми для устной и письменной коммуникации в различных ситуациях профессионального общения, что предполагает активное формирование иноязычной профессионально-речевой компетентности, которая является составляющей иноязычной профессионально-коммуникативной компетентности, означающей способность выражать свои мысли с помощью языка и понимать мысли других людей в процессе речевой интеракции.

Учебное пособие «Профессиональный английский архитектора в активных методах обучения» направлено на достижение вышеназванной цели. Данное пособие выполнено в соответствии с педагогической технологией «Развитие критического мышления через чтение и письмо» и направлено на формирование базовых знаний по специальности и овладение профессионально-ориентированным английским языком. Материал пособия включает как тексты учебного характера, в которых широко представлена терминология области, так и различные упражнения, способствующие не только формированию умений чтения и расширению лексического запаса студентов, но и нацеленные на формирование умений говорения на профессиональном английском языке.

Особый интерес представляют включенные в пособие тексты. Они современны, заимствованы из оригинальных источников и соответствуют темам основного курса обучения архитекторов. Существенным фактором, способствующим поддержанию интереса студентов к изучению профессионального языка, являются задания, разработанные на основе активных методов и, несомненно, способствующие развитию речи студентов.

Данное пособие готовит студентов к будущей профессиональной деятельности. Они учатся читать профессионально-ориентированные тексты, находить и читать литературу в Интернете, делать профессиональные презентации докладов и проектов, публично выступать, писать деловые письма и письменные размышления, выражая свои мысли, отстаивая своё мнение и дискутируя на профессиональном английском языке.

Учебное пособие поможет студентам эффективно и интересно организовать самостоятельную работу над текстом, а также научиться общаться на профессиональном английском языке, что будет способствовать подготовке архитекторов к их будущей профессиональной деятельности.

## **Содержание**

<b>Unit 1 Architecture.....</b>	<b>5</b>
<b>Unit 2 The architect's job.....</b>	<b>13</b>
<b>Unit 3 Problem solving in architecture.....</b>	<b>22</b>
<b>Unit 4 The structure of the house.....</b>	<b>24</b>
<b>Unit 5 Building materials .....</b>	<b>33</b>
<b>Unit 6 Developing one-family mansion house design.....</b>	<b>40</b>
<b>Unit 7 Ancient structures.....</b>	<b>42</b>
<b>Unit 8 Greek and Roman architecture.....</b>	<b>53</b>
<b>Unit 9 The history of architectural styles.....</b>	<b>64</b>
<b>Unit 10 Hi-tech architecture.....</b>	<b>76</b>

## **Appendices**

<b>Appendix 1 Expressing opinions.....</b>	<b>78</b>
<b>Appendix 2 Preparing presentations .....</b>	<b>79</b>
<b>Appendix 3 Reflections .....</b>	<b>80</b>
<b>Appendix 4 Students' sinkweins.....</b>	<b>82</b>
<b>Appendix 5 Students' poetry.....</b>	<b>84</b>
<b>Appendix 6 Students' quotes.....</b>	<b>86</b>
<b>Appendix 7 Writing annotations and abstracts.....</b>	<b>87</b>
<b>Appendix 8 Six hats of thinking .....</b>	<b>91</b>
<b>Appendix 9 Design presentation .....</b>	<b>94</b>
<b>Bibliography.....</b>	<b>96</b>

## Module 1

### ARCHITECT'S PROFESSIONAL ACTIVITY

#### Unit 1

#### ARCHITECTURE

#### I. Warming up (Разминка)

#### Listening & Speaking

*1. Group work. Reflect on the following question: “What is your concept of architecture?” Report your ideas to the class. Get ready to discuss different points of view answering questions and persisting in your own opinion (See appendix 1.)*

*2. Group work. Reflect on the following quotes about architecture, interpret them and share your ideas with the class. Get ready to discuss different points of view answering questions and persisting in your own opinion. The following lexis can be helpful:*

- a) “Architecture is frozen music”. Johann Wolfgang Goethe.
- b) “Architecture is that great living creative spirit which from generation to generation, from age to age, proceeds, persists, creates, according to the nature of man, and his circumstances as they change. That is really architecture.” Frank Lloyd Wright.

to proceed	развиваться,
to persist	сохраняться, продолжать существование
tuneable, classical	гармоничный
stopped, fixed	неподвижный, неизменный
turned to stone	окаменевший, застывший
to embody	запечатлевать
a monument of architecture	памятник архитектуры
glory	великолепие, сияние
grandeur	величие
time-honoured	освящённый веками

#### Useful terms and phrases

*3. Read the following terms and phrases, mind their pronunciation:*

to design and construct	проектировать и строить
construction/structure	постройка, сооружение, конструкция
to offer/ render services	предоставлять услуги
to serve a purpose	служить определённой цели
to meet the needs	удовлетворять потребности
to put down on paper	переносить на бумагу
to take into consideration	принять во внимание

to provide pre-design services	оказывать предпроектные услуги
to blend in with environment	сочетаться, гармонировать с окружающей средой (обстановкой)
to turn into reality	претворять в жизнь
to make a draft	делать чертёж
to select a site	выбирать участок
to conduct feasibility studies	проводить анализ осуществимости (проекта)
schematic design	эскизное проектирование
construction documents	проектно-сметная документация (на строительство объекта)
bidding and negotiations	предложение цены/предложение о заключении контракта и переговоры
construction contractor	строительная организация
specifications	технические характеристики, спецификация
technical submission	представление (документа)
cost analysis	анализ затрат
land-use studies	функциональное зонирование территории
to specify the requirements	оговаривать требования
proper handling	правильное использование
overall cost estimate	полная оценка расходов
blueprint	проект, план

## Vocabulary Focus

4. Pair work. Match the words to their explanations:

Design	A plan or set of proposals that shows how it is expected to work.
Construction	Concept that focuses on the components of a structure and unifies them into a coherent and functional whole, according to a particular approach.
Blue-print	A physical representation that shows what it looks like and how it works.
Architectural design	Practicability; capable of being used successfully.
Feasibility	The building of things such as houses, factories, roads and bridges; something constructed, especially a building.
To design	A thought, idea or principle; notion.

Model	A general plan or intention that someone has in mind when doing something.
Concept	To plan a building, machine or other object and make a detailed drawing of it from which it can be built or made.

5. Match the words and phrases to their translation:

a)

construction documents	предлагать услуги
structure/construction	претворять в жизнь
to offer services	сочетаться, гармонировать с окружающей средой
to turn into reality	сооружение, постройка
to blend in with the environment	проектно-сметная документация
to meet the needs	оговаривать, подробно излагать требования
to conduct feasibility studies	технические характеристики, спецификация
planning and decision making	служить определённой цели
to serve a purpose	удовлетворять потребности
design development	анализ затрат
specifications	планирование и принятие решений
to specify the requirements	проводить анализ осуществимости проекта
cost analysis	разработка проекта, доработка проектных решений

b)

overall cost estimate	правильное использование строительных материалов
to select a site	полная оценка расходов
blue-print	делать чертёж
to make a draft	оказывать предпроектные услуги
proper handling of materials	представление документа
construction contractor	принимать во внимание
bidding and negotiations	строительная организация
technical submission	завершить проект
to complete a project	эскизное проектирование
to provide pre-design services	предложение о заключении контракта и переговоры
schematic design	выбирать участок
to take into consideration	план, проект

c)

to design and construct	замысел, план, проект, чертёж
to put down on paper	функциональное зонирование территории
to co-ordinate	осуществимость
to draw up documents	оценка воздействия на окружающую среду
to require	руководство строительства
environmental impact studies	переносить на бумагу
land-use studies	координировать
feasibility	требовать
design	оформлять документы
construction administration	проектировать и строить



## II. Evocation (Вызов) Writing & Speaking

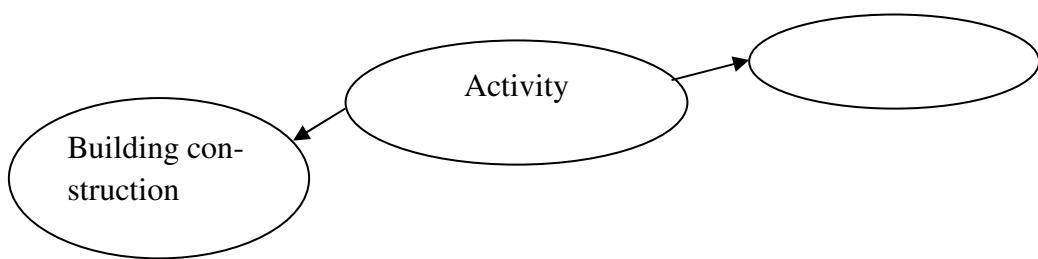
6. *Group work. Look at the picture and think what you can speculate about the human activity depicted in the picture. Individually write down everything that you associate with this human activity. Then, share your ideas with your group.*

*The following questions can be helpful:*

1. What sphere of human activity is depicted in the picture?
2. When and where did it emerge? What were the first results of this activity?
3. What does this profession deal with and what do these professionals do?
4. How does this activity influence people's life?

7. *Group work. Report your ideas to the class in order to put them on the board.*

8. *Structure the received information in the form of the “cluster” (графическая организация материала, показывающая смысловые поля того или иного понятия):*



## **Speaking & Listening**

9. *Group work. Prepare a presentation about architecture and deliver the presentation to the class. Get ready to discuss different points of view answering questions and persisting in your own opinion (See appendix 1, 2.)*

10. *Agree (+) or disagree (-) with the following statements about architecture or put (?) if you are not sure:*

1. Architecture is the designing and construction of all types of structures from the simple to the complex.
2. An architectural design begins with a simple idea that is turned into reality by the architect.
3. Everything from remodeling a chair in your home to building a ship starts with an architectural design.
4. Architects don't spend a great deal of time explaining their ideas to clients.
5. The architect takes the parts of a structure and turns them into a building.
6. The architect never selects a site. His responsibility is to build a structure.

## **III. Realization (Осмысление)**

### **Reading**

11. *Read the text and correct agree (+) or disagree (-) statements.*

12. *Read the text once again and make marginal marks (пометки на полях):*

✓ - *I knew it;*

+ - *New information;*

- - *The information contradicts my knowledge;*

? - *The information isn't enough or understandable.*

13. *Get ready to answer the following questions after reading the text:*

1. What did you know about architecture before reading the text?
2. What information did you find new reading the text?
3. What information contradicts your knowledge?
4. What information isn't enough or understandable for you?

### **What is Architecture?**

Architecture is a simple word that has a complicated meaning because it can't be explained in a single phrase. The word architecture is used to describe the designing and construction of all types of structures from the simple to the complex.

Everything from remodeling a room in your home to building an enormous skyscraper in a big city starts with an architectural design. It begins with a simple idea that is turned into reality by the architect. Someone has an idea and they see in their mind what the structure should look like and how it needs to be built in order to serve a purpose. The architect takes this idea and puts it down on paper in the form of a blueprint.

The process of design includes five phases: schematic design (SD), design development (DD), construction documents (CD), bidding and negotiations (BN), construction administration (CA). Architects spend a great deal of time explaining their ideas to clients, construction contractors, and others. The architect and client discuss the objectives, requirements, and budget of a project. In some cases, architects provide various pre-design services: conducting feasibility and environmental impact studies, selecting a site, preparing cost analysis and land-use studies, or specifying the requirements the design must meet.

Architecture can also be described as a creative art and science combined together to design buildings and structures that fulfill the need of the government and the people. Everyone needs a home to live in, places of entertainment and somewhere to buy food and other necessities.

As an art it expresses the architect's emotions, beliefs and ideals. It is also a life-style; a reflection of one's personality. It moves people, stimulating their emotions. It is time, connecting the past, the present and the future.

As science it realizes concepts and ideas into reality making what seems to be impossible possible. It understands all branches of science from mathematics, physics to chemistry, biology, understanding how things work and how it can blend in with its environment.

### **What does architecture involve?**

Architecture is a complicated process that involves a lot of planning and decision making concerning the design of the structure in question. Architects take into consideration many things in order to create a functional structure that meets the needs of its user. It involves the proper handling and organization of all materials needed to build the structure, the technology involved and anything else required to complete the project.

### **Reading & Writing**

14. Individual work. Read the text again and fill in the “marginal chart”:

✓	+	-	?
I knew that ...	I didn't know that ...	The information about ... contradicts my knowledge because ...	The information about ... isn't enough or understandable for me, because ...

### **Vocabulary Focus**

15. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “My concept of architecture”. Share your ideas with the partner. (See appendix 1):

a)

to design	an idea down on paper
to turn an idea	a site

to serve	ideas to clients
to put	the budget of a project
in the form	with the environment
to explain	different structures
to discuss	into reality
to provide	a functional structure
to select	the requirements
to specify	pre-design services
blend in	a purpose
to create	of a blueprint

b)

to take	the objectives of a project
to make	feasibility studies
to draw up	planning and decision making
to offer	drafts
to conduct	cost analysis
to meet	services
to prepare	construction documents
to involve	into consideration
to discuss	the needs

## Reflection (Размышление)

### Listening & Speaking

16. Prepare a presentation about architecture according to the text and deliver your presentation to the class. Get ready to discuss it answering questions and persisting in your own opinion. (See appendix 2.)

### Speaking & Speaking

17. Group work. Reflect on your own professional speech. (See appendix 3.)

18. Group work. Reflect on the professional speech of other groups. Get ready to discuss different points of view persisting in your own opinion (See appendix 3.)

### Writing

19. Make a “sinkwein” about architecture. (“Sinkwein” is a poem consisting of 5 lines). (See appendix 4.)

### Listening & Speaking

20. Ground your “sinkwein” and present it to the class. Get ready to discuss different points of view answering questions.

21. Make a poem about architecture. Ground your poem and present it to the class. Get ready to discuss different points of view answering questions (See appendix 5.)

## Grammar Focus

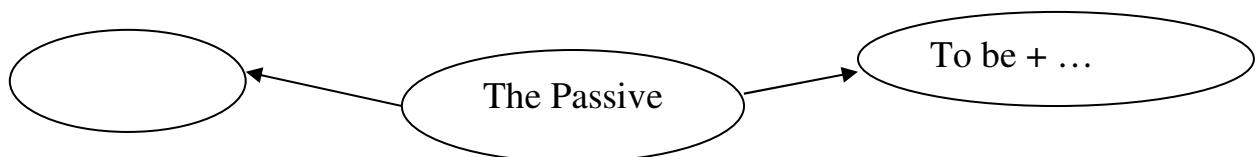
### *The Passive Voice*

22. *Group work. Read the sentence and answer the following questions:*

**A lot of amazing buildings are designed by talented architects.**

1. Переведите предложение.
2. Какое грамматическое явление представлено в этом предложении?
3. Как образуется «пассивный залог»?
4. Приведите свой пример на использование «пассивного залога».

23. *Group work. Structure the information about the Passive Voice making a “cluster”:*



24. *Group work. Present your cluster to the class.*

25. *Pair work. Read the sentences and translate them into Russian. Mark the sentences with the predicate in the passive form (сказуемым в пассивной форме):*

1. Architects take into consideration many things in order to create a functional structure.
2. Many things are taken into consideration in order to create a functional structure.
3. Architecture connects the past, the present and the future.
4. The past, the present and the future are connected with architecture.
5. The architect turns a simple idea into reality.
6. A simple idea is turned into reality by the architect.
7. Modern architects create functional structures.
8. Functional structures are created by modern architects.
9. As a rule, architects provide various pre-design services.
10. As a rule, various pre-design services are provided by architects.

26. *Pair work. Read the sentences and translate them into Russian. Transform the following sentences from Active into Passive:*

1. We use the word architecture to describe the designing and construction of all types of buildings.
2. The architect takes the idea and puts it down on paper in the form of a blueprint.
3. The architect realizes concepts and ideas into reality designing structures.

4. The process of design includes five phases.
5. The architect's activity involves a lot of planning and decision making concerning the design of the structure.
6. The architect's activity also involves the proper handling and organization of needed materials.
7. The architectural design includes everything from the foundation to the type of the faucet in the bathroom.

*27. Pairwork. Find out your partner's preferences concerning his/her job:*

*E.g.: Do you prefer to love or to be loved?*

*As for me, I prefer both: to love and to be loved.*

1. Do you prefer to construct a building by yourself or do you want the building to be constructed by house builders?
2. Do you prefer to create ideas or do you want ideas to be created by your colleagues?
3. Do you prefer to explain your ideas to clients or do you want ideas to be explained by your assistants?
4. Do you prefer to discuss the budget of a project with your client by yourself or do you want the budget to be discussed by your assistants?
5. Do you prefer to conduct environmental impact studies by yourself or do you want it to be conducted by other specialists?
6. Do you prefer to specify the design requirements by yourself or do you want it to be specified by your colleagues?

## **Unit 2** **THE ARCHITECT'S JOB**

### **I. Warming up (Разминка)** **Listening & Speaking**

*1. Group work. Reflect on the following quote about the architect's job, interpret it and share your ideas with the class. Get ready to discuss different points of view answering questions and persisting in your own opinion. (See appendix 1):*

“To be an architect is to possess an individual voice speaking a generally understood language of form.” Robert A.M. Stern.

### **Useful terms and phrases**

*2. Read the following terms and phrases, mind their pronunciation:*

oversight of the building construction	наблюдение, надзор за строительством здания
to surround the building	окружать здание
to consider each and every aspect	рассматривать, обсуждать, обдумывать все до единого аспекты

constructional project	строительный объект
to make calculation mistakes	делать ошибки при вычислении
to secure from	обезопасить от
computer literacy	компьютерная грамотность
communication skills	навыки общения
to affect public safety	влиять на безопасность людей
to undergo specialized training	проходить специализированное обучение
to create the overall look	создавать общий вид
to suit the people's needs	удовлетворять потребности людей
initial discussion	предварительное, первоначальное обсуждение
to agree on the initial proposal	достигать соглашения по первоначальному предложению
to develop a construction plan	разрабатывать строительный чертёж
plumbing system	водопроводная система
to develop a design	разрабатывать проект
to follow a building code	соблюдать строительный кодекс
computer-aided design and drafting (CADD)	автоматизированное проектирование и изготовление чертежей
building information modeling (BIM) technology	технология моделирования строительной информации
apartment building	многоэтажное жилое здание
to conduct constructive activities	проводить строительные работы
to file documents	регистрировать документы
to obtain development and building permits	получать разрешение на строительство

## Vocabulary Focus

3. Pair work. Match the words and phrases to their translation:

a)

to offer services	безопасность людей
to consider each and every aspect of a constructional project	ошибки в вычислении
to possess creative imagination	окружать здание
public safety	проходить специализированное обучение
calculation mistakes	предлагать услуги
to surround the building	обсуждать все до единого аспекты строительного объекта
to undergo specialized training	обладать творческим воображением

b)

to plan and design buildings	навыки общения
to explain ideas to clients	первоначальное обсуждение
overall look of the building	удовлетворять потребности людей
communication skills	разрабатывать строительный чертёж
initial discussion	окончиться катастрофой
to suit the people's needs	планировать и проектировать здания
to develop a construction plan	объяснять идеи клиентам
to develop a building design	прочность, устойчивость постройки
to end in disaster	оговаривать строительные материалы
stability of the structure	общий вид здания
to specify building materials	разрабатывать проект здания

c)

to follow a building code	служебные обязанности архитектора
apartment building	первоначальное предложение
computer-aided design and drafting (CADD)	разрешение на строительство
plumbing system	практический опыт
initial proposal	соблюдать строительный кодекс
development and building permits	требовать специальных профессиональных знаний
practical experience	проводить строительные работы
architect's duties	строительство зданий
to require specific skills	многоэтажное жилое здание
to conduct constructive activities	автоматизированное проектирование и изготовление чертежей
building construction	водопроводная система

## II. Evocation (Вызов)

### Writing, Listening & Speaking

4. Individual work. Read the following key words and make your own text reflecting your own view on the architect's job. Entitle the text:

Offer services, plan and design buildings, be responsible, concerning design and building construction, turn into reality, create an idea, put down on paper, explain ideas to clients, consider aspects of a constructional project, discuss requirements and budget of a project, develop a construction plan, take into consideration, create a functional structure, specify building materials, public safety, secure people from, end in disaster, make calculation mistakes.

