**Pre-class Task List (Week 8)**

1. Video Watching：NetEase Open Course

Answer the following questions after watching the video clips：

A.俄亥俄州立大学建筑史公开课中的古代罗马建筑1 中09：30-23:30的部分

（Source：<http://open.163.com/movie/2012/10/8/M/M8JHGHLL1_M8KVTM18M.html>）

1）What technology has been mentioned particularly that enabled Romans to build in a very different way than the Egyptians and Greeks? How do you understand it?

A lot of it had to do with vaulting.It means the making of arches.

2）How does the lecturer explain “dome”?

if you take an arch and you spin it around its axis,you get a dome.Take the curvy thing and you spin it,and you get a dome.

3）What was the new building material developed by Romans?

Concrete.

4) What were the characteristics of Roman building materials?

All these roman building material is that it's small,it's portable.It is not difficult to move to the site.

5) What was an aqueduct used for?

Introducing water sources,bring waters down from the mountains,drained the swamps and reclaim land,getting rid of the foul standing water.They also provide a system of roads and bridges.

6) What is the top voussoir called?

Key stones.

7) How do we get a cross vault or groin vault?

If you intersect two barrel vaults,you begin get a more complex vaulting system.The cross vault or the groin vault.

8) How were columns in a Roman Temple used differently from columns in a Greek Temple?

They are engaged columns,they are embedded in the wall.They taken on the function of an ornament.

9) In what way is the interior space in Roman architecture different from that of Greek architecture? Why?

Roman architecture start vaulting structures,you can begin to develop interior space in a much more complex way.

10) What is the variation on the temple type other than rectilinear temple?

They densely embedded in urban context.It's kind of a hinge between attitudes about a landscale.

B.俄亥俄州立大学建筑史公开课中的古代罗马建筑1 中27：10-30:20的部分

（Source：<http://open.163.com/movie/2012/10/8/M/M8JHGHLL1_M8KVTM18M.html>）

11) What temple is the most famous of all Roman temples? What temple type is it?Can you explain the meaning of the temple by its name?

The pantheon.It's kind of a Tholos.

Pan means all,Theon,more or less means,the gods,all the gods.So the pantheon is a temple to all the gods.

C.俄亥俄州立大学建筑史公开课中的古代罗马建筑2 中13：45-17:55的部分

（Source：<http://open.163.com/movie/2012/10/R/T/M8JHGHLL1_M8KVTT9RT.html>）

12) Why did the building of the Colosseum pose a challenge to Romans? What did they do to make it?

Creating a challenge for how do you use the Orders.Colosseum is not a single story building.Everything that comes down to us from Greek antiquityabout how to use the Orders is pretty much talking about a one story building.

Romans stack the Orders.They take the idea that Vitruvius gives us.

13) What is the task of the Orders in the Colosseum?

is to call out the relationships,the proportional relationships,.It's all the creation of beauty,delight.

14) What are the five Roman Orders?

Doric,Ionic,Corinthian,Tuscan order(the simplest,the smallest and the slenderest)，Composite Order(a kind of comingling of aspects).

D.俄亥俄州立大学建筑史公开课中的古代罗马建筑2 中32:10-34:00部分

（Source：<http://open.163.com/movie/2012/10/R/T/M8JHGHLL1_M8KVTT9RT.html>）

15) What are the two structural systems mentioned in the video?

arcuated system and trabeated system.

E.俄亥俄州立大学建筑史公开课中的古代罗马建筑2 中37:30-38:30部分

（Source：<http://open.163.com/movie/2012/10/R/T/M8JHGHLL1_M8KVTT9RT.html>）

F.俄亥俄州立大学建筑史公开课中的早期基督教建筑中10:15-12:40部分

（Source：<http://open.163.com/movie/2012/10/F/J/M8JHGHLL1_M8KVTO1FJ.html>）

16) What is the plan type of basilica? What is the large space in the middle called?

Its purpose is for the assemblage of large crowds.

The large space in the middle is called the nave.(中殿）

17）What is the purpose of Roman basilica?

The purpose of basilica is meeting hall.It is not a religious building at all.

2. Find the Chinese equivalents for the following terms.

| **序号** | **单词** | **中文** |
| --- | --- | --- |
| 1 | vaulting | 拱 |
| 2 | arch | 券 |
| 3 | dome | 穹顶 |
| 4 | aqueduct | 高架水渠 |
| 5 | concrete | 混凝土 |
| 6 | voussoir | 拱石 |
| 7 | key stone | 核心石头 |
| 8 | barrel vault | 桶形拱顶 |
| 9 | lateral thrust | 横向推力 |
| 10 | cross vault/groin valut | 十字拱（腹股沟拱顶） |
| 11 | tholos | 圆形神庙 |
| 12 | Pantheon | 万神庙 |
| 13 | Colosseum | 罗马圆形大剧场 |
| 14 | porch | 门廊，门厅 |
| 15 | Tuscan order | 托斯卡纳圆柱式 |
| 16 | Composite order | 组合柱式 |
| 17 | triumphal arch | 凯旋门 |
| 18 | arcuated system | 拱式结构 |
| 19 | trabeated system | 抬梁式结构 |
| 20 | basilica | 长方形会堂 |

3. Read Text A, Unit 2 (pp.18-20) and translate Para. 3 on the right column on P. 19 into Chinese.

Rome became a powerful, well-organized empire, marked by great engineering works----roads, canals, bridges, and aqueducts. Two Roman inventions allowed for greater architectural flexibility: the dome and the groin vault----formed by the intersection of two identical barrel vaults over a square plan. The Romans also introducedthe commemorative or triumphal arch and the colosseum or stadium. Rome was noteworthy for grandiose urban design, demonstrated through the forum, complete with basilica, temple, and other features. The most remarkable forum is Hadrian’s Villa near Tivoli.

罗马成为了一个强大的、组织良好的帝国，以伟大的工程工程——道路、运河、桥梁和引水渠为标志。罗马的两项发明提高了建筑的灵活性：穹顶和腹股沟拱顶——它们是由两个相同的桶形拱顶在一个方形平面上的交集形成的。罗马人还介绍了纪念拱门或凯旋门和罗马斗兽场或体育场。罗马以宏伟的城市设计而值得注意，通过论坛进行展示，包括大教堂、寺庙和其他特色。最著名的论坛是蒂沃利附近的哈德良别墅。