

Geometric & Graphics Programming Lab: Lecture 11

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1 Workshop N.3

2 Minimal git/github instructions

Workshop N.3

Leonardo's centralized church schemes



Figure 1: Leonardo da Vinci, sketches of plans and elevations of a domed church with the central space and eight domed side chapels based on an octagonal pattern extended by eight smaller domes, pen, ink and black chalk, manuscript B, folio 18 recto (source: Chierici 1956: 236)

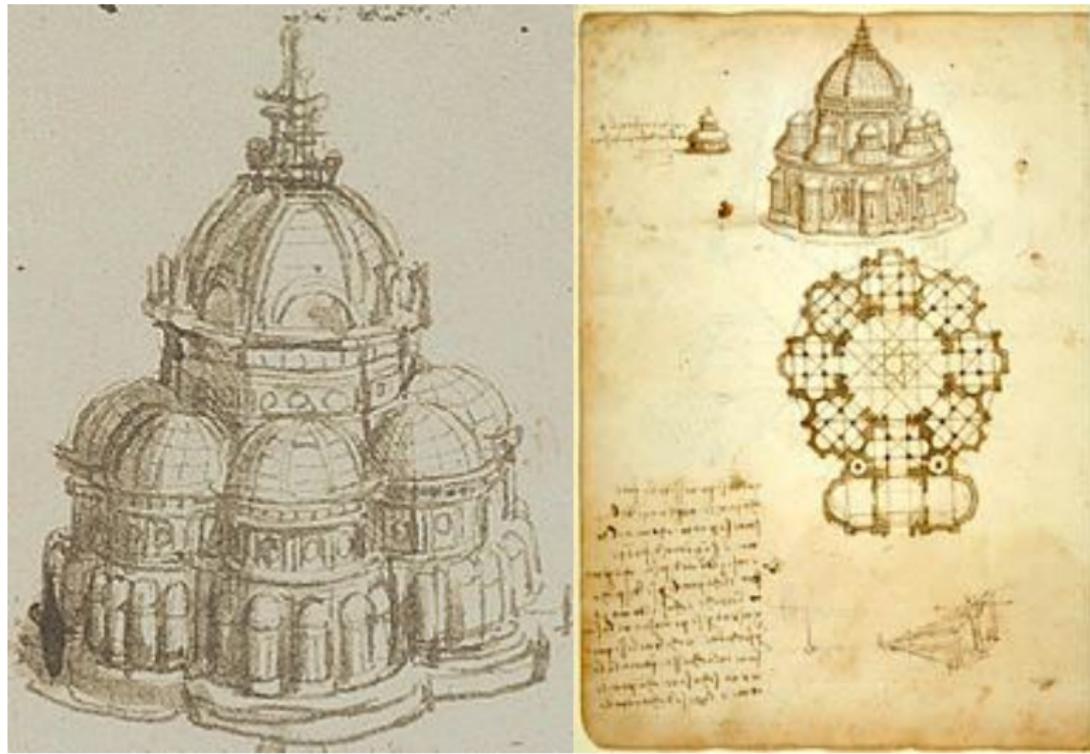
Theme definition

- using some pyplasm primitives (**SPHERE**, **CYLINDER**, **PROD**, **QUOTE**, **CUBOID**, etc),
- generate a **3D model** of Leonardo's **centralized church** scheme
- complete **choice freedom** for the **topic**, the **tools**, and the **style of coding**