5. Individual work. Present your text to the class. Get ready to answer questions and discuss different points of view persisting in your own opinion (See appendix 1.)

### **III. Realization (Осмысление)**

#### **Reading & Speaking**

6. Read the following terms and phrases, mind their pronunciation:

final delivery	окончательная сдача
to supervise	надзирать за, руководить
to agree on the initial proposal	достигать соглашения по первоначальному предложению
structural system	конструктивная система (здания)
heating and ventilating systems	система отопления и вентиляции
site plan	план стройплощадки
landscape plans	проект создания антропогенного ландшафта
interior furnishing	внутренняя отделка
zoning law	законодательство по вопросам функционального зонирования территории
fire regulations	нормы противопожарной безопасности
ordinance	закон, постановление муниципалитета
entire community	населённый пункт, микрорайон
construction drawing	строительный чертёж
to file	регистрировать
to obtain development and building permits	получать разрешение на строительство
structural engineer	инженер-проектировщик строительных конструкций

7. Read the text and make marginal marks (пометки на полях):

✓ - I knew it;

+ - New information;

- The information contradicts my knowledge;

? - The information isn't enough or understandable.

8. Get ready to answer the following questions:

1. What did you know about architecture before reading the text?
2. What information did you find new reading the text?
3. What information contradicts your knowledge?
4. What information isn't enough or understandable for you?

#### **The Architect's job**

The architect is a person trained in the planning, design and oversight of the construction of buildings. To practice architecture means to offer or render services in

connection with the design and construction of a building. In addition to this, the architect is involved in organizing the space within the site that is surrounding the building.

The word “Architect” derived from Latin word “architectus” means ‘chief builder’. The architect is fully responsible for the process of design and construction of houses, office buildings, skyscrapers, landscapes and even entire cities. This specialist has to consider each and every aspect of any constructional project including aesthetic, structural and safety factors.

The architect must possess a creative imagination, drawing skills, computer literacy, oral & written communication skills, as well as self-discipline. Professionally, an architect's decisions affect public safety, and thus an architect must undergo specialized training consisting of advanced education and internship for practical experience.

The architect must have the ability to be a team leader. There are many important decisions to be made that will affect the final design and if the wrong decisions are made it could end in disaster.

### **Nature of the Work**

People need places in which to live, work, meet, play, etc. Architects are responsible for designing these places. Architects create the overall look of buildings and other structures, but the design of a building involves far more than its appearance. Buildings must also be functional, safe, and economical and must suit the needs of the people who use them. Architects consider all these factors when they design buildings and other structures.

Architects may be involved in all phases of a construction project, from the initial discussion with the client to the final delivery of the completed structure. Their duties require specific skills — designing, engineering, managing, supervising, and communicating with clients and builders.

After discussing and agreeing on the initial proposal, architects develop final construction plans that show the building's appearance and details for its construction. The following drawings accompany these plans: drawings of the structural system; air-conditioning, heating, and ventilating systems; electrical systems; communications systems; plumbing; and, possibly, site and landscape plans. The plans also specify the building materials and, in some cases, the interior furnishings. In developing designs, architects follow building codes, zoning laws, fire regulations, and other ordinances. The computer-aided design and drafting (CADD) and building information modeling (BIM) technology have replaced traditional paper and a pencil as the most common method for creating design and construction drawings.

They design a wide variety of buildings, such as office and apartment buildings, schools, churches, factories, hospitals, houses, and airport terminals. They also design complexes such as urban centers, college campuses, industrial parks, and entire communities.

### **Documentation role**

Architects prepare the technical or "working" documents (construction drawings and specifications). They are filed for obtaining development and building permits.

This process is usually coordinated with and supplemented by the work of mechanical, plumbing, electrical, civil, structural engineers. These construction drawings and specifications are also used for pricing the work, and for construction.

### **Reading & Writing**

9. Read the text once again and fill in the “Marginal chart”:

√	+	-	?
I knew that ...	I didn't know that ...	The information about ... contradicts my knowledge because ...	The information about ... isn't enough or understandable for me, because ...

### **Vocabulary Focus**

10. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The architect's professional skills”. Share your ideas with the partner:

to possess	communication skills
to have	using computer-aided design and drafting software
to explain	computers
oral & written	creative imagination
to draft and design	drawing skills
to apply	ideas to clients

11. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “My concept of the architect's job”. Share your ideas with the partner. (See appendix 1):

a)

in connection	on the initial proposal
to offer	in disaster
to consider	the overall look of the building
to affect	the needs of the people
to end	professional services
to create	specific skills
to suit	with the design and construction of a building
to develop	each and every aspect of a constructional project
to require	public safety
to agree	a final construction plan

b)

initial	a building design
to show	fire regulations
to specify	development and building permits
to develop	technical documents
to follow	the building's appearance
to prepare	discussion with the client
to obtain	the building materials

## Reflection (Рефлексия)

### Writing, Listening & Speaking

12. Create a quote about architect's job, ground it and present to the class. Get ready to discuss it persisting in your opinion. (See appendix 6.)

13. Role-play the following situation: On the Open Day a leading lecturer of the architecture chair tells the entrants about architecture profession. His task is to convince them to choose this job. The entrants interestedly talk with the lecturer and ask her numerous questions.

Take into account the following points:

1. Project yourself (перевоплотиться) either into a character of a leading lecturer or an entrant;

2. Your speech should correspond with your character.

### Speaking & Listening

14. Group work. Reflect on your own professional speech. (See appendix 3.)

15. Group work. Reflect on the professional speech of other students-lecturers. Get ready to discuss different points of view persisting in your own opinion. (See appendix 3)

### Writing

16. Write a reflection on the quote "To be an architect is to possess an individual voice speaking a generally understood language of form." (See appendix 3)

## Part II JOB SEARCH IN ARCHITECTURE

### Reading & Writing

1. What information do you think we should include in a letter of application for a job? Think about: age, qualifications, etc.

2. A. Which beginnings/endings would be appropriate?

a) Dear Sir/Madam,

Yours faithfully,

b) Dear Jack,

Best wishes,

c) Dear Mr. Smith,

Yours sincerely,

*B. What is the difference between A and C?*

*3. Read the rubric, then read the letter and match the paragraphs to the headings.*

*a) Closing remarks; b) Personal qualities; c) Opening remarks/reason(s) for writing; D. Experience.*

1. Dear Mrs. Jackson,

With reference to your advertisement in Thursday's edition of the *Daily Star*, I am interested in applying for the position of primary school teacher.

2. I am 28 years old and currently teaching in Margate. I have a BSc degree awarded by Glasgow University in 1997. I completed my certificate in Education at Preston Teacher Training College in 1998.

3. I have been working for Margate Education Department since 1999. During this time, I have enjoyed teaching a variety of subjects, including English, General Science and Games.

I consider myself to be punctual, hard-working and fair. I enjoy working with children and have good organizational skills.

4. I enclose a reference from my present employer. I would be grateful if you would consider my application. I am available for interview any weekday morning. I look forward to hearing from you.

Yours sincerely,

*Steven Davies*

*4. Read the letter again and think of formal expressions to match the informal ones in the table, as in the example.*

<b>Informal style</b>	<b>Formal style</b>
About your advert ...	With reference to your advertisement ...
I want to apply for ...	
I got my teaching certificate ...	
I've had a job ...	
I think I'm always on time ...	
I like working with kids ...	
There's a note from my boss ...	
I'd like it if you hired me ...	
I'm free to talk to you ...	
Drop me a line sometimes ...	

*5. Read the rubric. Fill in the CV with your personal information. You saw this advertisement in The Weekly News and you want to apply for the position.*

Narofsky Architecture & Design, a boutique architecture & interior design firm, located in Manhattan's Gramercy Park area, is seeking architects and intern architects to join our firm. We specialize in high-end modern and sustainable residential design, from city apartments to one family home to multi-family buildings. Our office environment is hard-working, collaborative, and friendly, and would like to grow with someone who seeks the same daily interaction.

Candidates should have 2+ years of professional experience in all phases of the design and construction process, with design capability, coordination experience, communication skills, and strong technical abilities. Interns who are interested in learning various aspects of design and the process of project delivery should apply. The position will also require work on lectures with power point skills. Proficiency is required in AutoCAD 2009+, Sketch up Pro, Adobe CS programs, hand sketching, digital modelling and physical model-making.

Salary to commensurate with experience. Check out [www.narofsky.com](http://www.narofsky.com) to learn more about us.

Please e-mail your cover letter, CV and portfolio/work samples (PDF format) to: [jadwig-ad@narofsky.com](mailto:jadwig-ad@narofsky.com)

## Curriculum Vitae

### Personal Details

Name/Surname:

Address: Tel.:

Date of birth: Nationality:

### Education

Qualifications:

Languages:

### Work Experience (most recent first)

### Personal Qualities

*6. Answer the questions in the plan. Use your answers and your CV to write the letter of application in Ex. 6.*

### Plan

- Who will you address your letter to?

**Introduction** (Paragraph 1) reason for writing? For what position? Where was it advertised?

- **Main body** (Paragraph 2 – 3) age? qualifications? current job? previous experience? personal qualities?
- **Conclusion** (Paragraph 4) closing remarks?
- How will you sign off?

## Unit 3 PROBLEM SOLVING IN ARCHITECTURE

### I. Warming up (Разминка)

*1. Group work. Reflect on the following questions and share your ideas with the class. Get ready to discuss different points of view persisting in your own opinion. (See appendix 1):*

*Do soft jobs exist in our life? Can you name them? Ground your answer.*

### Useful terms and phrases

*2. Read the following terms and phrases, mind their pronunciation:*

to get clients to agree	уговорить клиентов
to reach a compromise	найти компромисс
to face a challenge	стоять перед проблемой
to respect the client's choice	уважать выбор клиента
to find a mutual understanding	найти взаимопонимание
to suit both parties	устраивать обе стороны
to develop a report	делать отчёт
to have a good grasp of something	хорошо разбираться в чем-либо
legislation	законодательство
to perform a code analysis	проводить анализ законов
material science	материаловедение
to acquire a complete understanding	достичь полного понимания
to meet a deadline	успеть закончить работу к установленному сроку
to resolve unexpected issues	решать непредвиденные проблемы
ins and outs of the profession	тонкости профессии

### II. Evocation (Вызов)

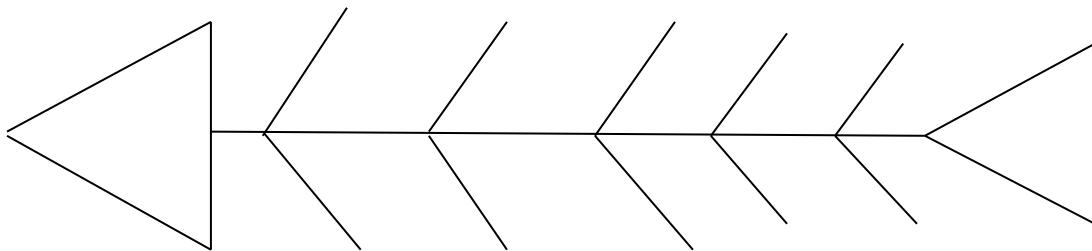
#### Speaking and Listening

*3. Group work. Discuss the following questions and report to the class. Get ready to discuss different points of view persisting in your own opinion (See appendix 1):*

1. Is it hard to work as an architect?
2. What difficulties does a practitioner run into?
3. What is the secret of the architect's success?

### **III. Realization (Осмысление)**

4. *Group work. Formulate several most actual problems which architects face in their work and describe these problems.*
5. *Group work. Set the problems on the upper bones of the fish skeleton and report about the existing problems to the class. Get ready to discuss different points of view persisting in your own opinion:*
6. *Group work. Discuss the following: What do you think the architects should change in their professional activity to begin solving these problems? Formulate your thoughts in your exercise books. Report your ideas to the class.*



7. *Group work. Find solutions to the problems. Set the solutions on the lower bones and report your solutions to the class. Get ready to discuss different points of view persisting in your own opinion:*
8. *Pay attention to the head of your fish and formulate the aim of your activity in class according to the problems and their solutions*
9. *Think over the result of your activity set it into the tail of the fish skeleton and report to the class.*

### **IV. Reflection (Рефлексия)**

#### **Writing**

10. *Write a short essay entitled “Architect’s challenges”.*

## **Module 2** **ARCHITECTURAL DESIGN**

### **Unit 4** **THE STRUCTURE OF THE HOUSE**

#### **I. Warming up (Разминка)**

1. *Group work. Reflect on the following quote about a building, interpret it and share your ideas with the class. Get ready to discuss different points of view answering questions and persisting in your opinion. (See appendix 1):*

“A building is hard to judge. It takes many years to find out whether it works. It's not as simple as asking the people in the office whether they like it.” Helmut Jahn.

## Useful terms and phrases

2. Read the following terms and phrases, mind their pronunciation:

wear proof	износостойкий
load	тяжесть, груз
load-bearing element	несущая конструкция, несущий элемент
structural element/part	часть здания, конструктивный элемент, несущая часть (здания)
footing	фундаментный блок, опорное расширение (стопы, колонны, сваи)
foundation	заложение фундамента, фундамент, основание
structural system	конструктивная система
concrete	бетон
to pour	заливать, укладывать бетонную смесь
trench	ров
floor system	конструкция перекрытия
masonry	кирпичная кладка, кирпич
brick	кирпич
to reinforce	усиливать, армировать
steel bar	арматурный стержень
pile foundation	фундамент на сваях
pile cap	оголовок сваи
slab-on-grade	бетонная плита на грунтовом основании, плита, уложенная вровень
basement	подвал, подвальный этаж, цокольный этаж
beam	балка
joist	балка перекрытия
plywood	фанера
floor joist	балка перекрытия
intermittent	перемежающийся
foam product	пенопластовый, пенистый материал
partition wall	перегородка

3. Match the words and phrases to their translation:

a)

wear proof	несущий элемент конструкции
to carry weight	фундаментный блок
load-bearing element	фундамент, заложение фундамента

footing	нести нагрузку
foundation	износостойкий
structural element	конструктивная система
concrete wall	заливать бетонную смесь в ров
structural system	конструкция перекрытия
to pour concrete into a trench	часть здания
floor system	бетонная стена

b)

pier	кирпич
conventional foundation wall	расставлять с промежутками
masonry	опора, свая
brick	примыкающий к стене
to space	обычная стена под фундамент
adjacent to the wall	кирпичная кладка
to reinforce a steel bar	слой почвы
pile foundation	вбивать в землю
layer of soil	усиливать арматурный стержень
to hammer into the ground	фундамент на сваях

c )

floor joist	подвал
slab-on-grade	пенопластовый материал
beam	фанера
flooring material	бетонная плита на грунтовом основании
basement	сложная стена
plywood	настилочный материал
foam product	балка
complicated wall	балка перекрытия

d)

wiring	каркас
to attach to	точка опоры
finish	сводчатый потолок
frame	шиферная плитка
bearing point	прикреплять
to truss	финиширование, отделочное покрытие
slate	электропроводка, прокладка электрических проводов
vaulted ceiling	опираться на
to bear on	укреплять, связывать

## **II. Evocation (Вызов)**

4. *Pair work. Agree (+) or disagree (-) with the following statements about the house or put (?) if you are not sure:*

1. The structural elements of the house are often called load-bearing elements or load-bearing systems.
2. The structural elements of the house must support their own weight.
3. The footing is the structural element upon which the home rests.
4. The foundation consists of the foundation walls and other vertical elements needed to support the floor (piers and steel columns).
5. A pile can be described as a fence hammered into the ground.
6. Load-bearing walls support their own weight and partition walls support the load of the ceiling and the roof.
7. The simplest ceiling is formed by a roof truss.
8. The primary function of a pitched roof is to shed water from a dwelling in poor weather conditions.

## **III. Realization (Осмысление)**

### **Reading**

5. *Read the following terms and phrases, mind their pronunciation:*

crushed stone	щебень
siding	облицовка, наружная обшивка стен
sheathing	опалубка
drywall	стена сухой кладки; стена, сложенная без раствора ,сухая штукатурка, гипсокартон
lumber	пиломатериал
roof truss	стропила
ceiling joist	потолочная балка
to be stick built	быть собранным на месте из комплектующих изделий
plywood decking	опалубка из фанеры
roofing shingles	кровельный гонт, асбестошифер
gable roof	двускатная крыша, щипцовая крыша
to frame a roof	сооружать каркас крыши
load carrying system	снаряжение для переноски тяжестей
pitched roof	двускатная щипцовая крыша
clay tile	керамическая облицовочная плитка
concrete tile	бетонная плитка, бетонная черепица
framework	каркас
rafters	стропила
batten	обрешётка
tar	смола, гудрон

roof sagging	проседание крыши
vault a ceiling	покрывать потолок сводом
secure	закреплять, укрепить
engineered slab	сконструированная плита
cable	напрягаемая арматура
cure	выдерживание бетона, затвердение
crack resistant	трещиностойкий
cable	напрягаемая арматура
to install	устанавливать, монтировать

5. Read the text and correct agree (+) or disagree (-) statements.

### The structure of the house

The structure of the house is an extremely important part of the building as it makes the construction wear proof. The structure carries the weight of the house to its supporting element - the ground. The structural elements of the home are those which carry the weight or load of the home to the earth on which it rests. Hence, they are often called load-bearing elements or load-bearing systems. They include the footings, foundation, floor, walls, ceiling and roof.

It is important to design and construct these elements properly. The fact is that they must not only support their own weight, but the weight of the ceiling and the roof.

Let's consider the component parts of the house.

#### Footings

The footing is the structural element upon which the home rests, and it is the first member of the load bearing structural systems of the home. It is also an integral part of the structure foundation upon which the first floor is built.

The footings are placed under all load-bearing parts of the foundation, i.e. piers, columns, foundation walls, etc.

And they are almost always made of concrete. The footing is usually formed by concrete poured into a trench and constrained by some kind of forms.

#### Foundation

The foundation consists of the foundation walls and other vertical elements needed to support the floor (piers and steel columns).



The "Foundation" for this slab home is the "turned-down" portion of the slab at the perimeter. Notice the plumbing pipes which will poke up through the slab.

The house foundation is the system on which the home sits. Sometimes the house foundation rests upon the footings and supports the floor system - as with conventional foundation walls and piers.

Sometimes the home foundation is also the footing - as with a home built on piles driven into the ground. Sometimes the footing, the foundation, and the floor system are an organic whole - as with the monolithic slab.

## Types of Foundations

### MASONRY FOUNDATIONS

Many foundation systems consist of a masonry (brick or concrete block) perimeter wall sitting on a concrete footing. Inside the perimeter wall there may also be a number of piers, columns, or posts spaced within the area surrounded by the wall or immediately adjacent to and built into the wall itself.

### CONCRETE FOUNDATIONS

Concrete foundation walls are popular in many areas of the country, and are almost always used where there is to be a basement.



