

Interior Design
Prof. Smriti Saraswat
Department of Architecture and Technology,
Indian Institute of Technology Roorkee

Lecture - 9
Interior Design: Drawings and Representation Techniques

Namaste, hello everyone. We are at lecture 9 today in this course on interior design, and today we will be talking about drawings and representation techniques, especially focusing on interior architecture or interior design. So, when we talk about interior architecture projects, the drawings are really elaborate, and I keep saying that, you know, God is in the details. So, all these drawings that we produce are very comprehensive; they have a lot of information. So, in this lecture, I am going to show you some representations and some discussion on these drawings.

So, what are some of the types of interior architecture drawings? Some standards and symbols, some of the types of plans, and then, you know, there is an example of a project and some references. So, when we talk about types of interior architecture drawings, we could, you know, understand these drawings in terms of process. So, there are process drawings, and process drawings would, you know, essentially mean preliminary images or sketches and schematics. They don't have to be like hardcore construction drawings or, you know, the working drawings. Then we have construction documents or, you know, working drawings or drafted drawings.

So, it has, you know, the drawings which give proper information regarding how they will be drafted. So, there are working drawings, and there are technical drawings like plans, elevations, sections, and also zoom-in details. Now, the drafted drawings, you know, they could be technical sketches. So, rather than preliminary sketches, technical sketches would be on scale. They would have some kind of technical detail.

And other than technical sketches, there is mechanical drafting when we talk about drafted drawings. There is also computer-aided drafting, which is like your CAD drawings. And then, of course, there are presentation drawings. So, you know, even to present a complete portfolio, these drawings come in handy. So, they could have illustrated sketches, 3D views, renders, and also details like perspectives, isometrics, and so on.

So, there is, you know, this mix and match of these kinds of drawings that you could use, and it could enhance the portfolio of your project and improve interactions with your clientele. So, this is an example of a technical sketch. It gives an idea, you know, about the scale of the design, and it provides the overall ideation. This is done to scale, you know, to represent how a certain space would look like on a final scale. Then there is also an example of a CAD drawing that you see here.

So, Autodesk AutoCAD is used for drafting these drawings, and of course, they are not freehand sketches but proper line drawings with, you know, all the hatching and symbols—how the furniture is placed, what the layout is like, how the wall looks, where the openings are, what the details are, where the flooring is, and what kind of flooring it is. And also, this kind of numbering and direction suggest where the subject is standing and which sides they are looking at, and then, you know, also providing other relevant details—like elevation on this side or that side. So, there will be an entire set of drawings required on-site for proper project execution. And, you know, we designers also use a lot of tracing paper. So, like this is tracing paper, and this is the initial conceptualization or ideation, even something close to a final drawing but in a very, you know, crude format. And if you use graph paper underneath, it may also give you an idea of scale, or it could be without scale in the beginning, which could be your very cursory idea.

So, these tracing papers help in interior architecture ideation and drawings. Then, we also have vellum paper. Here, actually, this is a bit crisp and solid compared to the tracing paper, and it does not absorb the ink readily. These details and drawings could stay for a longer period. So, this is quite often used. In the graph paper that I was just talking about, there is a proper grid mentioned over here, and like one square could represent one scale.

Corresponding to that, it becomes easy to make your drawings. And here, since we already have grid lines or construction lines, they're almost straight and linear while we work. Of course, not like drafted drawings, which are done on AutoCAD or other software, but this is quite on scale and very finesse in that sense. Then, you know, when we talk about these drawings, any kind of drawing that we just saw, the different kinds of drawings—especially when we talk about the software, there are line weights which we could assign to different lines. This could also happen

manually when we do the sketching. Whether we are using a light-intensity pencil or a dark-intensity pencil, whether it's like 2H, 4H, 2B, 4B, or 6B.

So, H is the lighter one, and towards B is the darker one. And then, with the combination of light and dark, we could create this kind of variation. So, for example, over here, these are dark lines. And here, if we see this, this is light. This furniture is light.

So, you know, the main highlights are your building elements. So, you will give your wall thicknesses, widths, and the line weights are assigned like that. So, there are layers in the software, and these line weights can be assigned there. And, of course, there are these other details which are sort of marked, you know, lighter. So, then there is a sort of layer, and it helps read these drawings.

And also, lettering matters a lot when we produce interior architecture drawings, again, be it manual or software. And we must also have some sort of layering and line weights for that, too. So, there is a system in place, and it's based on a hierarchy of information. So, main titles under the drawings have a certain scale and dimension that is followed. Subtitles and sub-names have other dimensions.

We have notes. We also have sheet numbering and a title block over here. So, main headings, other subheadings, the title, legend, and then within this drawing, we have another set of information. So, we have text and dimensioning over here, too. So, as per the hierarchy of information, there are, of course, you know, the play of dimensions along with line weights in the case of lettering, too.

