

ARCH 2300/5010 Notes

Fall 2013

Dear Students,

These and subsequent notes, to be issued periodically over the term, are meant to supplement the ARCH 2300/5010 weekly lectures. The images comply with "fair use" rules under Carleton copyright agreements.

The notes should not be understood as encompassing what may (or may not) be asked on tests; they are designed only to help frame key ideas, thus serving as supplemental study aids. The class lectures and weekly readings - outlined on the syllabus and organized (in a helpful sequence) in the Coursepack - constitute the full intellectual arc of ARCH 2300/5010.

The Teaching Assistants will inform you of review sessions to be held before the midterm and final tests.

Sincerely,

Inderbir S. Riar

Lecturer, Azrieli School of Architecture and Urbanism

## Lecture 2

Claude Perrault and the "Querelle des Anciens  
et Modernes": A 17<sup>th</sup>-century Perspective on  
What it Means to be Modern

Vitruvius, *The Ten Books of Architecture* (1<sup>st</sup> century BCE)

CONTEMPLATION OF THE GODS THROUGH A  
RECOGNITION OF ORDER IN NATURE  
NATURE IS OMNIPRESENT, RATIONAL, AND DIVINE  
ANALOGY OF BODY, BUILDING, AND NATURE

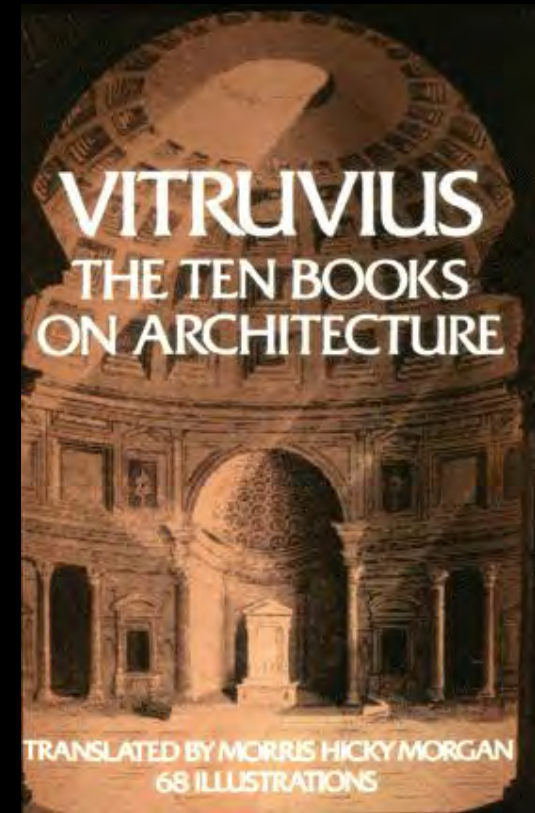
Oldest surviving treatise on Architecture  
(First Century)

The architect must convey wonder.  
Architecture must harmonize a cosmic order

The concept of *decorum* in Vitruvius: a deep  
continuity between human works and the  
natural world

The word KOSMOS means both "world order" and  
"ornament"

THIS TEXT ENJOYED WIDESPREAD CURRENCY UNTIL  
THE END OF THE RENAISSANCE



CLAUDE PERRAULT (1613-1688)

*La querelle des Anciens et des Modernes* (The Quarrel between the Ancients and the Moderns): a critical debate in late-17<sup>th</sup>-century France

A fundamental shift: moving away from a cosmological basis of architecture and toward one of self-conscious "design"

Perrault was trained as a physician, receiving his degree in 1642

Perrault was elected to the Royal Academy of Science in 1666; from then on, he was engaged mainly in scientific research

Perrault was *not* a member of the Academy of Architecture, but attended its sessions

#### PERRAULT'S THEORY:

- TRUE AND NATURAL PROPORTIONS DO NOT EXIST
- THE BUILDING CAN BE BEAUTIFUL WITHOUT PROPORTION CONTRIBUTING TO THE BEAUTY
- THE BEAUTY OF A BUILDING IS NOT A FUNCTION OF THE PRECISION OF ITS PROPORTIONS
- THE PROPORTIONS COULD BE DIFFERENT WITHOUT IMPAIRING BEAUTY