This concrete foundation will have a basement.

Wood or metal forms are set on the footings, reinforcing steel bars which strengthen the wall, and concrete is poured into the forms. Before the concrete is "set," anchor bolts are pushed into the concrete along the perimeter of the home.

### PILE FOUNDATIONS

A pile foundation is a special type of foundation that enables a structure to be supported by a layer of soil found below the ground surface. A pile foundation comprises two basic structural elements, a pile and a pile cap. The pile cap is a structural base that supports a structural column, wall, or slab. A pile can be described as a structural stilt hammered into the ground.

Piles are typically used where soils are unable to support the necessary loads with more traditional footings and they are supported with masonry or concrete foundation walls.



A beach house built on piles.

### Floor

Floor systems are either wood or concrete. In residential construction, concrete floors are slab-on-grade (concrete poured on the ground). This type of floor system is usually used for the garage and basement, or for the main floor in southern areas. As a matter of fact, the wood floor is the standard. The wood floor

consists of the supporting members - beams and joists - and the flooring material is usually a plywood product.

Typically, there is a beam supporting the floor joists. The beam is supported by the foundation walls and intermittent piers or posts.

### Slabs

Concrete slabs are common foundation/floor systems in many parts of the world, particularly in warmer climates with soils that are stable.

Typically, building a concrete slab consists of sand, gravel, or crushed stone. The edge of the slab is insulated, typically with a rigid foam product.

## **Walls**

The Walls divide the interior space into rooms and are subdivided into load-bearing walls and partition walls. Load-bearing walls support the load of the ceiling and the roof and partition walls support their own weight.

As far as exterior walls are concerned, they are pretty sophisticated systems! They are designed to keep the elements out, keep your conditioned air in, and provide support for your roof. Exterior walls as a system include not only the structural parts but also the siding, sheathing, insulation, and drywall, as well as the exterior doors and windows. It may also contain parts of other systems like plumbing or wiring. Most walls are constructed of lumber.

## **Ceiling**

Ceilings are supported by the walls below or by a ceiling beam. The ceiling does not actually support a vertical load. It is included in the load bearing elements of the home because it supports rather significant weight of the drywall attached to it. Ceilings are not as complicated as walls. The simplest ceiling is formed by a roof truss. In this case, there is no additional step to constructing a ceiling. The roof truss is simply set in place.

If trusses are not used, the ceiling is constructed much like the wood floor. In fact, in a two-storey house, the ceiling of the first level is the floor of the second. The members are called ceiling joists. They rest on the walls, or on beams which span between the walls.

There are some other kinds of floors. For example, ceilings can be vaulted in an infinite variety of ways. A vaulted ceiling adds volume to your rooms to create a space sense. Even flat ceilings can be adorned with a variety of textured materials and finishes.

## **Roof**

The Roof Structure will either be “stick built”, trussed, or a combination of the two. The weight of the roof, with the wood members, the plywood decking, and the roofing shingles, are significant. All of this weight must be carried down through the walls, floor, foundation walls, and footings to the ground.



A load of trusses delivered to the job site.

### **Roof Trusses**

Roof trusses are roof shaped frames which are engineered and shop built for each construction activity.

Roof truss design is done by engineers, specializing in this area of expertise. If your construction will be inspected by a local building official, they will want to see the truss plans before construction begins.

Trusses are designed to concentrate the entire roof load

at the ends of the truss. This means that the trusses actually span the distance between their two end bearing points.

Although there may be walls under the trusses, they are "partition" (non-load bearing) walls. The advantages of using trusses are cost and speed and ease of installation.

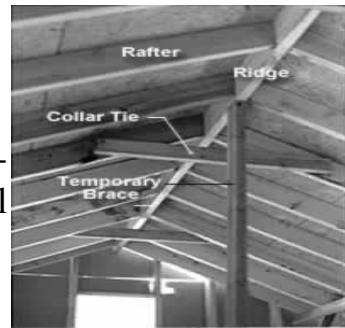
Trusses can be constructed to accommodate almost any roof configuration, but in a practical sense, the simpler the roof, the more attractive trusses are to use. They are ideal for a gable roof.

### **Stick Built Roof**

The alternative to using trusses in framing a roof is to "stick build" the roof. It means that all of the roof members are cut and installed on the site.

The photo (right) shows you some of the members involved in a stick built roof. One advantage is the additional storage space you'll have in the attic.

A disadvantage may be a more complicated load carrying system throughout the house.



### **Pitched roof**

A pitched roof is a roof for which one or more roof surfaces is pitched more than 10 degrees, and alternately a roof with two slopes that meet at a central ridge.

The pitched roof is the most common type of roof construction used in new dwellings today. The primary function of a pitched roof is to shed water from a dwelling in poor weather conditions.

Most pitched roofs are covered with either slate, synthetic slate, clay tiles or concrete tiles. They are usually laid upon a framework of timber rafters across which are fixed timber battens.

### **FLAT ROOF**

A flat roof is a type of covering for a building. In contrast to the more sloped form of roof, a flat roof is horizontal or nearly horizontal. Materials that cover flat roofs should allow the water to run off freely from a very slight inclination. Traditionally flat roofs would use a tar and gravel based surface which is sufficient to prevent penetration. However, these surfaces tend to fail in colder climates, where ice dams and the like could block the flow of water.

*7. Read the text once again and answer the following questions:*

1. What are the structural elements of the house?
2. What is the footing?
3. What is the house foundation?
4. What types of foundations can you name?
5. What types are the walls divided into?
6. What is the ceiling formed by?
7. What is a stick built roof?

### Vocabulary Focus

8. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The house structure, its footing and the foundation”. Share your ideas with the partner:

to make	under all load-bearing parts
to carry	part of the structure foundation
to support	wear proof
an integral	into a trench
to constrain	upon the footings
to place	the weight of the ceiling and the roof
to pour	the weight to the supporting element
to rest	by some kind of forms
conventional	within the area surrounded by the wall
to build on	steel bars
to space	foundation walls and piers
to reinforce	the construction piles driven into the ground

9. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The floor system of the house”. Share your ideas with the partner:

to consist	by the foundation walls
to use	soils
to support	concrete floor
common	of the supporting members
stable	for the garage and basement
to insulate	foundation system
slab-on-grade	with a rigid foam product

10. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The walls and the ceiling”. Share your ideas with the partner:

to divide	support for the roof
to subdivide	volume to the room
to support	by a roof truss
to provide	the interior space into rooms
to form	into load-bearing and partition walls
to adorn	between the walls
to span	the load of the ceiling and the roof
to vault	a space sense

to add	with a variety of textured materials and finishes
to create	in an infinite variety of ways

11. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The roof structure”. Share your ideas with the partner:

roof shaped	the distance
to lay	any roof configuration
to concentrate	frames
to span	the roof
to accommodate	water from a dwelling
to stick build	the roof load
to install	load carrying system
additional	on the site
complicated	with clay tiles
to meet	upon a framework
to shed	at a central ridge
to cover	storage space

### Reflection (Размышление) Writing, Listening & Speaking

12. Individual work. Create a text about the house structure

1. Discuss the following points:

- a) subject;
- b) a role;
- c) audience;
- d) a form of presenting information;
- e) details concerning a plotline;
- f) details concerning your projecting into a chosen character.

2. Individual work. Create a text.

Help each other to improve your texts

13. Present your text to the class.

14. Write a reflection on the text «The house structure» (See appendix 3.)

## Unit 5

### BUILDING MATERIALS

#### I. Warming up (Разминка)

*1. Pair work. Read the three building material quotes and discuss the following: Which of the three quotes attracts your professional attention? Why? What is the importance of building materials in building construction in your professional opinion?*

- a. When we build let us think that we build forever. John Ruskin.
- b. “An architect must begin at the beginning... Architects must exercise well trained imagination to see in each material, either natural or compounded plastics, their own inherent style. All materials may be beautiful, their beauty much or entirely depend upon how well they are used by the architect.” – F.L. Wright.
- c. “Each material has its own message, and to the creative artists, its own song.... Every new material means a new form, a new use if it is used according to its nature.” – F.L. Wright.

#### Useful terms and phrases

*2. Read the following terms and phrases, mind their pronunciation:*

residential building	жилое здание
availability of resources	наличие вспомогательных средств
floor board	доска для пола
hardwood	твёрдая древесина
structural material	конструкционные материалы
finishing material	облицовочный материал
functional material (utility)	функциональные материалы
natural stone	природный (строительный) камень
waterproofing	водонепроницаемость
insulation	изоляция
to withstand the pressure and moisture	противостоять, выдерживать давление (нагрузку) и влажность
concrete	бетон
earth-sheltered construction	глубинное сооружение
floor slab	панель перекрытия
to absorb and store heat	поглощать и сохранять тепло
temperature swing	скачок температуры
precast concrete	железобетон в готовых изделиях, сборный железобетон
cast-in-place	уложенный на месте, бетонируемый на месте
watertight	водонепроницаемый
masonry	кирпичная/каменная кладка
steel bar	арматурный стержень
high stress	тяжёлая нагрузка

structural work	строительная работа
to treat with preservatives	пропитывать сохраняющим составом
framing material	каркасный материал
to make use of	использовать, применять
to expose to	подвергаться воздействию

### Vocabulary Focus

3. Match the words and phrases to their translation:

a)

residential building	наличие вспомогательных средств
structural material	облицовочный материал
availability of resources	твёрдая древесина
durable building material	природный (строительный) камень
hardwood	выдерживать нагрузку
finishing material	характерные свойства
natural stone	сборный железобетон
floor slab	жилое здание
characteristic properties	прочный строительный материал
precast concrete	панель перекрытия
to resist load	конструкционный материал

b)

masonry	строительная работа
steel bar	поглощать и сохранять тепло
floor board	тяжёлая нагрузка
to withstand the pressure and moisture	арматурный стержень
to absorb and store heat	кирпичная/каменная кладка
high stress	доска для пола
structural work	выдерживать давление (нагрузку) и влажность
cast-in-place concrete	принимать вертикальную и горизонтальную нагрузку
to receive vertical or lateral pressure	водонепроницаемость
insulation	уложенный на месте, бетонируемый на месте
waterproofing	изоляция

c)

to increase pressure	заливать и укреплять
earth-sheltered construction	делать стыки водонепроницаемыми
to pour and reinforce	служить защитным барьером
to prevent temperature swings	обрабатывать пропиточным составом

to make the joints watertight	каркасный материал
strength	глубинное сооружение
to treat with preservatives	предупреждать скачки температуры
framing material	увеличивать нагрузку
to make use of wood	подвергаться воздействию грунтовых вод
to expose to the groundwater	прочность
to serve as a protective barrier	применять дерево

## II. Evocation (Вызов)

### Listening & Speaking

4. Group work. Make assumptions about the content of the text. Answer the following questions and report your ideas to the class.

1. What types of building materials do you know?
2. Can you describe these materials?
3. What are their characteristic properties?

### Writing

5. Individual work. Fill in the first column of the “logbook” (бортовой журнал):

I know about building materials	I have learnt about building materials
---------------------------------	--

## III. Realization (Осмысление)

### Reading

6. Read the following terms and phrases, mind their pronunciation:

nature of the building	основное свойство, характер здания
intended purpose	предполагаемая, намеченная цель
storage facilities	складские помещения
ornate door	богато украшенная дверь
window trim	оконный наличник
functional/ utility material	функциональный материал
to embed	вмонтировать, встраивать
reinforced masonry	армированная каменная кладка
noncritical element	элемент, не влияющий на работоспособность других элементов
earth cover	защитная грунтовая толща
lateral pressure	горизонтальное давление, нагрузка
core of the masonry	внутренняя часть кирпичной кладки
frame wall	каркасная стена
burial depth	глубина погружения
beyond this depth	свыше этой глубины

bar joist	решётчатая балка
concrete reinforcement	арматура железобетона
tension and compression strength	прочность на натяжение и сжатие
iron alloy	железный сплав
percent carbon	содержание углерода
weight ratio	весовое соотношение

7. Read the text and fill in the second column of the “logbook”:

I know about building materials	I have learnt about building materials
---------------------------------	--

### **Contemporary building materials**

Any material which is used in construction of residential or commercial buildings is called a building material. The choice of building material depends on the size and nature of the building, its design, intended purposes, availability of resources and location. Let's read about some of the most commonly used building materials all over the world.

When it comes to modern building materials, the type of materials and the design of buildings are significantly determined by society's way of life. Since modern society is largely stable, the buildings and other structures are also permanent. Hence, there is a greater need for durable building materials.

Some examples of basic building materials used in constructing modern buildings include steel bars, concrete and wood. These are structural materials that comprise the foundation, floors, walls and ceilings of many modern buildings. Aside from purely structural purposes, these materials are also sometimes used for aesthetic purposes. Wooden materials, for instance, are used as decorative wall panels, ceilings and floor boards. Some hardwood materials are also used in making storage facilities, furniture, ornate doors and ornate window trims.

In terms of purpose, various types of building materials can be classified as structural materials, decorative or finishing materials, functional materials and protective materials.

Structural materials are fundamental and they provide the general shape and appearance of a building. The structural materials serve as the protective barriers against the natural forces, such as rain, snow, sun's heat and wind. All other types of building materials are attached, embedded or supported by the structural materials. The decorative or finishing materials include natural stones (such as marble or granite for flooring), ceramics and wooden panels. These materials are later installed when the structure of a building is already erected.

On the other hand, the functional or utility building materials are usually hidden or embedded within the structural materials. Some utility building materials include the components of the plumbing system, the components of the electrical system and the components of the ventilation system.

## **Construction materials**

The construction materials for each type of structure will vary, depending on the characteristics of the site and the type of design. However, general guidelines show that houses require stronger, more durable construction materials.

Materials must provide a good surface for waterproofing and insulation to withstand the pressure and moisture of the surrounding ground. When soil is wet or frozen, the pressure on the walls and floors increases. Pressure also increases with depth, so materials such as concrete and reinforced masonry, wood, and steel are all suitable.

### **Concrete**

Concrete is the most common choice for constructing different types of buildings. Not only is it strong, it is also durable and fire resistant. Several forms of concrete are used in earth-sheltered constructions. Lightly reinforced concrete, which is poured and reinforced at the site, is used for noncritical structural elements such as concrete foundations, floor slabs, and exterior walls with less than 6 feet (1.83 meters) of earth cover. Precast reinforced concrete can resist loads at any reasonable depth and can be used for floors, walls, and roofs. Concrete absorbs and stores heat, helping to prevent temperature swings that can damage some building material.

Precast concrete components are manufactured at a plant or on-site location before they are used, thereby decreasing construction time and cost in comparison to cast-in-place forms. The uses and advantages of precast and cast-in-place concrete are similar, except that precast concrete works are best in simple or repeatable shapes. Special care must be taken to make the joints between sections watertight.

### **Masonry**

Masonry (i.e., brick or stone) can be used for walls that will receive vertical or lateral pressure from earth cover. It is reinforced with steel bars that are put in the core of the masonry in places of high stress, such as weight-bearing walls or walls with earth against them. Masonry generally costs less than cast-in-place concrete.

### **Wood**

Wood can be used extensively in earth-sheltered construction for both interior and structural work including floors, roofs, and exterior walls. Wood is attractive for its color and warmth, and complements tile and masonry, as well as concrete walls, floors, and ceilings. However, using wood as a structural material requires wooden frame walls, which must withstand lateral pressure and be restricted to a burial depth of one storey. Beyond this depth, the rapidly increasing cost of wood construction restricts most builders from using it as a structural material.

Although wood can cost less than other materials, it does not offer the strength that a material such as steel does, so it may not be the best choice for structural material in some houses. Wood must also be treated with preservatives to prevent damage from moisture. If your structure can make practical use of wood as a framing material, employing carpenters who can rapidly construct a timber frame for an earth-sheltered house can decrease labor costs.

## Steel

Steel is used for beams, bar joists, columns, and concrete reinforcement. It is particularly useful because of its high tension and compression strength. The primary disadvantage of steel is that it must be protected against corrosion if it is exposed to the elements or to groundwater. It is also expensive, so it must be used efficiently to be economical as a structural material. Steel is an iron alloy with between 0.2 and 1.7 percent carbon.

Steel is used extremely widely in all types of structures, due to its relatively low cost, high strength to weight ratio, and speed of construction.

## Vocabulary Focus

8. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “My vision of structural and functional materials”. Share your ideas with the partner. (See appendix 1):

to provide	the components of the plumbing system
protective	for aesthetic purposes
to embed	need for durable building materials
include	the shape and appearance of a building
a great	barriers against the natural forces
to use	within the structural materials

9. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “Construction materials”. Share your ideas with the partner:

to provide	construction time and cost
to withstand	load at any reasonable depth
to increase	and store heat
to pour and reinforce	temperature swings
to resist	a good surface
to absorb	the pressure and moisture
to prevent	pressure on the walls and floors
to damage	at an on-site location
to manufacture	at the site
to decrease	building materials

10. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “Usage and characteristics of construction materials”:

to receive	the relatively low cost
to reinforce	to the groundwater

to put	damage from moisture
to withstand	labor costs
to treat	vertical or lateral pressure
to prevent	in places of high stress
to decrease	with steel bars
to protect	with preservatives
to expose	lateral pressure
due to	against corrosion

## Reflection (Рефлексия)

### Speaking & Listening

11. Group work. Prepare a presentation about building materials according to the text and deliver it to the class. Get ready to answer questions and discuss different points of view answering questions and persisting in your opinion (See appendix 2.)
12. Group work. Reflect on your professional speech (See appendix 3.)
13. Group work. Reflect on the professional speech of other groups. Get ready to discuss different points of view answering questions and persisting in your opinion (See appendix 3.)

### Writing

14. Create a quote about building materials, reflect on it, interpret and ground it (See appendix 6.)

### Listening and Speaking:

15. Present your quote to the class. Get ready to discuss different points of view answering questions and persisting in your opinion (See appendix 1.)
16. Listen to the quote presentation and get ready to discuss different points of view asking questions and persisting in your opinion (See appendix 1.)

### Writing

17. Write a reflection on one of the quotes from Ex. 1. (See appendix 3.)

## Unit 6

### DEVELOPING ONE-FAMILY MANSION HOUSE DESIGN

### I. Warming up (Разминка)

#### Listening and Speaking

1. Group work. Reflect on the following quote about the design, interpret it and share your ideas with the class. Get ready to discuss different points of view answering questions (See appendix 1.)

“The original idea makes design distinctive, function makes it work and quality adds value. “ Don Newgren.

## Useful terms and phrases

2. Read the following terms and phrases, mind their pronunciation:

one-family mansion house	одноквартирный жилой дом
project summary	аннотация к проекту
space-planning decision	объёмно-планировочное решение
floor plan	поэтажный план здания
exterior view of the building	внешний вид здания
structural concept, structural scheme	конструктивное решение
breakdown of premises	экспликация помещений
floor spaces	размеры помещений
perspective building view/ perspective building drawing	перспективное изображение здания/чертёж в перспективе (трёхразмерный чертёж)
sectional view of a building (from the foundation to the roof)	разрез здания
elevation of building	фасад здания
building elevations design	композиция фасадов здания
facade sections	элементы фасада
design features	особенности конструкции
mansion house/domestic building	жилой дом
wall thickness	толщина стен
door/window embrasure	дверной/ оконный проём
floor slab	плита перекрытия
project feasibility	осуществимость проекта
customer orientation	ориентация на клиента
building location	расположение дома
building style	стиль дома
design special feature	особенность проекта

## II. Evocation (Вызов)

### Speaking & Listening

3. Group work. Reflect on the following questions about one-family mansion house design and share your ideas with the group:

- What difficulties can you face creating one-family mansion house design?
- What are the stages of the one-family *mansion house* design?
- What can be the design special feature?