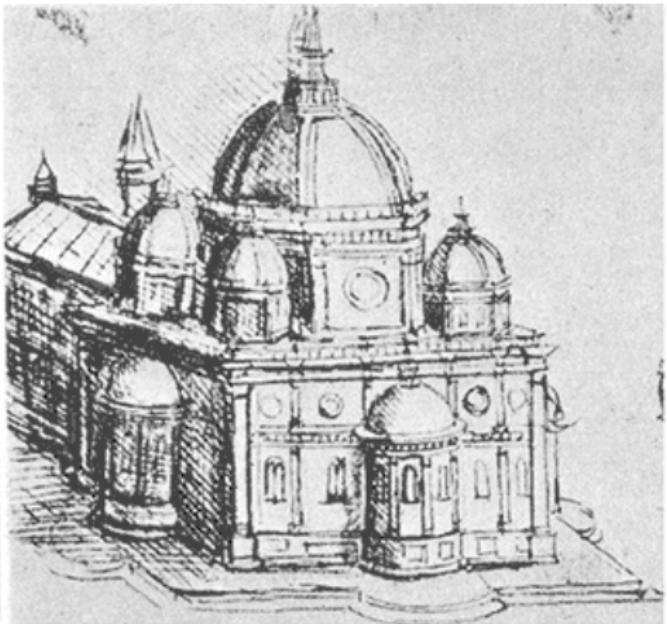
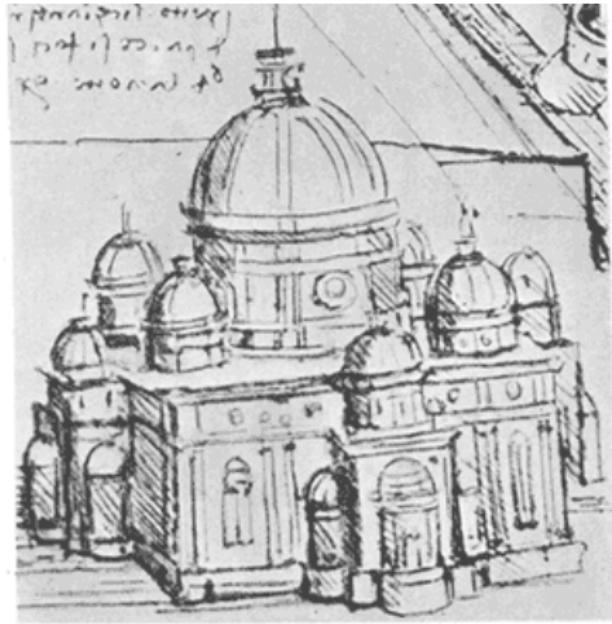
Look at some Leonardo's church schemes (1/8)



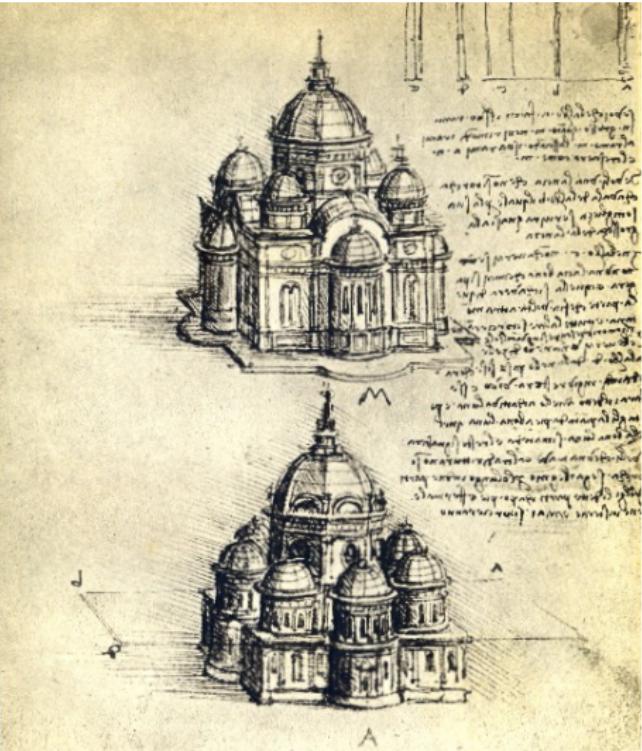
Look at some Leonardo's church schemes (2/8)