#### PERRAULT REFUTES:

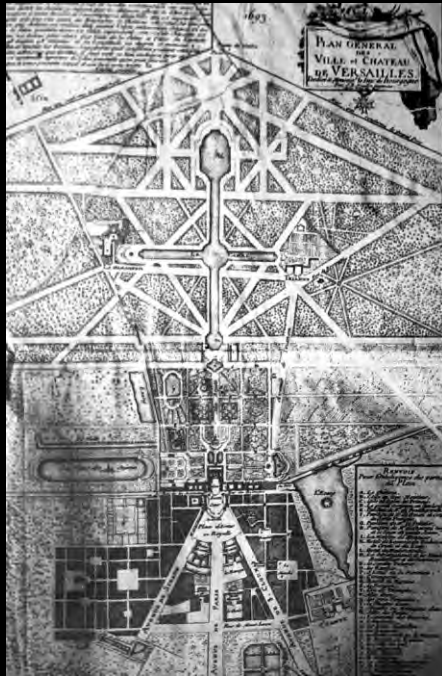
- MUSICAL ANALOGY
- IMITATION OF NATURE
- THE AUTHORITY OF THE ANCIENTS
- THE NEED FOR OPTICAL CORRECTIONS: "VISUAL JUDGEMENTS, THROUGH PRACTICE, CAN BE ACCURATE"

Perrault's work is based in milieu of scientific inquiry and debate

Perrault produced an *annotated* translation of Vitruvius, which led to controversy



12. Ch. Perrault, Les hommes illustres (1696-1700), portrait de Claude Perrault par G. Edelinck, d'après Vexelin.



André La Nôtre, Versailles, 1693 (for Louis XIV)

Kenneth Frampton: "the ultimate Baroque Cartesian gesture of the *ancien regime*"

