



function /'fʌŋkʃn/n. *special activity or purpose of a person or thing*

gain /geɪn/v. *to obtain or win sth*

labor /'leɪbər/n. *work*

manual /'mænjuəl/adj. *operated or controlled by hand*

master /'mæstər/v. *to learn or understand sth completely*

obviously /'ɑ:bviəsli/adv. *clearly*

responsibility /rɪˌspɑːnsə'bɪləti/n. *duty*

robustly /rəʊ'bʌstli/ *vigorously; strongly*

scoff /ska:f/v. *to talk about sb/sth in a way that makes it clear that you think they are stupid*

solution /sə'lu:ʃn/n. *a way of solving a problem; answer*

specifically /spə'sɪfɪkli/adv. *intended for one particular thing only*

spirit /'spɪrɪt/n. *the part of a person that includes their mind, feelings and character*

training /'treɪnɪŋ/n. *the process of learning the skills that you need to do a job*

treatise /'tri:tɪz/n. *a long and serious piece of writing on a particular subject*

trust /trʌst/v. *to believe that sb is good, sincere, honest, etc*

utility /ju:'tɪləti/n. *the quality of being useful*



Vocabulary Activity

B. Match the words with their equivalents in Persian.

- | | |
|-------------------|-----------|
| 1. apprenticeship | استادکاری |
| 2. craftsmanship | آموزش |
| 3. delight | دستی |
| 4. function | راه حل |
| 5. labor | رساله |
| 6. manual | سودمندی |
| 7. responsibility | شاگردی |
| 8. solution | عملکرد |
| 9. training | کار |
| 10. treatise | لذت |
| 11. utility | مسئولیت |



Three Principles of Good Architecture

The Roman architect Vitruvius in his **treatise** on architecture, De Architectura, **asserted** that there were three principles of good architecture:

Durability – It should stand up **robustly** and remain in good condition.

Utility – It should be useful and **function** well for the people using it.

Beauty – It should **delight** people and raise their **spirits**.

It is believed that these principles **apply** to system architecture and more **specifically clinical** architecture. Any technologist can easily see the value of the first two principles (Durability and Utility) when it comes to architecture: It will last and it will do the job. Some, however, might **scoff** at the third principle of beauty.

Most technologists can easily believe that the first two principles are our **responsibility** and the third is optional. However, no one can underestimate the importance of Beauty.

Why is Beauty important?

According to Vitruvius in book one of De Architectura titled “On the training of Architects”:

“The science of the architect depends upon many disciplines and various **apprenticeships** which are carried out in other arts. His personal service consists in **craftsmanship** and technology. Craftsmanship is continued and familiar practice, which is carried out by the hands in such material as is necessary for the purpose of a design. Technology sets forth and explains things happen in accordance with technical skill and method

So architects who without culture, aim at **manual** skill cannot **gain** a prestige corresponding to their **labors**, while those who **trust** to theory and



literature **obviously** follow a shadow and not a reality. But those who have **mastered** both, like men equipped in full **armor**, soon **acquire** influence and **attain** their purpose”

What Vitruvius is saying is that architecture is about craftsmanship and technology. The difference between a good application architect and a great application architect is the ability to craft an **elegant solution** in a way so as to **delight** the user.

Beauty in software is the combination of culture (understanding your target users), craftsmanship (you desire to produce an elegant solution) and technology (the easy part).

The most simple and straight forward way to **determine** if your software is “beautiful” is to use it. Not for five minutes. Not for ten minutes. Use it for an hour or two hours straight if possible. You are building a tool that someone else will be using for long periods of time. If you can’t use it for an hour without hating yourself, this will give you a feel for the flow, need for short cuts and additional items that could be useful to the user.

These universal principles of good architecture: Durability, Utility and Beauty, can help us all be better at what we do.

<http://clinicalarchitecture.com/three-principles-of-good-architecture/>



Reading Comprehension Exercises

A. Choose the correct answer.

1. Most technologists can easily believe that -----.
 - a) Utility in software is the combination of culture, craftsmanship and technology
 - b) Using your software for an hour gives you a feeling of hating yourself
 - c) Architecture doesn't have anything to do with technology
 - d) Durability and utility are our responsibility
2. The main idea of the text might be that -----.
 - a) Those architects who have mastered theory and manual skill, can't attain their purpose
 - b) Durability, utility and beauty are three principles of good architecture
 - c) Durability and utility are more important than beauty
 - d) Those architects who trust to theory follow a reality
3. The underlined word "scoff" means -----.
 - a) make fun of
 - b) emphasize
 - c) validate
 - d) ignore
4. Which statement is not true?
 - a) If you can't use your software for an hour, it can be used by other users.
 - b) Most technologists can easily believe that Beauty is optional.
 - c) The principles of good architecture can help us all be better at what we do.
 - d) According to Vitruvius, architects should master both culture and manual skill.

B. Write "T" for True statements and "F" for False statements.

1. Good architects should remain in good condition and stand up strongly.
2. Craftsmanship is continued and familiar practice, which is carried out by the hands in such material as is necessary for the purpose of technology.
3. What Vitruvius is saying is that architecture is about craftsmanship, technology and beauty.
4. Beauty is the mixture of technology and craftsmanship.