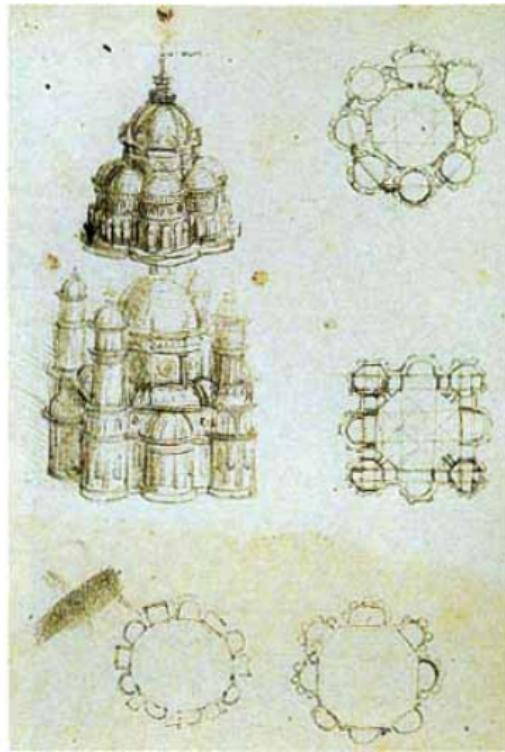
Look at some Leonardo's church schemes (3/8)



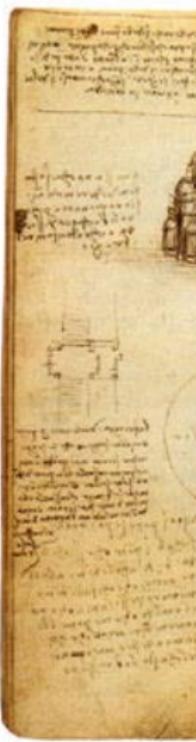
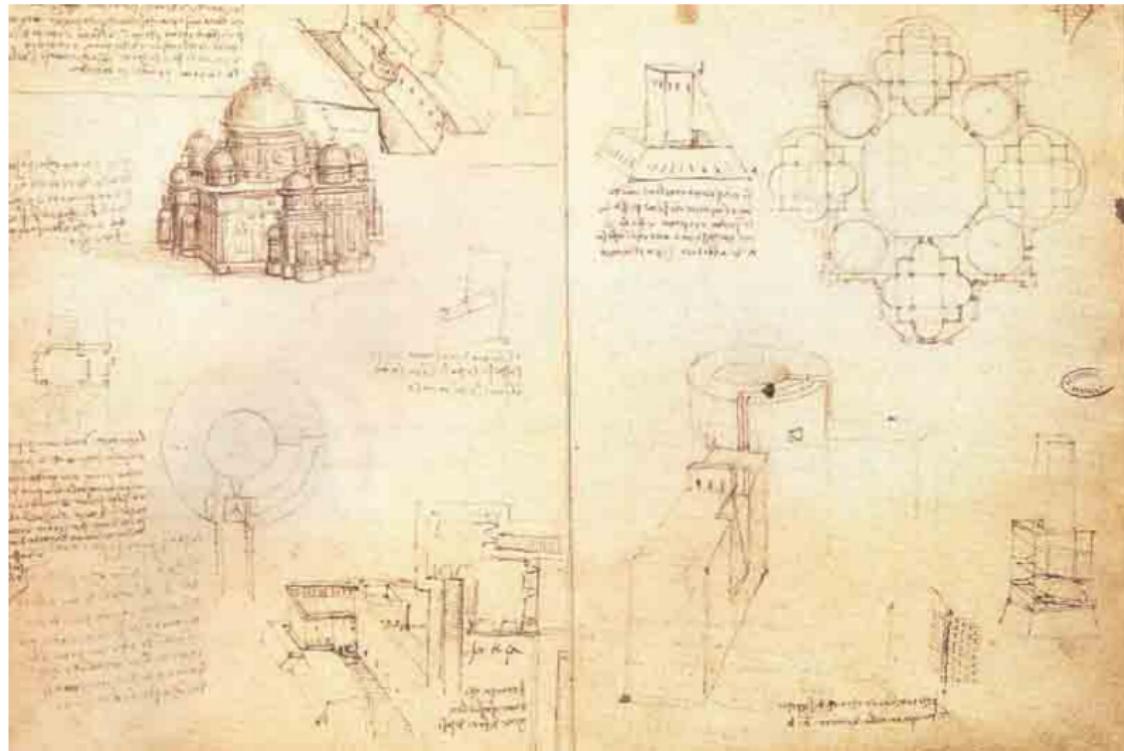
Look at some Leonardo's church schemes (4/8)