4. Group work. Report your ideas to the class. Get ready to discuss matters of opinion.

## **Realization (Осмысление)**

### **Speaking & Listening**

*5. Group work. Role-play the following situation: Your client commissions you to develop one-family mansion house design. Talk over the matter and develop one-family mansion house design. Take into account the following points:*

- House location;
- house style;
- floor plan;
- exterior view of the building;
- breakdown of premises;
- building materials;
- the cost of the project.

### **Writing & Speaking**

*6. Work out the structure of the presentation and present it to the class.*

## **Reflection (Рефлексия)**

### **Listening & Speaking**

*7. Group work. Present your projects to the client. Get ready to discuss it answering questions and persisting in your opinion.*

### **Writing**

*8. Write an essay reflecting on your project and its success.*

## **Module 3**

### **FROM THE HISTORY OF ARCHITECTURE**

### **Unit 7**

#### **ANCIENT STRUCTURES**

## **I. Warming up (Разминка)**

### **Listening & Speaking**

*1. Group work. Reflect on the following quote about historic buildings, interpret it and share your ideas with the class. Get ready to discuss different points of view answering questions. The following lexis can be helpful. (See appendix 1):*

“Historic buildings are a proud and significant part of our, and every, nation’s heritage. They are an irreplaceable element of the collective memory of local communities...They contribute both to our sense of identity and to that regional distinctiveness which is so valuable and so vulnerable.” Stevens, J. Sir.

heritage	наследие
irreplaceable	незаменимый
community	общество, сообщество
contribute to	вносить вклад в
sense of identity	чувство индивидуальности
distinctiveness	самобытность, своеобразие
vulnerable	восприимчивый, уязвимый

### Useful terms and phrases

2. Read the following terms and phrases, mind their pronunciation:

megalithic structure	каменная постройка
to raise a structure/tent	возводить сооружение, жилище
sacred site	религиозное, святое место
mystical rite	оккультный обряд, церемония
upright stone	столб (вертикальный элемент конструкции )
lintel	архитравная балка, перемычка над проёмом
to pervade manners and customs	распространяться /охватывать обычай и нравы, быт
immortality of the soul	бессмертие души
embalming and mummification	бальзамирование и мумификация
sculptured effigy	скulptурное изображение
to preserve a dead body	сохранить мёртвое тело
mastaba	мастаба (древнеегипетская гробница)
battered/inclined wall	стена с наклоном
to face with limestone	облицовывать известняком
to convey the message of authority and eternity	передавать/ выражать идею власти и бессмертия
to abound with	изобиловать
departure in style	новшество в стиле
trabeated style	стиль, характеризуемый антаблементом
post-and-beam	стоечно-балочная конструкция
to space	располагать с определёнными интервалами
spanning capability	перекрывающая способность
continuous flat slab	неразрывное безбалочное перекрытие
colonnaded courtyard	украшенный колоннами четырёхугольный двор
clerestory opening	ленточное окно

**Vocabulary Focus**

3. Match the words and phrases to their translation:

a)

to emerge	обретать форму, складываться
megalithic structure	религиозное, святое место
to raise a structure/tent	оккультный обряд, церемония
for a religious or mystical purpose	столб (вертикальный элемент конструкции )
sacred site	появляться, возникать
mystical rite	громадная архитравная балка
upright stone	возводить сооружение, жилище
colossal lintel	каменная постройка
to take shape	с религиозной или оккультной целью

b)

chamber	бессмертие души
architectural heritage	неприступная гробница
primary building material	скульптурное изображение
to pervade manners and customs	сохранять мёртвое тело
immortality of the soul	жизнь вечная
impregnable tomb	бальзамирование и мумификация
sculptured effigy	основной строительный материал
to preserve a dead body	архитектурное наследие
everlasting life	комната, палата
embalming and mummification	распространяться /охватывать обычай и нравы, быт

c)

permanence	ступенчатая пирамида
battered/inclined wall	поминальный храм
to face with limestone	капитальное сооружение
stepped pyramid	изобиловать
conventional pyramid shape	новшество в стиле
mortuary temple	долговечность, прочность
mastaba	выражать идею власти и бессмертия
to abound with	облицовывать известняком
departure in style	традиционная форма пирамиды
to convey the message of authority and eternity	стена с наклоном
permanent structure	мастаба (древнеегипетская гробница)

d.

expression in stone	ленточное окно
trabeated style	украшенный колоннами четырёхугольный двор
continuous flat slab	храм, святилище
clerestory opening	располагать близко
colonnaded courtyard	стоечно-балочная конструкция
sanctuary	воплощение в камне
spanning capability	стиль, характеризуемый антаблементом
to space closely	сплошное безбалочное перекрытие
post-and-beam	перекрывающая способность

## II. Evocation (Вызов)

### Speaking & Listening

4. Individual and group work. Today you will make an excursion to the history of architecture. Work individually and fill in the first column of the chart “K-W-L” («Знаю – Хочу знать – Узнал»), then discuss in groups what you know about the beginning of architecture. The following questions can be helpful:

1. When did architecture emerge?
2. Where did architecture begin to evolve?
3. What ancient structures do you know?

Working chart “K-W-L” («Знаю-Хочу знать-Узнал»)

We know about the history of architecture	We want to know about the history of architecture	We have learnt about the history of architecture. What is left to learn
<i>Categories of information we are going to use:</i> A. B.	<i>Resources for getting information</i>	
<i>What categories of information can you familiarize with, reading the article:</i> A.		

5. Group work. Report your concept of ancient architecture to the class.
6. In the first column of your chart find information which is referred to the same category. What categories of information can you separate out? Fill in the part of the chart which is called “Categories of information”.
7. Speculate on the following: what categories of information can you familiarize with, reading the text.
8. Ask questions which you have in connection with the studied theme and fill in the second column of the working chart “I want to know about the history of architecture”.

### **III. Realization (Осмысление)**

9. Read the following terms and phrases, mind their pronunciation:

ringed	отмеченный кружком, в кольцах
ancient worship	древнее богослужение
proportion generously	иметь крупную соразмерность
trilithon	трилит
enclosing circle	оградительное кольцо
sandstone	песчаник
to set in pits	устанавливать в углубления
landscaped trench	озеленённый ров
forerunner	предшественник
to express the perpetuity of the soul	выражать, изображать вечность души
the most stable of all geometric forms	самая устойчивая из всех геометрических форм
low-carved relief	низкое рельефное изображение
hieroglyphics	иероглифическое письмо
to orient to the cardinal points	ориентировать на четыре части света
overpowering pyramidal form	подавляющая форма пирамиды
proportion generously	иметь крупную соразмерность
hypostyle hall	гипостильный зал
entrance pylon	входной пилон / опора
sun-dried bricks	воздушносухой кирпич

10. Read the text and fill in the 3<sup>rd</sup> column of the table “K-W-L”

#### **Ancient structures**

Somewhere, many thousands of years ago, someone built the first structure. But who this person was or how the structure was built remains a mystery. Archeologists could not determine the precise origin of construction. The emergence of architecture followed endless centuries of primitive development.

#### **Paleolithic Age**

During the Paleolithic or Old Stone Age, mankind's energy was concentrated on survival – the search for food. A primitive man lived and slept outside in the open air.

His only shelter might be the bough of a tree or a natural cave, but it is clear that the earliest humans created almost nothing.

### **Neolithic Age**

Only when man freed himself from the struggle for survival, civilization started to develop. At that time a primitive man learned to live in a permanent village as a part of a tribe. He invented many tools that made life easier and, once settled. The primitive people took shelter under trees, which inspired huts that were made of branches, reeds and mud.

### **Primitive hut**

The tents raised on branches, became the first tents. Huts, natural caves, and tents were the three primitive types of human dwellings which inspired all later architectural development.

### **Megalithic structures**

The Neolithic Age was also the period of megalithic (meaning: great + stone) structures which were usually erected for religious or mystical purposes. A foremost example of these impressive structures is Stonehenge<sup>1</sup> built in several phases on a sacred site on the Salisbury Plain<sup>2</sup>. Stonehenge was a highly symbolic place which was probably used for *ancient worship or other mystical rites*.



In form Stonehenge is a series of concentric rings of standing stones around an *altar stone* at the center. The first ring has a horse-shoe plan of originally five *trilithons*<sup>3</sup>, and each of two upright stones is supporting a single colossal lintel. Beyond these there was first a circle of smaller uprights, sacred "blue" stones, and then an outer, *enclosing circle* of sandstone monoliths 13.5 feet high, which supported a continuous lintel. Beyond this a circle of small stones" were set in *pits* and farther out, a landscaped trench separated the site from the surrounding land. A long avenue marked by uprights sets up an axis, identified by a large stone with a pointed top.

The history of civilization – and of architecture – did not evolve at any one specific centre. Rather, it emerged simultaneously at several areas of cultural development: the river valleys of the Tigris and Euphrates in Mesopotamia, the valley of the Nile in Egypt, the Indus valley in northwest India, and the Valley of the Yangtse in China. Which civilization came first, nobody knows for certain. We do know, however, that wherever people gathered in groups, some sort of architecture resulted. For our purposes, we shall pick up the thread of Western architectural development in the valley of the Nile.

<sup>1</sup> **Stonehenge** – a prehistoric, mysterious circle of upright stones in southern England. Construction on the great monument began 5,000 years ago; the famous stones that still stand today were put in place about 4,000 years ago.

<sup>2</sup> **Salisbury Plain** – one of Great Britain's best-known open spaces, consisting of a plateau-like area covering about 300 square miles (775 square km), in the county of Wiltshire, England.

<sup>3</sup> **Trilithon** – a structure consisting of two large vertical stones (posts) supporting a third stone set horizontally across the top (lintel). It is commonly used in the context of megalithic monuments. The most famous trilithons are those of Stonehenge in England and those found in the Megalithic temples of Malta, both of which are UNESCO World Heritage Sites.

## **Egyptian architecture**

Egypt, a mysterious land of the Pharaohs, was ancient even to the ancients. It was viewed by the Greeks and Romans of 2000 years ago in much the same way as we view the ruins of Greece and Rome today.

As long ago as 5000 B.C., The Egyptians were a people already highly civilized and skilled in the arts of peace and war. The building forms that took shape in ancient Egypt were the forerunners of what the Western world calls its architectural heritage.

On the banks of the Nile Egyptians founded their cities – for both the living and the dead. On the east bank there were temples, while on the west bank there were tombs and royal pyramids.

The cliffs flanking the Nile valley provided the stone which became the primary building material of the Egyptians. The Nile also provided mud, which the Egyptians used to produce sun dried bricks. These were used to construct houses and other structures that didn't require the permanence of tombs and temples. Timber was scarce and therefore rarely used in permanent construction.

Another force which had a powerful influence on the development of Egyptian architecture was the religious belief in life after death. This concept of everlasting life pervaded all manners and customs. To achieve the immortality of the soul, it was essential to preserve in death all that had existed in life. Thus, we find bodies kept from decay through highly skillful methods of embalming and mummification.

Once the dead body was preserved, it also had to be protected by an impregnable tomb. This was more difficult, and became one of the important principles of Egyptian architecture. The preservation of the soul involved several other common practices. Placed within the several chambers of the tomb there were sculptured effigies and an entire household of family possessions – furniture, utensils, jewellery, etc. Carved or painted on the tomb walls there were pictures of the family and servants of the dead people, while scenes of food and drink were included to nourish the soul.

### **Tomb Architecture**

The tombs of the ancient Pharaohs took the form of the pyramid. They served to protect and express the perpetuity of the soul within. With the possible exception of the cone, the pyramid is the most stable of all geometric forms. Its great mass is the essence of permanence, and it is likely that this form was a conscious and logical selection. The walls of Egyptian tombs were generally covered with paintings or low-carved reliefs. The hieroglyphics, or symbol writing, which surrounded these pictures were usually descriptions of the person and prayers that would be helpful in the after-life.

### **Temple Architecture**

Egyptian temple architecture was essentially an expression in stone, and therefore, in the trabeated style, that is post-and-beam. Columns were generously proportioned and closely spaced because the stone lintels had limited spanning capability. Continuous flat slabs of stone formed the roofs of the temples.

Basically the temple plan was axially organized and consisted of three parts: a colonnaded courtyard, a hypostyle hall<sup>4</sup>, and a sanctuary. The entrance pylon was formed by two massive towers, with battered or inclined walls which were united by a tall door. As one penetrated the building, the spaces became gradually smaller and darker until one reached the sanctuary. From the open courtyard, one entered the hypostyle hall which was lit from above clerestory openings. At the same time, the floor rose as the ceiling became lower.

Windows were virtually nonexistent for several reasons. First, the activities within the temples were mysterious and secret, not for the eyes of the average citizen. In addition, the strong light reflecting off the desert made windows unnecessary, while the desert heat and occasional storms made them undesirable. Column capitals were derived from indigenous plants, such as lotus, papyrus, and palm.

### Examples

The earliest historic tombs were the *mastabas*<sup>5</sup>, generally constructed for the noble men and the middle class. Small and rectangular, with battered walls and flat roofs, mastabas were faced with limestone blocks and appeared permanent.

The first pyramid-shaped tomb was built around 2700 BC at Saqqara<sup>6</sup>. It was the stepped Pyramid of King Zoser<sup>7</sup> which was, strictly speaking, not a pyramid at all, but rather a series of mastabas placed one upon another. It was built by Imhotep<sup>8</sup>, who is considered to be the first architect in history.

The most famous royal tombs are those at Giza from about 2600 BC. The three great pyramids of Cheops<sup>9</sup>, Chephren<sup>10</sup>, and Mykerinus<sup>11</sup> were constructed in the

<sup>4</sup> **Hypostyle hall** – interior space whose roof rests on pillars or columns. The word means literally “under pillars” and the design allows for the construction of large spaces – as in temples, palaces, or public buildings – without the need for arches.

<sup>5</sup> **Mastaba** – (meaning "house for eternity" or "eternal house"), is a type of ancient Egyptian tomb in the form of a flat-roofed, rectangular structure with outward sloping sides that marked the burial site of many eminent Egyptians of Egypt's ancient period.

<sup>6</sup> **Saqqara** – the main cemetery of the Egyptian pharaohs at Memphis. It was located on the western plateau, 40 km south of Cairo. Pharaohs from as early as the first dynasty used Saqqara for their necropolis.

<sup>7</sup> **Stepped Pyramid of King Zoser** -- is thought to be the first pyramid ever built in Egypt and the oldest stone building still standing in Egypt. His pyramid was built and designed by the architect Imhotep.

<sup>8</sup> **Imhotep** – the world's first named architect who built Egypt's first pyramid, is often recognized as the world's first doctor, a priest, scribe, sage, poet, astrologer, and a vizier and chief minister. His name means "the one that comes in peace".

<sup>9</sup> **The Great Pyramid of Cheops** – the only one of the Seven Wonders of the Ancient World that is still standing. It is also the oldest of the Seven Wonders. It was originally built for the pharaoh Khufu. The ancient Greeks called him Cheops. It was built approximately 4,500 years ago, in about the same era as Stonehenge in England.

<sup>10</sup> **The Pyramid of Chephren** – the Pyramid of king Khafre (Chephren), son and successor of Cheops is considered the second biggest pyramid in Giza plateau, it is 469 feet tall and slightly shorter than the pyramid of his father Cheops.

<sup>11</sup> **The Pyramid of Mykerinus** – the Pyramid of Menkaure(Mykerinos), located on the Giza Plateau on the southwestern outskirts of Cairo, Egypt, is the smallest of the three Pyramids of Giza. It was built to serve as the tomb of the fourth dynasty Egyptian Pharaoh Menkaure.

conventional pyramid shape. The great pyramid of Cheops was the largest mass of stone ever erected by man. It covered 13 acres, was about fifty-storey high, and its sides were oriented to the cardinal points. The essential pyramidal form was overpowering and clearly conveyed the message of authority and eternity.

Egypt abounded with great temples of the priest class. The largest of these was the Great Temple of Amon (Karnak)<sup>12</sup> which was begun around 2000 BC. For several hundred years, it was added to by many pharaohs until it appeared as a group of temples. The mortuary temple of Queen Hatshepsut<sup>13</sup> was a departure in style. It consisted of three terraced courts cut into rock and situated at the foot of dramatically vertical cliffs.

*11. Read the text once again and correlate (coomhecum) received information to the questions which were formulated before reading the text. Separate out the new information you have not predicted. Have you got answers to all the questions? Find answers independently and fill in the corresponding column of the table.*

*12. Pair work. Discuss the following: what new information have you learnt from the text?*

## Vocabulary Focus

*13. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “A general concept of megalithic structures”. Share your ideas with the partner:*

to erect	for ancient worship or other mystical rites
to build	plan of five trilithons
a highly	of concentric rings of standing stones
to use	in pits
to support	the site from the surrounding land
a series	for religious or mystical purposes
to set	on a sacred site
to separate	symbolic place
a horseshoe	a single colossal lintel

---

<sup>12</sup> **Great Temple of Amon (Karnak)** – the temple of Karnak was known as Ipet-isut by the ancient Egyptians. It is a city of temples built over 2000 years and dedicated to the Theban triad of Amun, Mut and Khonsu. This derelict place is still capable of overshadowing many of the wonders of the modern world and in its day must have been awe inspiring.

<sup>13</sup> **Temple of Queen Hatshepsut** – the Queen Hatshepsut Temple in Luxor honors the longest living female Pharaoh of Egypt. It is well preserved and definitely worth seeing for anyone who loves Egyptian history. Hatshepsut was the fifth pharaoh of the eighteenth dynasty in Ancient Egypt.

14. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “My vision of the Egyptian architecture”. Share your ideas with the partner. (See appendix 1):

a mysterious	manners and customs
primary	a dead body
religious	sculptured effigies in the tomb chambers
to pervade	pictures on the tomb walls
to preserve	sun dried bricks
to place	building material of the Egyptians
to carve	belief in life after death
to produce	land of the Pharaohs

15. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “Tomb architecture”. Share your ideas with the partner:

to take	of permanence
to protect	with paintings or low-carved reliefs
the most stable	with limestone blocks
the essence	in the conventional pyramid shape
to cover	to the cardinal points
to face	the form of the pyramid
a series	and express the perpetuity of the soul
to construct	of all geometric forms
to orient	of mastabas placed one upon another

16. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “Temple architecture and its characteristic features”. Share your ideas with the partner:

an expression	the roofs of the temples
to proportion	organize the temple plan
limited	from indigenous plants
to form	with great temples
axially	from clerestory openings
to derive	in stone
to abound	spanning capability
to light	columns generously

17. Group work. Prepare presentations about ancient buildings raising the following points:

1. The first megalithic structures (form, size, building materials).
2. Ancient Egyptian architecture (general information).

3. Distinctive features of ancient Egyptian temple architecture.
4. Architectural features of Egyptian tomb architecture.