Vocabulary Activity

Complete the sentences with the words from the list.

<i>acquired</i>	<i>apply</i>	<i>apprenticeship</i>
<i>asserts</i>	<i>crafts</i>	<i>determine</i>
<i>discipline</i>	<i>durability</i>	<i>function</i>
<i>gained</i>	<i>manual</i>	<i>mastered</i>
<i>obviously</i>	<i>responsibility</i>	<i>solution</i>
<i>spirit</i>	<i>training</i>	<i>treatise</i>
<i>trust</i>	<i>utility</i>	

- The report ----- confidently that the industry will grow.
- He argued that the arts have great social -----.
- Many people believe the ----- lives on after death.
- These principles ----- equally in all cases.
- No one must operate the machinery without proper -----.
- The school was criticized for having very poor -----.
- He was in the second year of her ----- as a carpenter.
- My camera has ----- and automatic functions.
- We all ----- a lot from the experience.
- Don't ----- what you read in the newspapers!
- we don't want to spend too much money.
- He never completely ----- the art of lip-reading.
- When you have ----- a basic range of computing skills, you will be ready to start the job.
- The gallery has major exhibitions of arts and -----.
- They were seeking an ultimate ----- to the city's traffic problem.
- It is difficult to ----- the exact cause of the illness.



Translation Note

از ثقل واژگانی بپرهیزید.

هر گاه در ترجمه یک گروه اسمی، تعداد زیادی واژه به صورت ترکیب وصفی و یا ترکیب اضافی به کار رود ثقل واژگانی رخ می‌دهد. این اشکال ناشی از تلاش مترجم به منظور وفاداری به ساختار نحوی متن انگلیسی است. توصیه می‌شود مترجم در ترجمه بندهای وصفی کوتاه شده انگلیسی به فارسی از ضمیر موصولی «که» استفاده نماید.

به مثال زیر توجه کنید:

Example:

Any building insecurity posing threat to the laborer should be banned in the bud.

ترجمه نامناسب: هر گونه عدم امنیت ساختمان تهدیدکننده برای کارگر باید از همان ابتدا جلوگیری گردد.

عبارت وصفی posing threat که یک بند وصفی کوتاه شده است بهتر است به صورت زیر ترجمه شود:

ترجمه مناسب: هر گونه عدم امنیت ساختمان که برای کارگر تهدیدآمیز است، باید از همان ابتدای کار جلوگیری شود.



Translation Exercise

Good architecture has a logical construction

Traditionally, architecture is seen as the art of construction. However, it is not in an artistic way through which there has to be dealt with architecture and to merely give shape, but to achieve a harmony through good proportions and compositions. In that view, architecture is a superior form of construction because it accomplishes in a reasoned and logical way a harmonious fusion between function, form, construction and experience. Architecture is able to transcend the construction because it resides in the realm of symbolism, concept and idea.

The construction should pursue clarity, order and balance. One must build on reason in order to legitimize the architecture. The choice of structure has an impact on both function and form, but function and form may determine the structure as well. The tectonic character should be expressed and as pure and simple as possible geometry should be applied. A grid concerns working with reason, creates unity and serves as a quality mark for the sustainability of a building.

There should be a distinction between load-bearing and room-dividing elements. Therefore also between structure and skin. These have a subtle relationship, a play of concealing and revealing. The construction must be represented in the skin while maintaining a distinction between the two. Important is the difference in materiality of both. In no way may they be confused with one another.

Generally, one should act on rational grounds, in a logical and analytical way with the structure in terms of form and materiality. This leads to simplicity and clarity which will do good to both function, form and experience.

Unit 2

7 Fascinating Examples of Islamic Architecture

1



2



3



4



5



6



7



Pre reading Activities:

A. Answer the following questions before you read.

1. What do you know about Islamic Architecture?
2. Do you have any information about Shah Mosque in Isfahan?

Vocabulary Study

admire /əd'maɪər/v. *to respect sb*

arch /ɑːrtʃ/n. *a curved structure that supports the weight of sth above it*

base /beɪs/n. *the lowest part of sth*

capital /'kæpɪtl/n. *the most important town or city of a country*

characteristic /ˌkærəktə'rɪstɪk/adj. *very typical of sth or of sb's character*

completion /kəm'pliːʃn/n. *the act or process of finishing sth*

congregational /ˌkɑːŋgrɪ'geɪʃənl/ adj.

conquer /'kɑːŋkər/v. *to take control of a country or city and its people by force*

construct /kən'strʌkt/v. *to build or make sth such as a road, building or machine*

courtyard /'kɔːrtjɑːrd/n. *an open space that is partly or completely surrounded by buildings*

cupola /'kjuːpələ/n. *a round part on top of a building (like a small dome)*

daring /'derɪŋ/adj. *brave*

display /dɪ'spleɪ/v. *to show sth to people*

dome /dəʊm/ n. *a round roof with a circular base*

dynasty /'daɪnəsti/n. *a period of years during which members of a particular family rule a country*