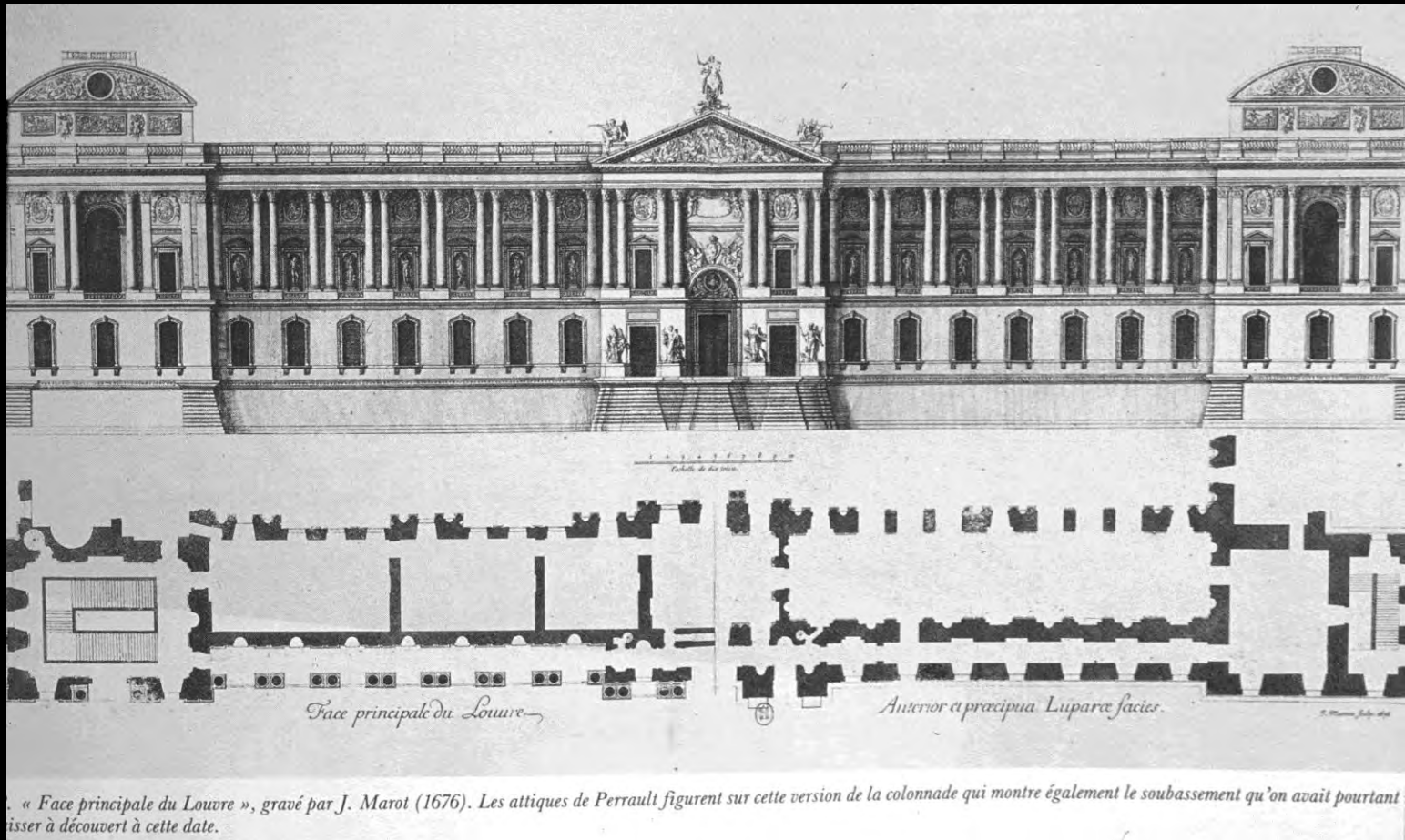


36. Cl. Perrault. Mémoires pour servir à l'histoire naturelle des animaux (1671), frontispice par S. LeClerc représentant Louis XIV et Colbert rendant visite à l'Académie des Sciences. Toutes les disciplines auxquelles s'intéressait l'Académie sont représentées : astronomie, cartographie, mécanique, anatomie animale. La scène se passe au Jardin de Roi dont on aperçoit les parterres à l'extérieur. Une topographie fantaisiste permet de faire figurer également l'Observatoire en construction.

Claude Perrault, *Mémoires pour servir à l'histoire naturelle des animaux* (1671)

Frontispiece: Louis XIV and Colbert visit the Académie des Science (all disciplines are represented: astronomy, cartographie, mechanics, animal anatomy)

Against the "libertinage" of the Italian baroque, the Académie will search for an "ordre général", thereby linking ideas on standard form (and "beauty") with national identity



« Face principale du Louvre », gravé par J. Marot (1676). Les attiques de Perrault figurent sur cette version de la colonnade qui montre également le soubassement qu'on avait pourtant émis à découvert à cette date.

## Claude Perrault, East wing of the Louvre, 1667-1670

Paired freestanding columns with larger than usual inter-columnar spacing, in contradiction with the "authority" of the Ancients

The East wing was part of a competition organized to produce a unique national "French style"

## Lecture 3

Visions at the Threshold of Change, c. 1750

1750

Three themes characterise the period emerging circa 1750 (and extending into the 19<sup>th</sup> century):

1. A fundamentally new vision of the relationship of architecture to the historical past
2. Architecture's response to the explosion of scientific inquiry, not simply in the natural realm but into humanity itself as the science of man sought an equivalent status to the emerging *natural sciences* (a term invented over the course of the period)
  - A. Newtonian revolution in scientific reasoning
  - B. Locke's premise that all knowledge was derived through the senses (and his rejection of innate ideas) – and thus the opening of human emotional response, knowledge, and even morality to scientific experimentation and inquiry
3. The emergence of new publics for architecture in a period of social and economic revolution and nation-building – and thus the creation of new building types (libraries, museums, halls of legislative assembly)

1750

Architecture becomes self-conscious (of its own modernity) - in other words... a doctrine of *progress*