#### **IV. Reflection (Рефлексия)**

##### **Listening, Speaking & Writing**

18. *Pair work. Discuss the following: What is your concept of the ancient architecture from the professional point of view? What contribution have ancient architects made to the development of architecture? Share some extra information you have learnt answering your own questions. (See appendix 1.)*
19. *Make an annotation to the text “Ancient structures”. (See appendix 7.)*

#### **Grammar Focus**

##### **Participle I, II**

20. *Read the following sentences paying attention to the words in italics in the function of attribute (определение). Translate the sentences:*

1. The tents *raised* on branches, became the first tents.
2. The Neolithic Age was also the period of megalithic structures *erected* for religious or mystical purposes.
3. In form Stonehenge is a series of concentric rings of *standing* stones around an altar stone at the center.
4. The hieroglyphics or symbol writing *surrounded* these pictures were usually descriptions of the person and prayers that would be helpful in the afterlife.
5. A *landscaped* trench separated the site from the *surrounding* land.
6. The Egyptians were a people already highly *civilized* and *skilled* in the arts of peace and war.
7. Columns were generously proportioned and closely spaced because the stone lintels had limited *spanning* capability.
8. The entrance pylon was formed by two massive towers, with *battered* or inclined walls which were united by a tall door.
9. The first *pyramid-shaped* tomb was built around 2700 BC at Saqqara.

21. *Pair work. Discuss the following statements with your partner. Express your own opinion. (See appendix 1):*

1. Used for *ancient worship or other mystical rites*, Stonehenge was a highly symbolic place.
2. The earliest historic tombs were the mastabas generally constructed for the noble men and the middle class.
3. Served to protect and express the perpetuity of the soul within, the pyramid was the most stable of all geometric forms.
4. The first pyramid-shaped tomb was the stepped Pyramid of King Zoser which was, strictly speaking, not a pyramid at all.
5. Conveying the message of authority and eternity, the essential pyramidal form was overpowering.

6. Being axially organized, the temple plan consisted of three parts: a colonnaded courtyard, a hypostyle hall, and a sanctuary.

## Unit 8

### GREEK AND ROMAN ARCHITECTURE

#### **Part I** **THE ELEMENTS OF CLASSICAL ARCHITECTURE**

##### **I. Warming up (Разминка)**

##### **Listening & Speaking**

1. *Group work. Reflect on the following quote about Greek architecture, interpret it and share your ideas with the class:*

“Proportions are what make the old Greek temples classic in their beauty. They are like huge blocks, from which the air has been literally hewn out between the columns. “- Arne Jacobsen.

##### **Useful terms and phrases**

2. *Read the following terms and phrases, mind their pronunciation:*

to hew out	вырубать, высекать
order	архитектурный ордер
molding	лепное украшение, архитектурный облом
supporting element	поддерживающая часть, опорный элемент
accepted way	общепринятый метод
entablature	антаблемент
spanning element	перекрывающий элемент
architrave	архитрав, архитравная балка
frieze	фриз
cornice	карниз
base	пьедестал, цоколь, основание колонны
shaft	ствол колонны
capital	капитель колонны
stylobate	стилобат
flat pavement	мощение, каменный пол
plinth	плинт
remainder of the base	оставшаяся часть базы
torus (tori)	полукруглый фриз
scotia	скоция, трохил
fillet/ band	горизонтальный поясок, выкружка

concave profile	вогнутый профиль
fluting	рифление
groove	канавка
necking	обвязка колонны, выкружка колонны
bulge	выдаваться, выступать
abacus	абака
echinus	эхин

**Vocabulary Focus**

3. Match the words and their translation:

a)

molding	различаться
accepted way	служить эстетической цели
spanning element	каменный пол, мощение
to distinguish	лепное украшение
circular block	скопление лепных украшений
supporting element	круглый блок
to serve an aesthetic purpose	вертикальная канавка
distinct characteristics	общепринятый метод
flat pavement	индивидуальная особенность
assemblage of moldings	опорный элемент
vertical groove	перекрывающий элемент

b)

architrave	рифление
convex molding	стилобат
shaft of the column	канавка
capital	горизонтальный поясок, выкружка
stylobate	антаблемент
torus	архитрав, архитравная балка
groove	ствол колонны
fillet/ band	выпуклое лепное украшение
fluting	капитель колонны
entablature	полукруглый фриз

4. Pair work. Match the words to their explanations:

Frieze	A convex molding just below the abacus of a Doric capital.
Capital	The uppermost part of an entablature, located above the architrave and the frieze.

Cornice	A horizontal band that runs above doorways and windows or below the cornice. In classical architecture, it is a part of the entablature, located between the architrave and the cornice.
Abacus	The lowest element of the entablature which rests on top columns.
Echinus	The uppermost element supported by the column. Its components include the architrave, the frieze and the cornice.
Plinth	A crowning member of a column, providing a structural support for the horizontal member (entablature) or arch above. In the Classical styles, it is the architectural member that most readily distinguishes the order.
Architrave	The stepped platform on which colonnades of temple columns are placed.
Entablature	The base or platform upon which a column, pedestal, statue, monument or structure rests.
Stylobate	The uppermost portion of the capital of a column, immediately under the architrave.

## II. Evocation (Вызов)

### Writing, Listening & Speaking

5. *Group work. Read the questions and write down individually everything you know about ancient orders. Then discuss ideas with your group.*

1. What ancient orders do you know?
2. What is an order?
4. What parts does an order consist of?
5. What are the most distinct characteristics of an order?
6. *Group work. Report the class your concept of ancient orders.*

### Writing

7. *Fill in the first column of the “logbook” (бортовой журнал)*

<i>I know about ancient orders</i>	I have learnt about ancient orders
------------------------------------	------------------------------------

## III. Realization (Осмысление)

8. *Read the text and answer the following questions:*

1. What are the main parts of the column?
2. Where is the column placed?
3. What is the lowest part of the base?
4. What is placed on top of the base?

5. What element is on top of the shaft?
6. What is the upper horizontal part of the column?
7. What parts does the entablature comprise?

8. Read the text once again and fill in the second column of the “logbook”

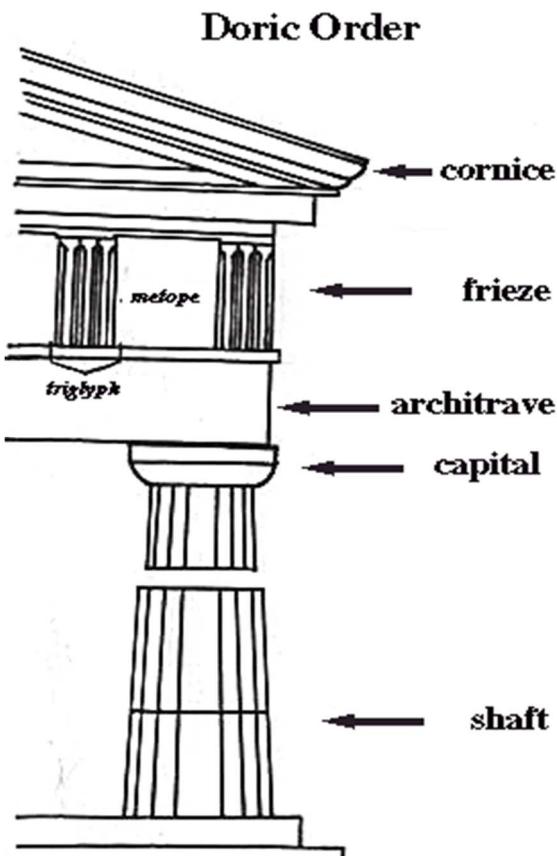
### The Elements of Classical Architecture

All classical architecture of the Greco-Roman tradition is composed in one language of forms. These elements of classical architecture include specific moldings and assemblages of moldings called an Order. An order is an accepted way of assembling a column (supporting element) with an entablature (spanning element) while imparting a certain character.

The Classical orders are ancient styles of classical or neoclassical building design distinguished by the type of column and entablature (architrave, frieze and cornice) used. There are five recognized orders: Doric, Ionic and Corinthian are Greek; Tuscan and Composite are Roman.

#### Parts of a Column

An order is divided into a shaft, its base and its capital. In classical buildings the upper horizontal part is called an entablature. The entablature is supported by the column. It is commonly divided into the architrave, the frieze and the cornice. To distinguish between different classical orders, the capital is used as the most distinct characteristics.



A complete column and entablature consist of a number of distinct parts. At the bottom there is the *stylobate*. The stylobate is a flat pavement on which the columns are placed. Out of the stylobate the *plinth* comes. The plinth is a square block – sometimes circular – which forms the lowest part of the base. Further up the remainder of the base comes: one or many circular moldings with profiles. Common examples are the Torus, the Scotia, fillets or bands. The Torus is a semi-circular convex molding, while the Scotia has a concave profile.

On top of the base, the *shaft* is placed. The shaft is cylindrical in shape and both long and narrow. It is placed vertically atop the base. The shaft is sometimes decorated with fluting. Fluting involves vertical grooves. Sometimes the shaft is wider at the bottom than at the top.

The *capital* comes on top of the shaft. The function of the capital is to concentrate the

weight of the entablature onto the shaft, but it also serves an aesthetic purpose. The simplest form of the capital is the Doric, consisting of three parts. The *necking* is the continuation of the shaft, but it is visually separated by one or many grooves. The *echinus* lies atop the necking. It is a circular block that bulges outwards towards the top. This is so in order to support the abacus. The abacus is the third part of a Doric capital. It is a square block that supports the entablature which lies above.

The entablature consists of three horizontal layers, all of which are visually separated from each other using moldings or bands. The three layers of the entablature have distinct names: the architrave comes at the bottom, the frieze is in the middle and the cornice lies on the top.

### Vocabulary Focus

9. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The ancient order”. Share your ideas with the partner:

an accepted	outwards towards the top
to distinguish	an aesthetic purpose
to divide	the lowest part of the base
to support	vertically atop the base
the most	the weight of the entablature
to form	by the type of column and entablature
to place	by the column
to concentrate	way of assembling a column
to serve	distinct characteristics
to bulge	into a shaft, a base and a capital

### IV. Reflection (Рефлексия)

#### Speaking & Listening

10. Group work. Prepare a presentation about ancient orders according to the text and present it to the class. Get ready to discuss it and answer questions persisting in your own opinion.

11. Group work. Reflect on your own professional speech. (See appendix 3.)

12. Group work. Reflect on the professional speech of other groups. (See appendix 3.)

13. Write an essay under the title “An ancient order.”

## Part II

### ORDERS OF CLASSICAL ARCHITECTURE

#### I. Warming up (Разминка)

1. *Pair work. Read the two building quotes and discuss the following: Which of the two quotes attracts your professional attention? Why? What was of great importance in building ancient constructions in your professional opinion?*

- a) "Greek architecture is the flowering of geometry." - Ralph Waldo Emerson.  
 b) "A great building must begin with the immeasurable, must go through measurable means when it is being designed, and in the end must be unmeasured." Louis I. Kahn.

#### Useful terms and phrases

2. *Read the following terms and phrases, mind their pronunciation:*

basilica	базилика (вытянутое в плане прямоугольное здание, разделённое на нефы)
elaborate	сложный, искусно сделанный
columnned portico	многоколонный портик (галерея)
faceted	фацетный, многогранный
squat	толстый, широкий
to channel	прорезать каналами
flute	каннелюра (колонны), нарезать же-лобки
register	часть, элемент
metope	метоп
unit	элемент
band	поясок, валик,
to entwine	сплетаться
aeolic order	эолийский ордер
fluted pillar	колонна с каннелюрами
slender pillar	тонкая колонна
volute	волюта
egg-and-dart	ионики (архитектурный орнамент)
motif	мотив, узор, элемент орнамента
counterpart	часть
entasis	выпуклость колонны, энтазис
mark	характеризовать, выделять
curved tapering	изогнутая коническая форма
attic base	аттическая база
fillet	выкружка (архитектурный облом)

ball shaped	сферической формы
acanthus	акант (орнамент), архитектурный декор из листьев аканта
stalk	стебель
scooped	имеющий углубление
hollow	пустой, полый
concave curve	вогнутая кривая
foliage	листва
projecting	выступающий
dentil	дентикула, зубчатый орнамент
angle	угол
to adopt	затмствовать, внедрять, осваивать
adaptation	адаптация, доработка

*3. Match the words and their translation:*

*a.*

basilica	гладкий, ровный
elaborate	характерный, отличительный
smooth	ионики
fluted pillar	выпуклость колонны, энтазис
distinctive	базилика
egg-and-dart	сложный, искусно сделанный
entasis	колонна с каннелюрами
to originate	высеченная фигура
columned portico	уменьшенный
carved figure	зарождаться, появляться
diminished	многоколонный портик (галерея)

*b.*

curved tapering	затмствовать, внедрять
distinguishing mark	акант (орнамент)
to adopt	изогнутая коническая форма
angle	листва
adaptation	отличительный признак
foliage	угол
acanthus	адаптация, доработка
tier	вогнутая кривая
concave curve	слой, ярус

## **Evocation (Вызов)**

### **Writing, Listening & Speaking**

4. *Group work. Read the questions and write down individually everything you know about orders of classical architecture. Then, discuss ideas with your group:*

1. What Greek and Roman classical orders do you know?
2. Draw the chosen order and name its distinctive features.
5. *Group work. Report your ideas to the class.*

## **III. Realization (Осмысление)**

### **Reading & Speaking**

6. *Individual work. Read the text and answer the following questions:*

1. Where were the orders developed first?
2. What were the three main types of the portico columns?
3. What was the Doric order characterized by?
4. What was the Ionic order distinguished by?
5. What were the distinctive features of the Corinthian order?

7. *Read the text once again and make marginal marks:*

✓ - *I knew it;*

+ - *New information;*

- - *The information contradicts my knowledge( противоречит моим представлениям);*

? - *The information isn't enough or understandable (непонятна или недостаточна).*

8. *Get ready to answer the following questions:*

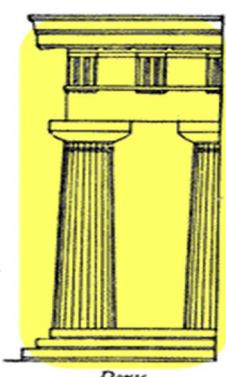
1. What did you know about orders before reading the text?
2. What information did you find new reading the text?
3. What information contradicts your knowledge?
4. What information isn't enough or understandable for you?

### **Orders of classical architecture**

The public buildings of the ancient Greeks and Romans were almost all designed using the five orders of architecture. Their public architecture like temples, public baths, or basilicas, was in most cases very elaborate so as to impress the spectator with the importance of the building and the wealth of its builders.

The orders were initially developed by the Greeks. The Greeks built few public buildings apart from temples, and the basic form of a Greek temple, is the main sanctuary surrounded on all four sides **by a columned portico**. The columns of the portico were of the same design, and conformed to one of three basic types, the Doric , the Ionic and the Corinthian . The Romans, in their temples used the Greek orders, together with their own orders, the Tuscan and the Composite Orders.

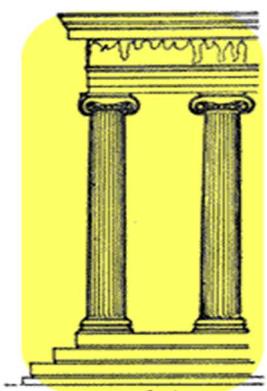
**The Doric order** originated on the mainland and western Greece. It is the simplest of the orders, characterized by short, faceted, heavy columns with plain, round capitals and no base. With the height that is only four to eight times its diameter, the columns are the most squat of all orders. The shaft of the Doric order is channeled with 20 flutes. The capital consists of a necking which is of a simple form. The echinus is convex and the abacus is square.



Above the capital there is a square abacus connecting the capital to the entablature. The entablature is divided into three horizontal registers, the lower part of which is either smooth or divided by horizontal lines. The upper half is distinctive for the Doric order. The frieze of the Doric entablature is divided into triglyphs and metopes. A triglyph is a unit consisting of three vertical bands which are separated by grooves. Metopes are plain or carved reliefs.

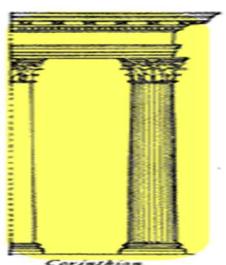
The earlier Greek forms of the Doric order came without an individual base. They are placed directly on the stylobate. Later forms, however, came with the conventional base consisting of a plinth and a torus. The Roman versions of the Doric order have smaller proportions. As a result they appear lighter than the Greek orders.

**The Ionic order** came from eastern Greece, where its origins are entwined with the similar but little known Aeolic order. It is distinguished by slender, fluted pillars with a large base and two opposed volutes in the echinus of the capital. The echinus itself is decorated with an egg-and-dart motif. The Ionic shaft comes with four more flutes than the Doric counterpart. The Ionic base has two convex moldings called tori which are separated by a scotia.



The Ionic order is also marked by an entasis, a curved tapering in the column shaft. A column of the Ionic order is nine or lower diameters. The shaft itself is eight diameters high. The architrave of the entablature commonly consists of three stepped bands. The frieze comes without the Doric triglyph and metope. The frieze sometimes comes with a continuous ornament such as carved figures.

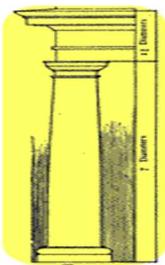
**The Corinthian Order** is a richly decorated, elegant style. The column is slender, generally diminished and fluted; the attic base, composed of three tori and three scotia divided by fillets, stands on a square plinth; the capital, ball shaped, has two tiers of acanthus or olive leaves, with small stalks rising above and forming four very small volutes, supporting the abacus, which is scooped in profile and also hollow, describing a concave curve. The capital is subjected to considerable variations within these limits, being much decorated.



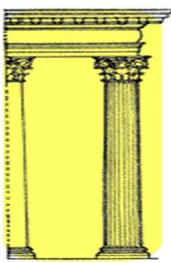
The entablature is elaborate, with well-formed, decorated architrave. It has a continuous frieze, plain or ornamented with foliage and sculpture, and a complicated projecting cornice, the lower member is often composed of dentils.

This Order was especially esteemed at the Renaissance, and has been largely adopted in modern work.

**The Tuscan order** has a very plain design, with a plain shaft, and a simple capital, base, and frieze. It is a simplified adaptation of the Doric order by the Romans. The Tuscan order is characterized by an unfluted shaft and a capital that only consist of an echinus and an abacus. In proportions it is similar to the Doric order, but overall it is significantly plainer. The column is normally seven diameters high. Compared to the other orders, the Tuscan order looks the most solid.



**The Composite Order** is, in general, a combination of the Ionic and Corinthian.



It has the same proportions as the latter and the same capital, with the exception that the stalks are replaced by the Ionic volute, one at each angle, and the echinus. It is a very ornate Order and was much favoured at the Renaissance, partly for this reason and partly because it was so often associated with the arch, an addition which is one of the marks distinguishing Roman architecture from Greek architecture.

#### 9. Fill in the “Marginal chart”:

✓	+	-	?
I knew that	I didn't know that	The information about ... contradicts my knowledge because ...	The information about ... isn't enough or understandable for me, because ...

