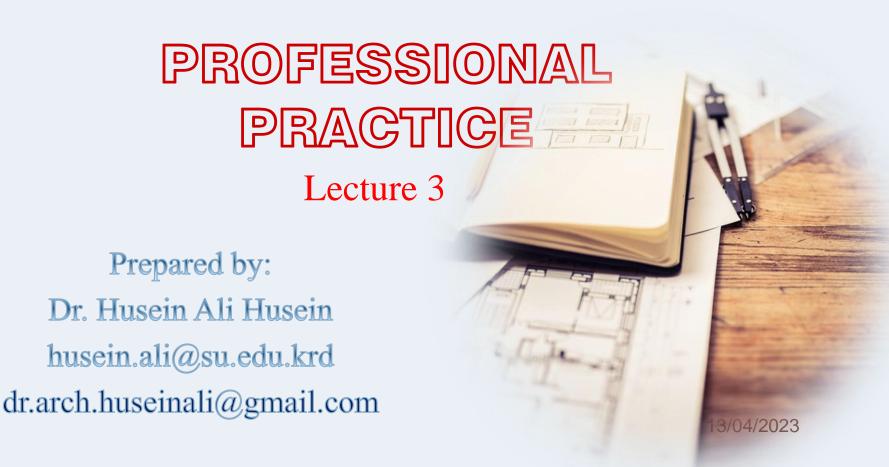


#### **COLLEGE OF ENGINEERING** ARCHITECTURAL ENGINEERING DEPARTMENT FIFTH STAGE

#### PROFESSIONAL PRACTICE



#### **Professional practice and conduct:**

- This course is important for post-graduation stage.
- > During your career.
- > On the state of Ethics.
- > Dealing with the others.
- ➤ Major and Minor parties are according to their role in the engineering process.

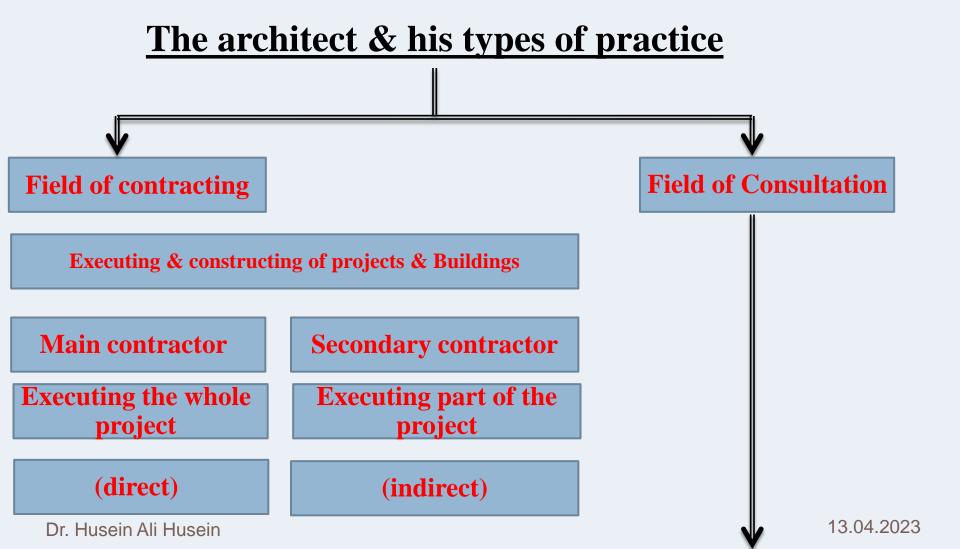
Dr. Husein Ali Husein

Architecture both defines and is defined by social, cultural, political and financial constraints: this is where the discipline and the profession of architecture meet.

The practice of architecture is complex and its complexity is increasing each year.

Because of these significant changes in the design and construction industry, it is impossible to assume that the same professional fee will be appropriate for all projects even if the projects are of the same size and the same building type.

## 1) The architect & his types of practice



#### 1- Arbitrator of Referee

When a conflict happens,

A Referee should be elected as a committee (3,5,....etc persons i.e odd numbers) this committee is:

- 1- by work practice
- 2- by the association
- 3- by the court.

We have here what we call: THE LEGAL EXPERT, as an arbitrator or referee but formally missioned by the court.

2- Project Manager

1- Representative of consultant.

2- Also cooperates with the client.

3- He is the referee for any conflict among the parties.

# **4-Resident Engineer**

Preparing of the following:

- 1- Studies
- 2- Prelim Designs
- 3- Detailed Design and working drawings set.
- 4- Written documents (B.o.Q., Specifications....)
- 5- Supervision on Construction execution.
- 6- Construction execution Management

1- Representative of client or Beneficiary party.

2-Coordinates with the consultant and Contractor

3- Managing the daily affairs of the Project construction.