Look at some Leonardo's church schemes (5/8)



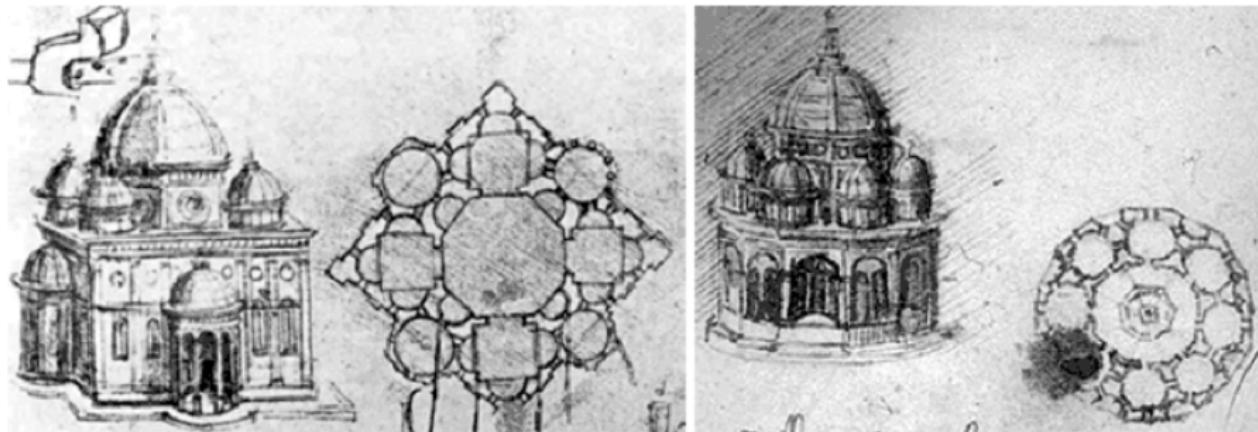
Look at some Leonardo's church schemes (6/8)



Look at some Leonardo's church schemes (7/8)



Look at some Leonardo's church schemes (8/8)



Requirements

- Write a single notebook, named `workshop_03.ipynb`
- Choose a notebook Title, for example `<Leonardo_scheme>`
- Start the notebook with a `web reference` and one/more `image/s` of your `scheme`
- List the `variables` used in your code, with a `textual definition`
- Provide a `short description` of used `geometric methods` you are going to implement
- Include the coding of a single parametric function named `ggpl_<my_leonardo>`
- Provide the `images` generated by `some executions` with different actual parameters.
- Use measures in `meters (m)`

Style specs

- use **meaningfull identifiers** (variables and parameters)
- use **camelCase** ids
- add **Python docstrings** (google for it)
- produce a **single** notebook file, named **workshop_03.ipynb**
- file path: **your_repo/2017-11-06/workshop_03.ipynb**

Minimal git/github instructions

Minimal git/github instructions (1/2)

create your local repository

```
$ mkdir 2017-11-06  
$ cd 2017-11-06  
$ touch workshop_03.ipynb
```

Minimal git/github instructions (2/2)

commit your work

```
$ git add -A .
$ git commit -m "add a short note to commit (Leonardo model?)"
$ git push origin master
```