#### Vocabulary Focus

10. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The Doric order”. Share your ideas with the partner:

to impress	by a round capital
to surround	with flutes
to conform	of a simple necking
to characterize	the spectator
to channel	for the Doric order
to consist	to one of three basic types
a unit	by a columned portico
distinctive	into triglyphs and metopes
to divide	consisting of three vertical bands

11. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “Distinctive features of the Ionic order”. Share your ideas with the partner:

to distinguish	by an entasis
to decorate	of three stepped bands
to mark	with Aeolic order

to decorate	by slender, fluted pillars
to consist	moldings called <i>tori</i>
to entwine	with an egg-and-dart motif
convex	with carved figures

12. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The Corinthian order and its characteristics”. Share your ideas with the partner:

richly	of three tori and three scotia
generally	by fillets
composed	on a square plinth
to divide	elegant style
to stand	diminished and fluted
ball shaped	in profile
two tiers	capital
scooped	a concave curve
describing	decorated with foliage and sculpture
ornament	of acanthus
a complicated	adopted in modern work
largely	esteemed
especially	projecting cornice

13. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “The Composite order”. Share your ideas with the partner:

to characterize	shaft
a simplified	high
an unfluted	the most solid
similar	by a very plain design
seven diameters	adaptation of the Doric order
to look	in proportions

14. Match the words from two columns to create a phrase and make sentences to use them in your own text entitled “Special features of the Tuscan order”:

to replace	much
a combination	at each angle
to favour	with the arch
one	by the Ionic volute
to associate	of the Ionic and Corinthian
the mark	in proportions
similar	distinguishing Roman architecture

## **IV. Reflection (Рефлексия)**

### **Speaking, Listening & Writing**

#### *15. Group work.*

*Group 1. Prepare a presentation about one of the orders and present it to the class.*

*Group 2. Listen to the presentations and comment on them using “Hats of Thinking” (See appendix 8.)*

#### **Grammar Focus**

#### *16. Read the following sentences and underline - ing forms. Translate the sentences:*

1. A structure of two upright stones supporting a lintel is called a trilithon.
2. A primitive man didn't have any tent living and sleeping in the open air.
3. He invented many tools making life easier.
4. The Greeks built sanctuaries surrounding them on all four sides by a columned portico.
5. The orders were initially developed by the Greeks.
6. The Doric order is the simplest of the orders, characterized by short, faceted, heavy columns with plain, round capitals and no base.
7. Above the capital there is a square abacus connecting the capital to the entablature.
8. A triglyph is a unit consisting of three vertical bands which are separated by grooves.
9. It is distinguished by slender, fluted pillars with a large base and two opposed volutes in the echinus of the capital.

#### *17. Pair work. Discuss the following statements with your partner. Express your own opinion. (See appendix 1):*

1. The public buildings of the ancient Greeks and Romans were almost all designed using the five orders of architecture.
2. The Doric order having short, heavy columns with plain capitals is the simplest of the orders.
3. The Corinthian order is a richly decorated, elegant style having a lot of decorative features.
4. Slender, fluted pillars distinguishing the Ionic order have a large base and two opposed volutes.
5. The Tuscan order consisting of simple architectural elements has a very plain design.

## **Module 4**

### **ARCHITECTURAL STYLES**

#### **Unit 9**

#### **THE HISTORY OF ARCHITECTURAL STYLES**

#### **I. Warming up (Разминка)**

*1. Group work. Reflect on the following quote about an architectural style, interpret it and share your ideas with the group. Get ready to discuss different points of view answering questions:*

“The principle of the Gothic architecture is infinity made imaginable.” Samuel Coleridge.

#### **II. Evocation (Вызов)**

##### **Speaking & Listening**

*2. Group work. Discuss the following questions and report your ideas to the class. Get ready to discuss different points of view.*

1. What is your idea of an architectural style?
2. What elements does a style include?
3. What are the features of any style?
4. What is the reason for the emergence of new styles?

#### **II. Realization (Осмысление)**

##### **Reading**

*3. Read the text and correct your answers to the questions from exercise 2. The following lexis can be useful:*

1. What is an architectural style?
2. What elements does a style include?
3. What is the reason for the emergence of new styles?

#### **An Architectural style**

An architectural style is a specific method of construction, characterized by the features that make it notable. A style may include such elements as form, method of construction, materials, and regional character. Most architecture can be classified as a chronology of styles which changes over time. These may reflect changing fashions, changing beliefs and religions, or the emergence of new ideas and new technology which make new styles possible.

Styles therefore emerge from the history of a society and are documented in the subject of architectural history. At any time several styles may be fashionable, and when a style changes, architects learn and adapt to new ideas. The new style is sometimes only a rebellion against an existing style, such as “post-modernism” (means “after modernism”) which has in recent years found its own language and split into a number of styles with other names.

notable	значительный, примечательный
beliefs	убеждения
subject	сюжет из архитектурной истории
to adapt to	приспосабливаться к
rebellion	противодействие
to split into	раскалываться на

4. Form groups according to the text numbers. Read and structure the text and discuss it with your group members to prepare a proper summary and a comprehension question for the members of your home group

### *Text 1* *Romanesque Architecture*

#### **Useful terms and phrases**

5. Read the following terms and phrases, mind their pronunciation:

to coin	создавать
basilica-style plan	базиликальный стиль, романский стиль
arcade	аркада, сводчатая галерея
barrel vault	свод двоякой кривизны
groin vault	крещатый свод
nave	неф
pier	пилястра, простенок между окнами
forceful outward thrust	мощный распор
arched vault	аркообразный свод
longitudinal	продольный
side aisle	боковой неф в соборе; проход между рядами в соборе
apse	апсида; полукруглая часть здания
radiating chapel	радиальная часовня
ambulatory	крытая аркада
transept	трансепт, поперечный неф собора
transverse aisle	поперечный проход
tower	пилон
engaged column	пилястр, полуколонна
diaphragm arch	разделительная арка
bay	бокс
compartment	помещение
compartmentalization	пространственное разделение
to arch	перекрывать сводом, придавать форму арки

thrust	горизонтальное или боковое давление
vaulted stone	куполообразный камень

### Romanesque Architecture

#### **What is “Romanesque” Architecture?**

The term “Romanesque” was coined in 1818 by Charles-Alexis-Adrien de Gerville<sup>14</sup> to describe the form of art and architecture that proceeded Gothic.

According to its name, Romanesque is inspired by Roman architecture. Similarities between Roman and Romanesque include round arches, stone materials, and the basilica-style plan used for secular purposes by the Romans.

The Romanesque period cannot be precisely defined but Romanesque architecture generally dates from 1000 to 1150, when Gothic began to take over. Romanesque was at its height between about 1075 and 1125.

#### **Romanesque Churches**

Romanesque architecture resulted from the great expansion of monasticism in the 10<sup>th</sup> and 11<sup>th</sup> centuries. At that time Europe first regained political stability after the fall of the Roman Empire. Several large monastic orders sprang up at this time and established churches all over Western Europe. Their churches were larger than the previous ones in order to accommodate a large number of priests and monks. They also gave an access to pilgrims who wished to view the saints’ relics kept in the churches.

To fulfill these functions, Romanesque churches extensively used a semicircular (“Roman”) arch for windows, doors, and arcades. Round arches were a salient feature of Romanesque architecture, and the windows were usually small, owing to the necessity for keeping the walls strong to support the outward pressure of the roof.

A barrel vault or groin vaults were used to support the roof of the nave while massive piers and walls contained the extremely forceful outward thrust of the arched vaults. The barrel vaults of Romanesque churches were typically divided by shafts (engaged columns) and diaphragm arches into square bays, or compartments. This compartmentalization was an essential characteristic that distinguishes Romanesque architecture from its predecessors.

Two basic church plans evolved in France became the most often used types. The early Christian basilica plan (longitudinal with side aisles and an apse) was also expanded to accommodate the expanding functions of large churches. Each one involved a system of radiating chapels (to accommodate more priests during mass), ambulatories around the sanctuary apse, and large transepts (transverse aisles separating the sanctuary from the main body of the church). Transepts were a feature of most Romanesque churches, and took an important part in the ornamentation.

The typical Romanesque church also had side aisles along the nave with galleries above them, a large tower over the crossing of the nave and transepts, and smaller towers at the church’s western end. In Italy the towers were built separately, and made a picturesque feature of these churches.

---

<sup>14</sup> Charles-Alexis-Adrien de Gerville – early French archaeologist and early architectural historian; coiner of the concept "Romanesque" for art.

## Text 2

### Gothic Architecture

#### ***Useful terms and phrases***

**6. Read the following terms and phrases, mind their pronunciation:**

ribbed vault	нервюрный свод
pointed arch	стрельчатая арка
rib	нервюра
to align	выравнивать по одной линии
diamond shapes	ромбовидная форма
buttress	контрфорс, опора
in-between	в промежутке
vault arching support	опора, поддерживающая свод
flying buttress	арочный контрфорс
stained glass	цветное стекло
rose window	круглое окно-розетка
lean outward	наклоняться наружу
to tumble down	упасть, рассыпаться
entry portal	главный вход
facial gable	лицевой вимперг/ фронтон
array	построение, расположение, порядок
to lay out	размещать
to range	классифицировать
multitude	масса
Gargoyle	Горгулья, выступающая водосточная труба
water spout	водосточная труба
gutter	водосточный жёлоб
accepted God	признанный бог

## Text 2

### Gothic Architecture

Gothic architecture emerged from Romanesque architecture in the year 1144 AD. A Benedictine abbot called Suger was building a new church outside Paris. He decided that he wanted something new and impressive. Suger wanted to make the Abby church of St. Denis so tall that it would seem to reach the heavens, and so amazing that everyone would remember it.



Notre Dame Cathedral

When people saw this new form of architecture, they were amazed. The Gothic style quickly spread. Towns and cities did not let their churches be outdone by churches elsewhere. They tried to build taller, longer, and more stunning churches than any other.

Many of the individual characteristics of gothic architecture, such as ribbed vaults and pointed arches, were also used in the Romanesque style. The way they were combined made gothic architecture unique. The ribs that held up the vaults were aligned so that they made diamond shapes on the ceilings, and had a good place for buttresses to be attached. In Gothic architecture separate chambers were connected without walls in-between each other. That created the impression of a larger interior, and allowed the ceiling to be higher. The outward pressure of the vaults brought the need for buttresses to keep the building together. They were moved away from the side of the building, and were connected to the vault arching supports. This form of buttress became known as a flying buttress, and became widely used in gothic architecture.

Windows were very important. They were often made of stained glass with bible scenes. Each window could take months to complete, because some were as much as one-hundred feet tall. Gothic cathedrals had hundreds of windows, but the interior was usually dim. The coloured glass did not allow as much light in as clear glass would.

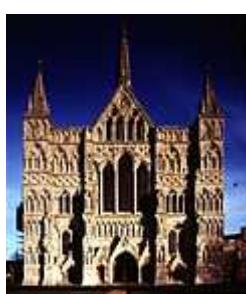
As gothic architecture spread from country to country, it changed a little. Each country had its own idea of what a cathedral should look like (i.e. the French centered on height, while the English centered on length). The only European country that did not really accept gothic architecture was Italy.

Probably the most famous of the gothic cathedrals is the cathedral of Notre Dame de Paris. Begun in 1163 and standing nearly 115 feet tall, it has all of the characteristics of gothic cathedrals including a huge rose window, a vaulted ceiling, and flying buttresses. Other famous gothic buildings include the Salisbury Cathedral in England; and the Chartres Cathedral in France.

### **The common characteristics of the Gothic Cathedrals**

The common characteristics of the Gothic cathedrals are the flying buttress, a great number of stained glass windows, vast amounts of statuary, and many vaulted roofs.

The Flying Buttress was innovated to help reinforce the walls which had a tendency to lean outward under the weight of the massive vaulted ceilings. If the buttresses had not been used the cathedrals would have eventually tumbled down under the pressure of their own mass. The other notable characteristic of these grand old buildings was the "Rose Window"<sup>15</sup>.



These buildings had a lot of stained glass which had been in use for many hundreds of years. The western Europeans of France and Germany began adding these complex patterns to their churches. The art form reached its creative zenith in the Rose Window. Rose windows were located over the entry portals, usually above the facial gables. They got

---

<sup>15</sup> A **rose window** (or **Catherine window**) – is often used as a generic term applied to a circular window, but is especially used for those found in churches of the Gothic architectural style and being divided into segments by stone mullions and tracery. The name “rose window” was not used before the 17th century and according to the *Oxford English Dictionary*, among other authorities, comes from the English flower name rose.

their name from the flower and their patterns were formed by the complex stain glass arrays created by the artists and craftsmen who erected and laid them out.

As far as the statuary of these magnificent buildings, it ranges from beautiful depictions of Mother Mary, Jesus Christ, and the multitude of canonized Saints to the horrid and the grotesque, most notably the Gargoyle. Gargoyles served a twofold purpose, first as a ward against evil spirits and secondly as the more practical water spout for the many gutters that lined the huge vaulted ceilings.

The Vaulted Ceilings of the middle ages were some of the most profound endeavors of mankind up to that point. Not only were they a representation of the power of the church and the local bishop that patroned their erection, but they also were a direct homage to the recently accepted God for the pagan Europeans. These vaults also represented a great deal of innovation from the older style temples in the form of the ribbed vault. These were a variation of the older Roman style groin vaults used in many of their temples and public buildings.

A magnificent example of this architecture is the Magna Carta Salisbury Cathedral<sup>16</sup>, at Lincoln. This Cathedral is unique to the Gothic's in that it actually started out nearly 300 years ago in 1072 as a church in the Romanesque style. This cathedral kind grew into a gothic over time. In 1121, the old, low, Romanesque roof was damaged by a fire and was replaced with stonework vaults and some of the first of the carved stone friezes depicting damnation were added over the entrances. In 1185, after major damage from an earthquake, the cathedral began its transformation into a properly "Gothic" style cathedral. The construction of the Nave proper was completed in the mid 13<sup>th</sup> century and another unique feature of the Early English Style the "double Arcade"<sup>17</sup> was added as well. This feature basically lends the illusion of a passageway over the choir aisles. It was during this time that the distinctively Gothic Flying Buttresses, Ribbed Vaulting, and a good deal of the Intricate Statuary were added. Another point of interesting note is that at one point during the 14<sup>th</sup> century the addition of its high central tower actually made it the tallest building in Europe.

---

<sup>16</sup> **Magna Carta Salisbury Cathedral** – Salisbury Cathedral, formally known as the Cathedral Church of the Blessed Virgin Mary, is an Anglican cathedral in Salisbury, England, and is considered one of the leading examples of Early English architecture. The main body was completed in only 38 years, from 1220 to 1258.

<sup>17</sup> **Arcade** – a series of arches carried by columns or piers, a passageway between arches and a solid wall, or a covered walkway that provides access to adjacent shops.

### Text 3

#### The Renaissance Architecture

#### *Useful terms and phrases*

7. Read the following terms and phrases, mind their pronunciation:

new-birth	возрождение
pillared drum	поддерживаемый колоннами барабан купола
edifice	величественное здание
chateau ( chateaux)	замок
town-hall/ guild-hall	ратуша
engaged column	полуколонна, пилястра
to clothe	оснащать, покрывать
to assimilate	воспринять, освоить
want of organic unity	отсутствие единого целого
structural sincerity	структурная прямота
to display faults	обнаруживать недостатки
delicate tracery	ажурная каменная работа
keep	сторожевая башня
stern tower	строгая башня
pediment	основание
border	обрамление
jamb	выступ стены
to surmount	увенчать
curved	закруглённый
scrolled	украшенный завитками
to alternate	чередоваться
to give texture	формировать структуру
roughness	суровость, резкость
projecting courses of masonry	выступающие слои каменной кладки
receding part	покатая часть
to veil in shadow	скрывать в тени

#### The Renaissance Architecture

One of the greatest periods of the world's history is called the Renaissance. This period, beginning about the year 1500, produced a new style of architecture which gradually displaced the Gothic. It was called the Renaissance style. But now we will try to see how it came about that a new style should appear.

On account of the great accumulation of wealth, men had leisure to study, and their study led them to learn about the Greeks and Romans and the wonderful things they had

done in literature, sculpture, and architecture. This study became a world-wide interest, making people of taste imitate the old arts, and doing so, they brought to life the classic beauties of an older time. The new style was called the Renaissance, or new-birth.

The men of this time added much to the older civilization. The art of painting, with Michelangelo, Leonardo da Vinci, and Raphael, revealed a new life to the world, and sculpture almost breathed the breath of the antique work of Greece. Architecture was revolutionized under the influence of Brunelleschi<sup>18</sup>, Michaelangelo, Bramante<sup>19</sup>, and a few others.

In a word, the characteristics of the Renaissance buildings are those of Greece and Rome applied to new and different kinds of buildings. Having studied the Greek and Roman buildings, we can best become acquainted with the Renaissance buildings.

First of all, the dome set on a pillared drum and crowned with a lantern, the whole church edifice, was the one great original production of the Renaissance. We see this in the Duomo at Florence<sup>20</sup>, and in St. Peter's<sup>21</sup> and St. Paul's cathedrals<sup>22</sup>. The wonderful palaces of Florence and Rome show the old Greek and Roman forms applied in new and beautiful ways. A lot of town-halls and guild-halls of the great European cities were treated in this way and were called Renaissance. The Renaissance style applied to the fronts, or facades of buildings along the fine streets of the time created a street architecture of a noble sort which one may recognize and study in hundreds of cities.



We have emphasized the meaning of «structural» in architecture, but, aside from the dome, the Renaissance architects did not do much that was new in structure. In fact they rather ignored structure in their use of columns, which supported nothing, and of engaged columns used only for ornament. Rich ornamentation was one of the chief characteristics of the buildings of the time and the semi-circular arch copied from Roman architec-

---

<sup>18</sup> **Filippo Brunelleschi** (1377 – April 15, 1446) – one of the foremost architects and engineers of the Italian Renaissance. He is perhaps most famous for his discovery of perspective and for engineering the dome of the Florence Cathedral, but his accomplishments also include other architectural works, sculpture, mathematics, engineering and even ship design. His principal surviving works are to be found in Florence, Italy.

<sup>19</sup> **Donato Bramante** (1444 – 11 March 1514) was an Italian architect, who introduced Renaissance architecture to Milan and the High Renaissance style to Rome, where his plan for St. Peter's Basilica formed the basis of design executed by Michelangelo.

<sup>20</sup> **The Duomo at Florence** – Santa Maria del Fiore (also known simply as the Duomo) is the cathedral of Florence known for its distinctive Renaissance dome. Its name ("Saint Mary of the Flower") refers to the lily, the symbol of Florence.

<sup>21</sup> **St. Peter's cathedral** – the parish now known as St. Peter's was established 10 August 1834 and the first church was constructed of logs at the southwest corner of Dufferin Avenue and Richmond Street. Prior to this, a travelling priest visited the area to celebrate Mass for Catholic residents. The church was dedicated to St. Lawrence and could hold 180 people. It was destroyed along with much of the town in the London fire of 11 April 1845.

<sup>22</sup> **St. Paul's cathedral** – the majestic St. Paul's Cathedral was built by Christopher Wren between 1675 and 1711. It is one of Europe's largest cathedrals and its dome is only exceeded in size by that of the St. Peter's Basilica in Rome.

ture was employed everywhere. Interior decoration also became very splendid. What the architects did was, to clothe their own inventions with classic details after familiarizing themselves with the remains of ancient Rome, and assimilating the spirit of Roman art.

The form and structure of their edifices was modern; the parts were copied from antique models. A want of organic unity and structural sincerity is often the result of those necessities under which a secondary and adapted style must labor, and thus even the best Renaissance buildings display faults.

When the buildings of the new style began to appear, they had no hint of the Greco-Roman styles. The churches were Gothic with high pointed arch and delicate tracery, the castles and keeps were stern towers, the home was a plain building.

Then in a hundred years, or even less, we see a complete change. All the new buildings are in the new style, ornamented with columns, entablatures, and pediments. The dwelling houses are no longer poor and mean, but fine, often magnificent. The villa, the mansion and the university have appeared. Except for the great domes of the churches, the new architecture consisted largely in adapted Greek and Roman features, and as these features were mostly present as decorations on cornices, doorways, windows, and balconies, a study of these four features would acquaint us with the appearance of the Renaissance style.