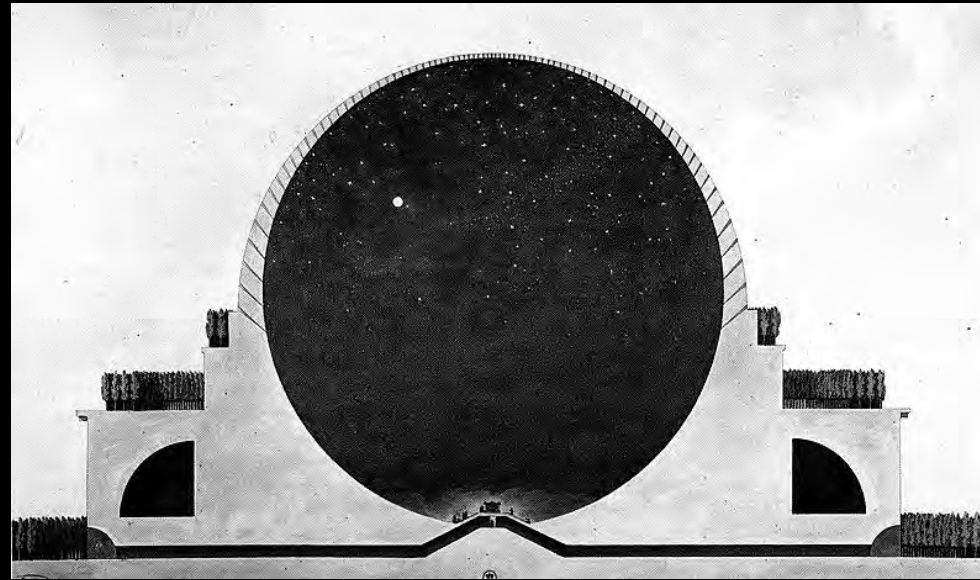
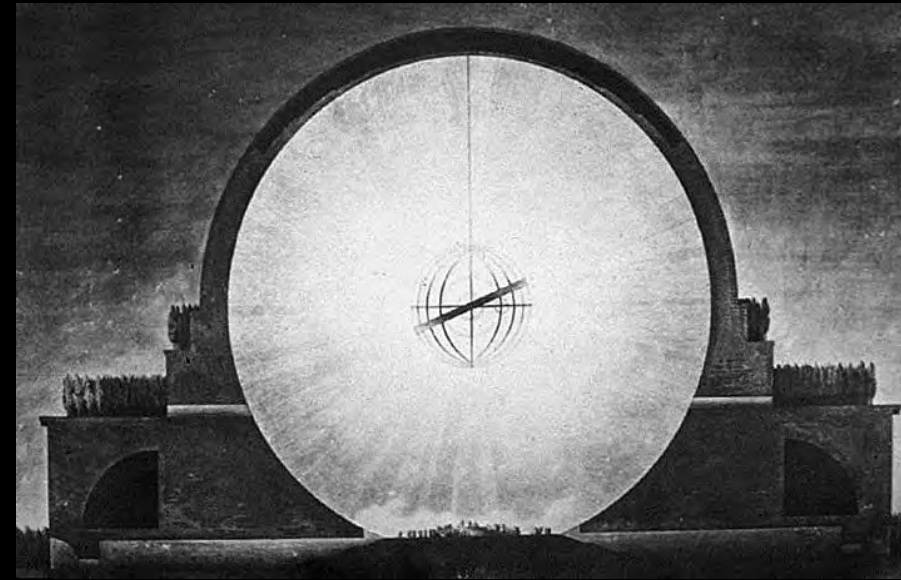
Archaeology (and the discovery of antiquity) - no longer the replication of the past (i.e. the "authority of the Ancients) but a means for intervening in history

Note: the use of antiquity was also the source of intellectual debate, e.g. at the Académie during Perrault's time (late-17<sup>th</sup> century)