Then there are drafting standards and symbols. So, you know, there could be different kinds of lines, and they could signify different kinds of information when we read the drawings. So, it could be a solid line, a dashed one, or the line which shows movement. There is a leader line, a break line. There is also a center line, then a line denoting a section where the section is being cut.

And then, of course, the dimension line, which is very important. So, there is this solid line that you see over here, and it indicates visible objects which are seen in plan, elevation, or 3D views. And then there are dashed lines which usually show hidden objects, you know, or like hidden parts of an object or objects below or behind

another object. And these are quite useful for the interior architecture portfolio. They also indicate shelving or cabinets, you know, above a counter.

So, whatever is not clearly visible at eye level and it's above or below, we could use different kinds of, you know, dashed lines to showcase that kind of information. Then there are also movement lines. If you see over here, dash and two dots, and they imply direction or they show movement. And, you know, also, they could indicate a bi-swing door movement. You know, where the movement of the door or the opening is could also be shown through these dashed lines or a phantom line, as it is sometimes called.

Also, it sometimes indicates the views and sometimes indicates drawers, cabinet door openings, and opening direction, as I was telling you. Along the hinge and that hinge point, where is the opening? You know, whether it is opening inside or outside. Those kinds of indications can be given by these kinds of lines. Then there is a leader line that we see over here with a sort of an arrow. These lines are used to connect notes or references to objects or lines in a drawing. They start with a solid line and, of course, end with an arrow. They could be straight or at an angle.

Then there are break lines because sometimes we are not able to contain or fit a drawing within a single piece of paper or on a single canvas. It may be quite elaborate. We may be using these break points, and later we can connect them based on the positioning of these break lines or break points. We can then connect them and have the entire piece of information woven together. Then there is this center line, which is like a long dash and a small dash.

They indicate the center of a plan, object, circle, arc, or any symmetrical object. Section line over here, we see this section line along with this arrow, indicating the direction in which we are looking. This section line is used to show a cutaway view of a floor plan. The direction of the arrows shows the direction of the section view. So, this is the notation for the section line. And we have dimension lines, which show the measurement of an object or indicate the length, width, diameter, etc.

And an important thing that you see over here for interior architecture projects and interior architecture drawings. It is preferred to use feet inches, although we can write always in the bracket in a metric system also. So, it can be an additional information.

So, we could write both because a lot of people still follow metric. But the standard protocol and the best practice as per interior architecture profession is to use feet inches.

And yeah, I mean, you're the people who execute on ground, you know, the masons and the skilled people, they are well versed with feet inches and it is sort of used quite often on ground on site. Then material symbols are also very handy and they are very, very crucial. You know how we denote different materials and how we show them through representational drawings and then translating them on site. So whenever we are, you know, sort of cutting a section, we are going to see some material, you know, notation through drawings. For example, a brick could be shown like this.

Then there is this concrete with dots and small triangles. There is a symbol for earth. Brick could also be shown like this. And there is a ceramic tile, glass, and then this one showing here the wood. And for plastering, for stone, for different ways of showing timber, etc.

So, there is this entire set of symbols that always helps us in representing and communicating our ideas and drawings. We also have interior architecture graphic symbols you know, how we show a wall or how we show a cased opening, an interior door, again with the dotted lines indicating the direction. And then there is this exterior door over here. You can see the difference: this versus this. There could be a bifold door, a sliding door, or a pocket door where this thing goes inside and fits over here.

So, we have all these symbols, and it's a very precise and concise way of showcasing certain building elements, material typologies, movement patterns, and directional connotations. So, all of this can be done using these graphic symbols. And, you know, for something double-hung like a casement opening or a sliding door again, there is this awning. You must have seen this sort of canvas projected outside in restaurants, etc., just above the window opening. So, we can even create a symbol for that awning. Then we have more interior architecture graphic symbols, like here for the sliding door, this is for the panel door, so we have these panels over here. So, you know, it could be a flush door, a panel door, and so on.

And we can just represent that graphically. And then, you know, there are different kinds of windows. We see again a single casement window, of course, with this dotted line that gives the idea of opening and direction. The double casement one, a fixed window with, you know, the double-hung. We see like two portions of that, the awning that I just explained, and so on.

So, all these graphic symbols can be used very effectively. Then there are different kinds of drawings, especially plants, because, you know, these drawings are very important because even though we have 3D renders and 3D views and we can use a lot of softwares to explain how a space looks like or how it can be perceived for the benefit of our clientele and also for better, you know, presentation of our portfolios. But it's very important to know how to make proper line drawings. And within that, a plan is a very important drawing. And for interior architecture projects, we would require plans of varied typology to communicate our drawings and details and ideas.

So, there's a site plan. And of course, there are residential drawings and commercial drawings. There may be slight variation in terms of what kind of scale and what kind of... you know, representation we are using. But in terms of typology, starting with the site plan, which is very, very crucial.