The doorway usually had a border around it covering jamb. At either side there were antique columns, or pilasters, while across the top there was the architrave, frieze, and cornice, probably copied from some building of ancient Rome. The whole doorway was surmounted by a pediment or, perhaps by a curved and scrolled variation of it.

The windows were similarly treated. Sometimes the curved top or the triangular were used. Often the two would be alternated along a facade. One or both were present in endless variety.

We may think of the builders of these facades as of an artist painting a picture. The architect could apply his colors in the colors of his building stones or marbles; he could give texture by the roughness or smoothness of his materials. The chief things were the masses, and the light and shades, which he could apply by means of his windows, doorways, cornices, and moldings, and by the projecting courses of masonry. He could arrange different colored stones and marbles so as to produce a pattern for the sake of decoration, as is so beautifully done on the front of the Doges' palace at Venice<sup>23</sup>. Wherever stones were raised or brought forward, lights would appear, and receding parts would be veiled in shadow. All the rules that govern an artist in composing a picture were applied to the composition of the facade.

---

<sup>23</sup> **The Doges' palace at Venice** – the Doges Palace "Palazzo Ducale" is a magnificent combination of Byzantine, Gothic and Renaissance architecture, the centre of the Venetian Empire and the seat of the Venetian Government. It was once the residence of the Doge, the elected ruler of the city.

## Text 4

### Baroque and Rococo Architecture

#### *Useful terms and phrases*

8. Read the following terms and phrases, mind their pronunciation:

facet	аспект, грань
surface texture	фактура поверхности
heighten immediacy	усилить чувственное представление
worshiper	прихожанин
heavenly concerns	небесные деяния
to propagate faith	пропагандировать веру
movement	оживление
participation	соучастие
viewpoint	точка обзора
subsidiary viewpoint	дополнительная точка зрения
current	направление
to refine	делать более утонченным, облагораживать
robust architecture	грубоватая архитектура
diffuse light	диффузное освещение, рассеянное освещение
smooth flowing masses	плавные обтекающие массы
isolated point	отдельная точка
to render	изображать, представлять
ethereal	лёгкий, неземной
unified space	единое пространство
continuous decorative schemes	непрерывный декоративный порядок
to unify the space	объединять пространство

### Baroque and Rococo Architecture

Baroque and Rococo are terms, applied to European art of the period from the early 17th century to the mid-18th century.

The derivation of the word Rococo is uncertain, though its source is probably the



French word “rocaille”, used to describe shell and pebble decorations in the 16th century.

Fundamentally a style of decoration, Rococo is much more a facet of late Baroque art than an autonomous style. During the Baroque period (c. 1600 – 1750), architecture, painting, and sculpture were integrated into

decorative ensembles. Baroque art was essentially concerned with the dramatic and the illusory, with vivid colours, hidden light sources, luxurious materials, and elaborate, contrasting surface textures, used to heighten immediacy and sensual delight. Ceilings of Baroque churches presented vivid views of the infinite to the worshiper and directed him through his senses toward heavenly concerns. Seventeenth-century Baroque architects made architecture a means of propagating faith in the church and in the state. Baroque palaces expanded to display the power and order of the state.

Baroque space, with directionality, movement, and positive molding, contrasted markedly with the static, stable space of the High Renaissance. Baroque space invited participation and provided multiple changing views. Renaissance space was passive and invited contemplation of its precise symmetry. A Renaissance building was to be seen equally from all sides, while a Baroque building had a main axis or viewpoint as well as subsidiary viewpoints. Attention was focused on the entrance axis or on the central pavilion, and its symmetry was emphasized by the central culmination. A Baroque building expanded to include the square facing it, and often the ensemble included all the buildings on the square as well as the approaching streets and the surrounding landscape. Baroque buildings dominated their environment; Renaissance buildings separated themselves from it.

During the period of the Enlightenment (about 1700 to 1780), various currents of post-Baroque art and architecture evolved. A principal current, generally known as Rococo, refined the robust architecture of the 17th century to suit elegant 18th-century tastes. Vivid colours were replaced by pastel shades; diffuse light flooded the building volume; and violent surface relief was replaced by smooth flowing masses with emphasis only on isolated points.

Churches and palaces still exhibited an integration of the three arts (Renaissance, Mannerist art, Baroque), but the building structure was lightened to render interiors graceful and ethereal. Interior and exterior space entertained and captured the imagination by intricacy and subtlety.

In Rococo architecture, decorative sculpture and painting are inseparable from the structure. Rococo architects obtained unified spaces, emphasized structural elements, created continuous decorative schemes, and reduced column 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 (Madonna Del Carmine Church<sup>24</sup>, Turin, Italy, 1732, by Filippo Juvarra).

To obtain a vertical unification of structure and space, the vertical line of a supporting column might be carried up from the floor to the dome (e.g., church of San Luis<sup>25</sup>, Seville, Spain, begun 1699, by Leonardo de Figueroa).

<sup>24</sup> **Madonna Del Carmine Church**, Turin, Italy – Carmine's church is an original work by Filippo Juvarra. It was built between 1732 – 1736 but was completed by Agliaudo di Taviglano, Francesco Benedetto Feroggio and Ignazio Birago di Borgaro.

<sup>25</sup> **The Church of San Luis**, Seville, Spain – the magnificent Church of San Luis is located at San Luis Street, in the Macarena district. It was built between 1699 and 1730. Leonardo de Figueroa was the architect who designed this splendorous building dedicated to St. Louis (King Louis XIV of

The entire building was often lighted by numerous windows placed to give – dramatic effect or to flood the space with a cool diffuse light (Pilgrimage Church of Wies<sup>26</sup>, Ger., Zimmermann, 1745).

### **III. Reflection (Рефлексия)**

#### **Writing & Speaking**

9. *Return to your home groups and give the information you have learnt to the members of your home group. Finishing your story ask them your question and specify incomprehensible information (уточните непонятную информацию)*

10. *Highlight categories of information concerning your text and report to the class:*

11. *Make a chart of categories according to the number of groups:*

Type of a question	Origin of the style				
Type 1					
Type 2					
Type 3					

12. *Choose an information block and make questions concerning architectural styles according to three types of questions. Follow the model:*

1. Questions for information reproduction (воспроизведение)

When did the Renaissance Architecture emerge?

2. Questions for comprehension (понимание)

What were the reasons for Renaissance style emerging?

3. Questions for linking (связывание)

How is the Renaissance style used in contemporary architecture?

13. *Group work. Ask other groups questions taking into consideration an information block and a question type.*

14. *Write a reflection on the text you have read (See appendix 3.)*

---

France). The beautiful and impressive façade, with its elaborate decoration, shows the Baroque style.

<sup>26</sup> The Pilgrimage Church of Wies – (German: *Wieskirche*) is an oval rococo church, designed in the late 1740s by Dominikus Zimmermann. It is located in the foothills of the Alps, in the municipality of Steingaden in the Weilheim-Schongau district, Bavaria, Germany.

## Unit 10

### HI-TECH ARCHITECTURE

#### I. Warming up (Разминка)

##### **Listening & Speaking**

1. *Group work . Reflect on the following quote about the hi-tech architecture, interpret it and share your ideas with the group. Get ready to discuss different points of view*

“In short the building becomes a theatrical demonstration of its functional ideal. In this romanticism, hi-tech architecture is, of course, no different in spirit – if totally different in form – from all the romantic architecture of the past”. - Cruickshank, Dan

#### **Useful terms and phrases**

2. *Read the following terms and phrases, mind their pronunciation:*

accentuated technical elements	подчёркнутый технический элемент
display of technical and functional components	демонстрация технических и функциональных компонентов
orderly arrangement	правильное расположение
pre-fabricated elements	быстровозводимый, готовый блок
steel frame	стальная рама, стальная конструкция
to externalize	выводить наружу
to keep to the functional essence	придерживаться функциональной сути
to emphasize	придавать особое значение, акцентировать
overriding feature	доминирующее, характерное свойство
functionally orientated	функционально ориентированный
to achieve optimal orderliness	достигать оптимального упорядочения
to highlight	придавать большое значение, выдвигать на первый план

#### II. Evocation (Вызов)

##### **Listening & Speaking**



3. *Look at the picture and think what you can speculate about the architectural style depicted in the picture. Individually write down everything that you associate with this style. Then, share your ideas with your group.*

4. *Report your ideas to the class to write them down on the board.*

5. *Structure the received information in the form of a “cluster.”*

**III. Realization (Осмысление)****Reading & Writing**

6. Read an article or a book about hi-tech architecture and abstract the article (See appendix 7.)

**IV. Reflection (Рефлексия)****Writing**

7. Prepare a report and a computer presentation of the book/ article on architectural styles you read.

**Listening & Speaking**

8. Present your report to the class. Get ready to discuss it answering questions and persisting in your opinion.

**APPENDIXES**  
**APPENDIX 1**  
**Expressing Opinions**

<b>How to express your opinion</b>	<b>Agreeing or disagreeing</b>
<p>1. I think/ consider/ feel/ guess/ suppose that – Я считаю/полагаю.</p> <p>2. As far as I'm concerned – Что касается меня.</p> <p>3. To my mind/ according to me – по моему мнению.</p> <p>4. As I see it – как мне это кажется; как мне это представляется.</p> <p>5. It seems to me that – мне кажется, что ...</p> <p>6. In my point of view / my opinion – по моему мнению.</p> <p>7. From my point of view – с моей точки зрения.</p> <p>8. I am of the opinion/ take the view that – Я придерживаюсь того мнения, что...</p> <p>9. I am sure / I am certain that – Я уверен, что ...</p> <p>10. I hold the opinion that – Я придерживаюсь мнения, что ...</p>	<p><b>Agreeing with an opinion:</b></p> <p>1. I agree with this opinion – Я согласен с этим мнением.</p> <p>2. I completely agree with this view – Я полностью согласен с этой точкой зрения.</p> <p>3. You are absolutely right – Вы, безусловно, правы.</p> <p>4. I couldn't / can't agree more – Я не могу не согласиться.</p> <p><b>Partial agreement:</b></p> <p>1. I agree with this point of view, but – Я согласен с этой точкой зрения, но...</p> <p>2. This idea is right, but – Это мнение верно, но...</p> <p>3. I agree with you, but – Я согласен с вами, но...</p> <p><b>Disagreeing with an opinion:</b></p> <p>1. You are wrong – Вы неправы.</p> <p>2. I'm afraid. I can't agree with you – Боюсь, я не могу согласиться с вами.</p> <p>3. I disagree with you – Я не согласен с вами.</p> <p>4. I think otherwise – Я думаю иначе.</p> <p>5. I think you're wrong – Я считаю, что вы неправы.</p> <p>6. I don't share your view – Я не разделяю ваше мнение.</p> <p>7. I don't think so – Я так не думаю.</p> <p>8. I don't agree with what you say - Я не согласен с тем, что вы говорите.</p> <p>9. I take a different view – Я придерживаюсь другого мнения.</p> <p>10. This argument does not hold water – Этот аргумент не убедителен.</p> <p>11. I hold by my opinion – Я остаюсь при своём мнении.</p>

## APPENDIX 2

### *Preparing presentations*

#### **I. Introducing yourself**

1. Good morning everyone. On behalf of ourselves and “Stone treasure”, we’d like to welcome you. Our names are Laura Larsen and ... We are professionals in the sphere of architecture and town building.

#### **II. Introducing the topic**

Today we are going to tell you about.... (Сегодня мы собираемся рассказать вам...)

We’d like to outline (обрисовать в общих чертах) our company concept we’ve developed (разработали) for you.

We are going to give you an idea of ... (дать некоторое представление о ...)

The subject of the presentation is the future building design

#### **III. Giving background information** (сведения общего характера)

We have divided (разделил) our presentation into 4 parts: introduction, the building design, the building location, and the structures that will surround the building, and conclusion.

#### **Presenting Information**

*I. Introduction:* To start with,

*II. The main part:*

Student 1: My name is Laura Larsen and I am going to speak about ... Now I want to give the floor to my professional partner, John Philips.

Student 2: Thank you, Laura. Now I am moving to the next point (пункт, вопрос) which is devoted to ... (Теперь я перехожу к следующему вопросу, который посвящён...)

Student 3: I’d like to draw your attention to (Мне бы хотелось обратить ваше внимание на...)

Student 4: Turning now to.... (Обращаясь к), I will tell you about the structures that will surround the building. Now I’d like to give the floor to my professional partner

...

Student 5: What I’d like to talk about now is concerned with (то, о чём я хочу говорить сейчас, связано...)

Student 6: Now I would like to describe.... (Теперь мне бы хотелось описать...)

Now I’d like to give the floor to my professional partner...

#### **III. Summarizing and concluding**

Student 7: I’d like to conclude (сделать вывод) by saying...

#### **IV. Ending a presentation**

Thank you for listening to us. If there are any questions, we’ll be pleased to answer them.

## APPENDIX 3

### Reflections

#### **3.1. Writing a reflection on a quote**

*Take into account the following questions:*

1. *Make an introduction*
2. *Give your understanding of the term used in the quote*
3. *Interpret the quote reasoning about the quote theme*
4. *Build a context (приведите пример из жизни)*
5. *Conclude your reflection. You can give some professional advice concerning the activity described.*

#### **3.2. Writing a reflection on the professional text**

*Take into account the following questions:*

1. *What is this text about?*
2. *What is the main idea of this text?*
3. *What information have you learnt from the text? Can it broaden your professional outlook?*
4. *Would you like to get any extra information concerning this text?*
5. *Express your opinion about the text from the professional point of view?*

#### **3.3. Reflection on the partner's professional speech**

*Reflect on the partner's professional speech answering the following questions:*

##### **1. Accuracy of speech** (точность и правильность речи)

Has the speaker made any pronunciation and grammar mistakes?

##### **2. Word fluency** (беглость речи)

Did he/she speak fluently? (говорить свободно)

Was the speech easy to understand?

Did the speaker manage to be laconic?

Did he/she make a lot of pauses in the course of speech?

##### **3. Discourse Management** (взаимодействие – способность вести беседу)

Was the speaker able to answer and ask questions and respond to simple utterances (реагировать на простые высказывания) after speech?

Was it easy for the speaker to understand the interlocutors (собеседник)? Was he/she able to keep up a conversation (поддерживать разговор)?

##### **4. Range of speech:** the active use of a range of grammatical forms and vocabulary. (диапазон грамматических форм и языковых средств)

Did the speaker demonstrate a wide range of vocabulary and grammatical forms usage?

##### **5. Coherence and justification of the utterance** (логическая стройность и обоснованность высказывания)

Was the speaker's utterance (высказывание) logical and reasonable (обоснованный)?

Did the speaker arrange the utterance in a logical way? (строить высказывание логично) and develop arguments (излагать аргументы)

**6. The clarity of presentation** (ясность изложения)

Was the speaker's utterance precise (ясный) and understandable?

**7. Has the information interested you? Explain the reason.**

**8. The speech expressiveness** (выразительность речи)

Was the speaker's speech emotional? Did the way of presentation (способ изложения) get you interested and keep up your interest and attention? (поддерживать интерес и внимание)

**9. Did the speaker have an eye contact with the audience?** (аудитория)

**10. What impression did the speech make on you?**

**3.4. Reflection on your own professional speech**

Reflect on your own professional speech answering the following questions:

**1. Have you achieved your aim?**

**2. Word fluency** (беглость речи)

Did you speak fluently? (говорить свободно)

Was your speech easy to understand?

Did you manage to be laconic?

Did you make a lot of pauses in the course of speech?

**3. Discourse Management** (взаимодействие – способность вести беседу)

Were you able to answer and ask questions and respond to simple utterances (реагировать на простые высказывания) after speech?

Was it easy for you to understand the interlocutors (собеседник)? Were you able to keep up a conversation (поддерживать разговор)?

**4. Was your speech understandable for the audience?** Did it kindle the listeners' interest?

**5. Was your speech expressive from the intelligential (информационный) and emotional point of view?**

**6. Did you have an eye contact with the audience?**

**7. What difficulties arose in the course of speech?** How could you avoid them?

## APPENDIX 4

### Students' sinkweins about architecture and architects' job

<p><i>Architecture</i>          Magic, striking          Finds, draws, realizes          Architecture is the science of construction  <i>Creativity</i>          (Elena Maslova, group 025)</p>	<p><i>Architecture</i>          Ancient, distinctive          Inspires, recognizes, enjoys          Architecture is the characteristic of the time  <i>Art</i>          (Elena Maslova, group 025)</p>
<p><i>Architecture</i>          Impressive, useful          Excites, attracts, holds          Just makes your living  <i>Organization</i>          (Arseniy Tyurin, group 025)</p>	<p><i>Composition</i>          Easy, tunable          Compares, estimates, moves          Teaches you to analyze forms  <i>Order</i>          (Arseniy Tyurin, group 025)</p>
<p><i>Architecture</i>          Magnificent, impressive          Creates, defends, admires          It satiates our grey days  <i>Inspiration</i>          (Irina Sergienko, group 025)</p>	<p><i>Architecture</i>          Amazing, majestic          Surprises, inspires, visualizes          The basis of everything  <i>Art</i>          (Elina Zelyonaya, group 025)</p>
<p><i>Architecture</i>          Aesthetic, functional          Designs, constructs, amazes          One of the most helpful for people  <i>Science</i>          (Elina Zelyonaya, group 025)</p>	<p><i>Design</i>          Volumetric, proportional          Calculates, compares, combines          The science to mold the form from space  <i>Transformation</i>          (Irina Sergienko, group 025)</p>
<p><i>Architectural image</i>          Classical, ancient          Shows, idealizes, expresses          An aesthetic canon of architecture  <i>Order</i>          (Polina Panova, group 025)</p>	<p><i>Dolmen</i>          Mysterious, unusual          Creates, thinks, guesses          An unusual burial place of the ancient civilizations  <i>Construction</i>          (Sveta Smirnova, group 025)</p>

<p><i>Architecture</i></p> <p>Sublime, perfect</p> <p>Studies, creates, designs</p> <p>It isn't only observation of the proportion rule</p> <p><i>Endlessness of perception</i></p> <p>(Maxim Michailov, group 025)</p>	<p><i>Ancient architecture</i></p> <p>Simple, reliable</p> <p>Survives, invents, protects</p> <p>Uncomplicated primitive dwellings</p> <p><i>Megalithic structures</i></p> <p>(Michail Yakovlev, group 025)</p>
<p><i>Composition</i></p> <p>Static and dynamic</p> <p>Combines, solves, organizes</p> <p>Harmonious interaction of geometric shapes</p> <p><i>Picture</i></p> <p>(Kristina Prikazchikova, group 025)</p>	<p><i>Art</i></p> <p>Tricky and smart</p> <p>Minds, dreams, visions</p> <p>A never ending way to perfection</p> <p><i>Beauty</i></p> <p>(Arseniy Tyurin, group 025)</p>
<p><i>Ancient architecture</i></p> <p>Plain, modest</p> <p>Attracts, excites, conceals</p> <p>A very fascinating thing</p> <p><i>The returning</i></p> <p>(Valeria Platygina, group 025)</p>	<p><i>Ancient architecture</i></p> <p>Mysterious, stately</p> <p>Inspires, bewitches, narrates</p> <p>Source of historic knowledge</p> <p><i>Trace</i></p> <p>(Masha Cholstinina, group 025)</p>

## APPENDIX 5

### Students' poetry about architecture and architects' job

<p style="text-align: center;"><b>Architecture</b></p> <p>Impressive dynamics and tunable statics, Space composition and unique details. All is interactive, all is realistic But firstly in mind like point particles.</p> <p style="text-align: center;">***</p> <p>Architecture's majestic and naturalistic. It needs inspiration, bravery, special skills. It designs and constructs something dramatic, Otherwise, it's not architecture and we shouldn't feel it.</p> <p style="text-align: center;">(Elina Zelyonaya, group 025)</p>	<p style="text-align: center;"><b>Architect's job</b></p> <p>A lonely woman with a kid, smart and nice; She wants to get room rearranged for low price. A rich handsome man wants a pool on his acre. It's only for fun, as a matter of fact.</p> <p style="text-align: center;">***</p> <p>A just married couple needs a house in the suburbs, Ecology-harmless, with clever land-use. A governor needs a new Art Gallery Palace And bulletproof windows for mansion in Vegas. These people are architect's job to deal with, We watch architecture as drama like this.</p> <p style="text-align: center;">(Arseniy Tyurin, group 025)</p>
<p style="text-align: center;"><b>Architecture</b></p> <p>So many people try to cerebrate What architecture is about? Some, with space and function it relate, But some with brilliant lay-out.</p> <p style="text-align: center;">***</p> <p>Perceiving beauty of construction, The depth and variation of the light, Architecture is an interaction Between the forms and person's mind.</p> <p style="text-align: center;">***</p> <p>It's not the science, not the art Above and beyond it obviously stands. For man it's impossible to disregard Because of glory it arouses sense.</p> <p style="text-align: center;">(Maxim Michajlov, group 025)</p>	<p style="text-align: center;"><b>Infinity</b></p> <p>I know the science It's like a song. It's been perfected very long.</p> <p style="text-align: center;">***</p> <p>Demanding mind It should be great It isn't easy to create.</p> <p style="text-align: center;">***</p> <p>Unlike the number It has a size. But it's obliged to be precise. number ***</p> <p style="text-align: center;">I know the art It's very old It was set up against cold.</p> <p style="text-align: center;">***</p> <p>Among grey days It's like pure beam Inspiring soul just to dream</p> <p style="text-align: center;">***</p> <p>Causing delight It's filled with turns Which I so strongly want to learn</p> <p style="text-align: center;">***</p> <p>And not a minute It deserves to be Infinite.</p> <p style="text-align: center;">(Ira Sergienko, group 025)</p>

### To architecture and architectural students

Architecture is the way  
To a new fantastic day  
Where structures standing proud  
Are surprising the crowd.  
\*\*\*

And they are making the world  
Just fascinating and great.  
And structures that are ancient, old  
The best achievements generate.  
\*\*\*

And in the stream of inspiration  
Majestic structures emerge again.  
And outstanding great people  
Create them day after day.  
\*\*\*

My admiration for you, my students.  
I'm inspired by your success.  
Create, live, be always near  
And let your dreams make progress.