### 2) The architect & his commitments and Duties

Commitments (obligations) General

in general toward society and in particular client

Duties Particular

toward the client and the work

Duties are part of Commitments

Client: Who owns the building, Site, Capital

Beneficiary Part: Who uses and commissions the building after construction completion

## Client & Beneficiary part:

<u>The same</u> <u>Different</u>

Owns & uses Owns but doesn't use

Uses but doesn't own

## Client & Beneficiary part could be:

One person or a number of persons.

Company (Governmental, mixed or private)

Establishment, Society; semiofficial or charitable societies.....etc.

Governmental part such as: Ministry, council, establishment, institution,.....etc.

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Going back to the architect's general commitments toward the client:

- 1) Putting himself under the service of the client and giving him extreme objectives of the project.
- 2) Achieving the public interest by investing and using all the adopted standard specifications in his work.
- 3) Achieving the financial & economical side of the project by making them within the budget.
- 4) Achieving the time period of project completion which is in turn an economical side.
- 5) Balancing among the parts of the engineering work TRIANGLE Design-wise and Construction-wise.

#### The Architect's duties:

They are pure professional and part of the commitments.

- 1) Performing the studies of the project.
- 2) Performing the prelim Architectural Design.
- 3) Performing the working drawing architectural sets.
- 4) Supervision on construction.
- 5) Advising the client and helping him in taking decisions concerning the work.
- 6) Determining and following up the ways of project execution stages and sequence.
- 7) Cooperation with the <u>associated parties</u> in the project, advising and helping them on the engineering and technical sides.

## These **associated parties** are:

- 1) The contractor (Main & Secondary).
- 2) Materials Suppliers
- 3) Owners of the workshops (Carpenters, Blacksmiths, Plumbers, Electricians, etc)
- 4) The technicians performing the work with their workers.
- 5) The administrative staff.

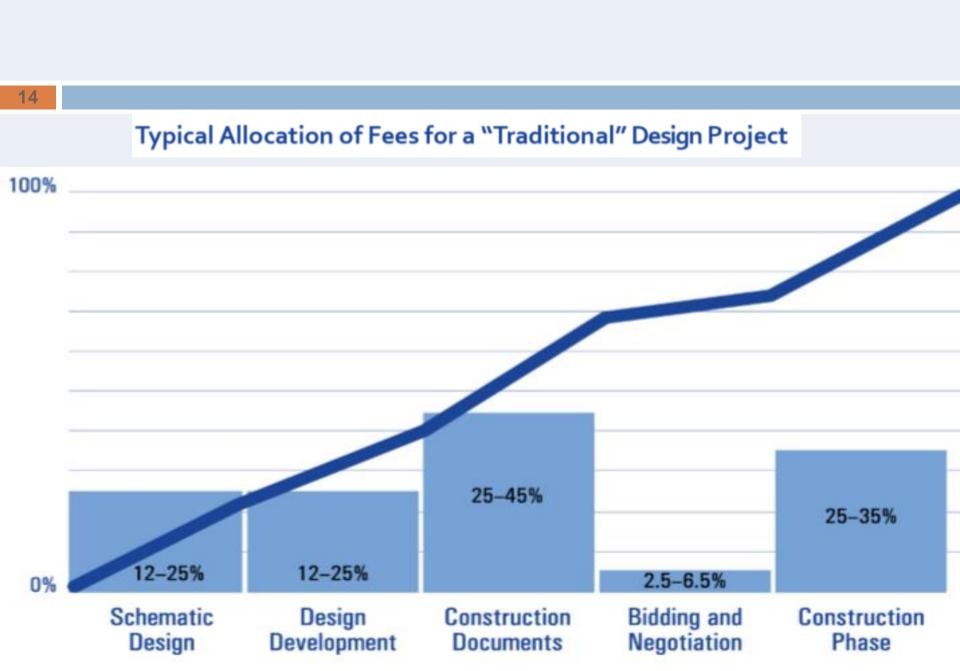
#### **Types of Design and Drawings:**

There are four main types of Design and Drawings to be prepared during Consulting stage and Construction stage:

- 1. <u>Preliminary Design</u>- to be prepared by the consultant during consulting stage (particularly design stage).
- 2. Working Drawing Set- to be prepared by the consultant during consulting stage (particularly design stage) for architectural and all other engineering specialties.

- 3) Shop Drawing Set- to be prepared by the contractor (project constructor and executor) during construction stage for all specialties and is considered as the realistic and practical documentation of electrical, mechanical and sanitary service routes within structure, partitioning and finishing of the building.
- 4) As Built Drawing Set- for all specialties and to be prepared by the contractor at the final stages of the building construction or/ and at the end of each engineering specialty work.

As built drawing set is the reference for the beneficiary part (the users and occupants) for the services in the building and their maintenance during building using.



#### Architectural Fee Breakdown

# Architectural Fee Breakdown

PHASE	%	DISCIPLINE	%
Schematic Design	15%	Structural Engineer	11%
Design Development	20%	M/E Engineers	22%
Construction Documents	40%	Architect	67%
Bidding	5%		
Construction Administration	20%		
TOTAL FEE	100%		100%



## What are the architect & his types of practice?

The architect & his commitments and Duties