Neoclassicism



A. Joli, The Temples of Paestum, 1758, oil on canvas

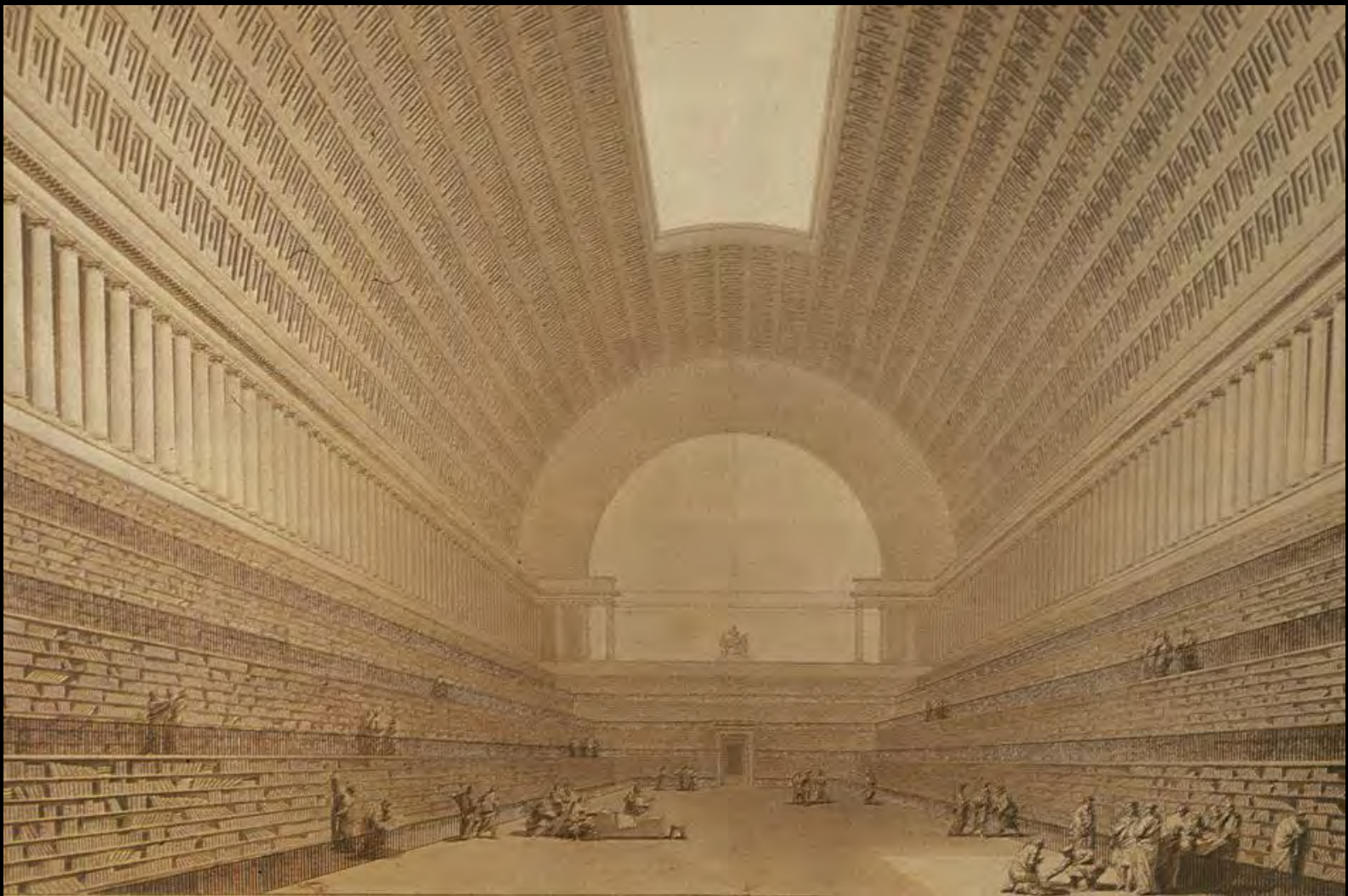


Boullée, Cenotaph for Newton, 1784.  
Sections with the effects of night (left) and day (right)

Boullée: "...to discover the properties of volumes and their analogy with the human organism..."

A monumental public building

The term "Newtonian" denoted the view of nature as a universal system of mathematical reason and order divinely created and administered



Boullée, project for a Royal Library, 1785

A public library as a grand spectacle of books, which are constituent parts of the architecture

Sublime: that an effect typically found in nature here could be *constructed* in architecture

Edmund Burke: "the "artificial infinite"