(Tamara Albertovna Sarkisian)

## APPENDIX 6

### **Students' quotes about architecture and architects' job**

1. "Architecture is unification of two spaces: a limited one which gives us protection against environment and an open one around it providing the integrity of the composition." Irina Sergienko, group 025.
2. "Stability of the architect's reputation is secured by the stability of his construction." Irina Sergienko, group 025.
3. "The most labour-intensive part of the architects' job is not to design and plan buildings but to bring them into life." Anastasiya Staroverova, group 025.
4. "The architect's job is bifunctional  
Public and interesting, structural.  
Creative, responsible, smart,  
Complex, conceptional, hard." Elina Zelyonaya, group 025.
5. "The great works of architecture are living witnesses of the past in modern life". (Polina Panova, group 025)
6. "The architects that can integrate beauty and comfort for life in a building deserve the greatest praise." (Alina Popova, group 025)
7. Architecture is a dialogue where an individual building or construction gives each voice to the overall conversation of the city." (Maxim Michailov, group 025)
8. Architecture isn't a job, it is a lifestyle." (Maxim Michailov, group 025)
9. Architecture is a special kind of art consisting in organizing space and comparing various shapes and colours." (Sveta Smirnova, group 025)
10. "The architect must create the best life conditions not only for contemporaries but also for future generations." (Sveta Smirnova, group 025)
11. Architecture is the science which studies not only the design and appearance of buildings, but also the character, mood and emotions of people for whom these houses are built." (Michail Yakovlev, group 025)
12. Architecture is an ensemble of many aspects of construction which are harmoniously combined in the product of architectural art." (Kristina Prikazchikova, group 025)
13. Architecture is an art of expanding space." (Anya Laikova, group 025)
14. The most complicated profession in the world is being God for people when you create a space for them." (Anya Laikova, group 025)
15. Architecture is the chronicle of the world art." (Elena Maslova)

## APPENDIX 7

### Writing annotations and abstracts

#### **7.1. Information about creating annotations**

Annotation (аннотирование, аннотация)

*Аннотация (от лат. *annotatio* – замечание) – краткая характеристика содержания произведения печати или рукописи.* Она представляет собой предельно сжатую описательную характеристику первоисточника. В ней в обобщенном виде раскрывается тематика публикации без полного раскрытия ее содержания. Аннотация дает ответ на вопрос, о чем говорится в первичном источнике информации.

*При составлении аннотации не следует пересказывать содержание документов.* Аннотация обычно состоит из двух частей. В первой части формулируется основная тема книги, статьи; во второй части перечисляются (называются) основные положения.

#### **7.2. Языковые модели для написания аннотации на английском языке:**

1. The theme of the paper is ...
2. The paper deals with the field of ...
3. The paper tackles the problem of ...
4. The author covers the following issues:
5. Firstly, the author analyses ...
6. Secondly, the paper gives information ...
7. Then, it is pointed out ...
8. Finally, it is stated ...

#### **7.3. Phrases to make an annotation to the text:**

to devote to	посвящать ч-л.
to deal with	рассматривать
to draw attention to	обращать внимание на
to cover the issues	освещать вопросы
concerned with	связанные с
The article is devoted to (an important problem). The paper deals with the problem of...	Статья посвящена проблеме...
The paper gives information	Статья (доклад) сообщает сведения...
It is pointed out that	Обращается внимание на то, что...
It is stressed that	подчёркивается, делается акцент на...
It is generally believed	общепринято, что ...

It is underlined	подчеркивается, выделяется, акцентируется
to raise an issue	поднимать вопрос
It is suggested	предлагается
to give explanation to	давать объяснение чему-либо
The article contains the description of	Статья содержит описание...
The article is entitled ...	статья называется...
The article entitled ...	статья под названием
to consider the problem of...	рассматривать проблему
The author is concerned with...	Автора интересует...
The first/second/third paragraph concerns the problem of...	Первый/второй/третий абзац касается проблемы...
considers...	рассматривает...
covers...	охватывает, освещает
The paper touches upon the problems of...	Статья касается проблемы...
The problem of... is observed here	Проблема... рассматривается здесь
The problem under discussion is...	Рассматриваемая проблема является...
At present there is a growing interest in...	В настоящее время наблюдается повышенный интерес к ...
The characteristic features are...	Характерными чертами являются...
The key feature of... is...	Отличительной чертой... является...
A special significance is attached to...	Особое значение придается...
This is proved by the fact...	Это подтверждается фактом...
The author lays special emphasis (stress) on ...	Автор уделяет особое внимание...
According to this point of view...	Согласно данной точке зрения...

#### 7.4. *Information about creating abstracts.*

Реферат (от лат. «refero», что означает «сообщаю») представляет собой краткое изложение в письменном виде или в форме публичного доклада содержания научного труда (трудов), литературы по теме с раскрытием его основного содержания по всем затронутым вопросам, сопровождаемое оценкой и выводами референта.

*7.5. Образцы оформления реферата на русском и английском языке*

**Federal Agency of Education  
State Educational Establishment of Higher Professional Education  
"Nizhny Novgorod State University of Architecture and Civil Engineering"  
(NNSUACE)  
Faculty of Architecture and Town Building**

**Abstract**

---

(title)

Supervisor :

Student:

## **Contents**

The abstract

Introduction

Part 1 The title of part 1

1.1. The title of the paragraph

1.2.

Part 2 The title of part 2

2.1. The title of the paragraph

2.2.

Conclusion

Bibliography

Glossary

Text of the presentation (attached)

## APPENDIX 8

### Six hats of thinking

#### **8.1. Useful lexis**

job task	профессиональная задача
to cover significant professional issues	освещать важные профессиональные вопросы
to deliver a speech like professionals	выступать как профессионалы
to raise an important professional issue	поднять важный профессиональный вопрос
to cover all the points of the presentation	раскрыть все пункты презентации
to touch upon the topical issues	затрагивать актуальные проблемы
to get message across to	донести свои мысли до
to come apart with	расходиться с
to specify the blind sides	указать на слабые стороны
to specificate	детализировать
to ignore	не учитывать, не включить
to overlook	упускать из виду, игнорировать
to torpedo a project	провалить проект
to speak by the book	говорить с полным знанием дела
unconsidered issue	нерассмотренный вопрос
to have an obscure view of	неясно представлять себе
to introduce / make changes in	вносить изменения в

## **8.2. Useful phrases to comment on the presentation**

<b>Useful words and word-combinations, questions and phrases</b>
<p><b><i>The white hat</i></b> gives factual information about the presentation.</p> <ol style="list-style-type: none"> <li>1. What was the subject of the presentation?</li> <li>2. How long did it last?</li> <li>3. How many parts did it consist of?</li> <li>4. Was it computer or paper presentation?</li> <li>5. Was it coloured or black-white?</li> <li>6. Was it joined or single-handed work?</li> <li>7. How many people took part in the presentation?</li> </ol>
<p><b><i>The yellow hat</i></b> states positive points of the presentation.</p> <ol style="list-style-type: none"> <li>1. to manage to develop a successful professional report;</li> <li>2. to cope with the job task professionally;</li> <li>3. to do something in the original professional way;</li> <li>4. to express one's own professional view concerning ...;</li> <li>5. to cover significant professional issues;</li> <li>6. to professional knowledge/skills;</li> <li>7. to deliver a speech like professionals (выступать как);</li> <li>8. to raise important professional issues;</li> <li>9. to cover all the points of the presentation;</li> <li>10. to be rich in professional lexis;</li> <li>11. to be worthy of special attention;</li> <li>12. well-prepared, thought-provoking, informative, cognitive , thought-out;</li> <li>13. to touch upon the topical issues;</li> <li>14. to manage to develop a professional detail project;</li> <li>12. to hold a special place;</li> <li>13. to get message across to;</li> <li>14. It is painstaking work (Это кропотливый труд);</li> <li>15. It is of great interest to us.</li> <li>16. It aroused our professional interest ...</li> <li>17. Your presentation is beyond comparison/words.</li> <li>18. According to your point of view...</li> </ol>
<p><b><i>The black hat</i></b> states negative points of the presentation.</p> <ol style="list-style-type: none"> <li>1. to fail to develop design concept;</li> <li>2. sloppy and sketchy work – небрежная и поверхностная работа;</li> <li>3. ill-considered (необдуманный); unsuccessful; confusing moment;</li> <li>4. limited professional lexis;</li> <li>5. to fail professional knowledge and skills;</li> <li>6. to come apart with design requirements;</li> <li>7. to specify the blind sides;</li> <li>8. to fail to represent the graphical part;</li> </ol>

9. to fail to specificate selection of needed materials ;
10. to leave out cost of works;
11. to communicate thoughts clearly;
12. to overlook the main project parts;
13. to torpedo a project;
14. to get message across to;
15. to have an obscure view of;
16. Your presentation failed.
17. Your report leaves much to be desired.
18. You failed to cover all the points of the presentation.

**The Red Hat** expresses all the feelings which the presentation arouses

1. experience different/ contradictory feelings;
2. to create a feeling of surprise/admiration/disappointment – вызывать чувство удивления/восхищения/разочарования;
3. to arouse a professional interest;
4. to put into a business-like mood;
5. to have the personal touch;
6. to get to like the project;
1. I fail words to express my respect for your professional skills/ professionalism.
2. There was a disappointing/ confusing moment.
3. There was a moment that gladdened us very much.
4. You speak by the book.

**The Green Hat** suggests constructive ways to improve the presentation

1. to improve considerably;
2. to make it more professional;
3. to specificate the project summary;
4. to meet requirements;
5. to analyse the building location;
6. to add building floor plans;
7. to specificate building materials;
8. I would suggest (doing) ...

**The blue hat** generalizes the points of view of all the hats and expresses the overall impression of the presentation

1. to create a favourable/ unfavourable impression;
2. to develop a successful project;
3. to fail to consider siting and site analysis;
4. to create a feeling of admiration;
5. to improve considerably and add unconsidered issues.

## APPENDIX 9

### Design Presentation (презентация проекта)

#### **9.1. The structure of the one-family mansion house design**

##### **Introduction**

**Project summary:**

- a) customer orientation; b) building location; c) design special feature

##### **I. Space-planning decision:**

- a) building floor plans; b) building elevations design and facade sections;
- c) breakdown of premises; d) sectional view of a building; e. perspective building view (3D pictures)

##### **II. Structural concept:**

**Design features:**

- a) walls, windows, doors, floor slabs
- b) building materials

##### **III. Conclusion (project feasibility)**

#### **9.2. Образец выполнения текста презентации**

#### *Making design presentations*

##### **I. Introducing yourself**

1. Good morning everyone. On behalf of ourselves and “Stone treasure”, we’d like to welcome you. Our names are Laura Larsen and ... We are professionals in the sphere of architecture and town building.

##### **II. Introducing the topic**

The subject of the presentation is one-family mansion house design.

##### **III. Giving background information** (сведения общего характера)

We have divided (разделил) our presentation into 4 parts: introduction, space-planning decision, structural concept and conclusion.

##### **IV. Presenting information**

*I. Introduction:* To start with,

*II. The main part:*

Student1: My name is Laura Larsen and I am going to speak about the space-planning decision ... Now I want to give the floor to my professional partner, John Philips.

Student 2: Thank you, Laura. Now I am moving to the next point (пункт, вопрос) which is devoted to ... (теперь я перехожу к следующему вопросу, который посвящён ...)

Student 3: I’d like to draw your attention to (мне бы хотелось обратить ваше внимание на...)

Student 4: Turning now to.... (Обращаясь к), I will tell you about the structures that will surround the building. Now I’d like to give the floor to my professional partner

...

Student 5: What I'd like to talk about now is concerned with.... (То, о чём я хочу говорить сейчас, связано...)

Student 6: Now I would like to describe.... (теперь мне бы хотелось описать...)

Now I'd like to give the floor to my professional partner...

### III. Summarizing and concluding

Student 7: I'd like to conclude (сделать вывод) by saying

### V. Ending a presentation

Thank you for listening to us. If there are any questions, we'll be pleased to answer them.

## Bibliography

1. Саркисян, Т. А. Формирование ИПРК студентов архитектурно строительных- профилей на основе педагогической технологии «РКМЧП» [Электронный ре- сурс] / Т. А. Саркисян // Наука, образование, общество : сб. материалов междунар. заоч. науч.-практ. конф. – Тамбов, 2016. – Режим доступа: <http://icom.ru/doc/na.2016.02.02.227>.
2. Саркисян, Т. А. К вопросу об использовании активных форм обучения для развития иноязычной речевой компетенции у студентов неязыковых специальностей / Т. А. Саркисян // Великие реки – 2010 : тр. конгр. 12 междунар. науч.-пром. форума (18-21 мая 2010 г.) / Нижегор. гос. архитектур.-строит. ун-т. – Нижний Новгород, 2011. – Т. 1. – С. 476-477.
3. Саркисян, Т. А. Из опыта внедрения интерактивных технологий в практику преподавания иностранных языков в неязыковом вузе / Т. А. Саркисян // Актуальные проблемы лингводидактики и лингвистики : сущность, концепции, перспективы : материалы III междунар. науч.-практ. конф. (18-20 окт.). – Волгоград, 2010. – Т. 2. – С. 162-164.
4. Саркисян, Т. А. Формирование ИПРК студентов архитектурных профилей на основе рефлексивных активных методов обучения в рамках педагогической технологии «РКМЧП» на занятиях в ННГАСУ / Т. А. Саркисян // Великие реки – 2014 : тр. конгр. 16 междунар. науч.-пром. форума (13-16 мая 2014г.) / Нижегор. гос. архитектур.-строит. ун-т. – Нижний Новгород, 2014. – Т. 2. – С. 301-304.
5. Саркисян, Т. А. Активные методы обучения как важный фактор развития профессионально-иноязычной речевой компетенции студентов архитектурно-строительных специальностей / Т. А. Саркисян // Непрерывное обучение иностранным языкам в XXI веке : сб. материалов междунар. научн.-практ. конф. (26-28 июня 2012г.). – Новосибирск, 2012. – С. 112-115.
6. Вербицкий, А. А. Активное обучение в высшей школе: контекстный подход : метод.пособие / А. А. Вербицкий / - М.: Высшая школа, 1991. – 207 с.
7. Грудзинская, Е.Ю. Активные методы обучения в высшей школе / Е.Ю. Грудзинская, В.В. Марико // Учебно-методические материалы по программе повышения квалификации «Современные педагогические и информационные технологии». – Н. Новгород. - 2007. – 182 с.
8. Алешугина, Е.А. Лошкарева Д.А. Использование активных методов в профессионально ориентированном обучении магистрантов: учебн. пос. для вузов/ Е.А. Алешугина [и др.]. Нижегород. Гос. архит.- строит.ун-т – Н.Новгород: ННГАСУ, 2017. – 61 с.
9. Building Elements. (2017). In ScienceAid. Retrieved Jan 27, 2021, from [Электронный ресурс]. – Режим доступа: [https://scienceaid.net/Building\\_Elements](https://scienceaid.net/Building_Elements)
10. Grussendorf Marion. English for Presentations. Oxford University Press, 2006. – 76 p.
11. <http://difficultdesign.com/articles/what-is-architecture/#comments>
- 12.<http://www.buildingmaterials.com.au/>
- 13.[http://books.google.ru/books/about/Architectural\\_History.html](http://books.google.ru/books/about/Architectural_History.html)

- 14.<https://english-grammar.biz/architects-dictionary.html>
- 15.<https://study-english.info/vocabulary-architecture.php>
- 16.<https://eng-rus-building-terms.slovaronline.com/>
- 17.[http://history-world.org/baroque\\_and\\_rococo\\_architecture.htm](http://history-world.org/baroque_and_rococo_architecture.htm)
18. <http://www.sacred-destinations.com/reference/romanesque-architecture>
- 19.[http://www.doric-column.com/glossary\\_classical\\_architecture.html](http://www.doric-column.com/glossary_classical_architecture.html)
20. <http://www.jmhdezhdez.com/2011/10/high-tech-architecture-architects.html>
21. <http://library.thinkquest.org/16545/data/low/gothic.htm>

Саркисян Тамара Альбертовна

ПРОФЕССИОНАЛЬНЫЙ АНГЛИЙСКИЙ АРХИТЕКТОРА  
В АКТИВНЫХ МЕТОДАХ ОБУЧЕНИЯ

Учебное пособие

Подписано в печать 30.03.2021г. Формат 60x90 1/16. Бумага газетная. Печать трафаретная.  
Уч. изд. л. 5,6. Усл. печ. л. 6,0 Тираж 300 экз. Заказ №

---

Федеральное государственное бюджетное образовательное учреждение высшего  
образования «Нижегородский государственный архитектурно-строительный университет»  
603950, Нижний Новгород, ул. Ильинская, 65.

Полиграфический центр ННГАСУ, 603950, Н.Новгород, Ильинская, 65  
<http://www.nngasu.ru>, [srec@nngasu.ru](mailto:srec@nngasu.ru)