Then there is a foundation plan, of course. And you have floor plans, which are very important for interior architecture project portfolios. There are a lot of elevations, you know, different walls, different elevations, lots of sections and your construction details and working drawings. interior details like surface finishes, tiling, false ceiling details, etc. And then of course, services.

So, you have your lighting, plumbing, electrical, air conditioning, heating, ventilation, drawings, etc. And then we could use these kinds of scales to represent them. It could be a customized scale also, but this is sort of a baseline set pattern. There is a very simple checklist, and it's important, especially for floor plans and also for different kinds of plans and drawings.

So, there is a professional way of presenting these drawings, and it's good to have a title block, it's good to have a certain delineation and definition within our canvas or sheet, the title, scale, drawing number, and site orientation—where is the north on the site, represented through an arrow. So, if I just put an arrow like this and write 'North'

at the bottom or upper left corner of the sheet, it will help understand the site orientation. Then the exterior walls, interior walls, outline of porches, patios. And whether we have given this window schedule or not, door schedule or not, proper symbols are marked or not. Whether we have highlighted through symbols—the symbols we just saw a while ago—whether it's sliding, casement, or a door is swinging, folding, pocket, or sliding, all those kinds.

And of course, then, different rooms and different spaces within that project or within the drawings that we have produced. What are those different spaces that we have demarcated? The positioning of the staircases and then giving the directional arrows which show the up and down, which side the staircase is leading us to. If there are chimneys and fireplaces, and then, of course, also considering universal accessibility. And then showing wheelchair access circle.

So, there is a certain radius that you need for turning your wheelchair. So, that has to be shown with dashed lines. So, these are all very important aspects. And our drawings should be the most effective way to communicate even the smallest possible detail because they are important. We could also

show handrails and grab bars. It is also possible to show plaster lines, then zoom in and show on a larger scale even the details of the layering within plasters. So, all of those possibilities are there. Then, of course, within the interior architecture domain, fixtures and appliances also play a big role. We have a lot of storage to show.

So, cabinets, shelving, and also the furniture layout, where the equipment is placed, even that layout. Where is your refrigerator going to be? Where are you going to put your sinks, and where are your storage units going to be? Whether they are, you know, the storage is above your eye level or just below your waist—so even those kinds of positioning need to be shown, also appliances like dryers, water tanks, etc.

So, we could use these line drawings so effectively to showcase and highlight all these details that go into making interior spaces very functional, aesthetic, and creative. And yeah, if there is any built-in interior feature, any kind of detail, or customized sort of design introduced within the project, all of those could be showcased through plans and drawings. And yes, of course, the dimensioning and the notations are very, very important, and they have to be put on all of these drawings.

And then the title and the scale, of course. So, like this, is an example of a floor plan over here that we see.

And like this is a study room here. This is a kitchen. And within the kitchen, we see all these details. So, there is a dotted line. There is a cabinet above the eye level.

And you know, these are all the arrows and numbering for the elevations, all four elevations and where the equipment is placed, where the refrigerator is placed, all of that. And this is the living room. And, you know, again, marking all the details, making the section lines. Then here we see the staircase, and we give this direction up, like we were discussing up and down. We have to show directions through the arrows.

And here we see again a material symbol. So, what are these walls made of, etc.? So, all those details are given over here. There is a laundry room, and then, you know, there is some kind of flooring over here. The drawing could communicate every possible detail.

So, it's all in the notation. It's all in the drawings. And line drawings are very important for execution on the site. Only views will not help, of course. We have to talk about the materials, specifications, finishes, dimensions, scale, joinery everything.

So, if we talk about dimensions, within that also there is a sort of hierarchical placement. There is an overall dimensioning, then wall dimensioning, and then, you know, the dimensioning of the opening. So, if we see over here, there is an overall dimensioning; we have the dimensioning of the opening, and then, you know, the wall dimensioning. So, we can produce this hierarchy of information. Over here, if we see, there is this dimension again in feet and inches.

And we also see these tick marks over here. They clearly delineate or demarcate, you know, from where to where this dimensioning is done. And it's quite important because until and unless we have the idea of scale and dimension, it's hard to relate these drawings on site. Then from here if we see there is this dimension marked from this to this.

This is the dimension line and this is the dimension line extension that we see over here. So, these are methods to represent our drawings. And we have to keep a little offset from the origin so that, you know, it's comprehensible and readable to the eye. It becomes easy to read it at a glance. This is another floor plan or drawing and it helps us understand the dimensioning of a curve.

So, you know if we have like anything curved or any detail which is you know like an arc or a circle or you know it's like a segment or a sector, we can just give the radius of this over here and mark the dimension along with the other dimensions that we see over here in feet inches. So, it is quite possible to talk about the curves or the circles and define them in terms of radius or other ways of quantifying them. Then the interior elevation drawings are very crucial because you know giving all the elevations of like all four sides the subject is standing here. And then trying to show to the clientele how a certain wall or how a certain elevation looks like. Because as designers, we may be able to comprehend things in terms of plans or sections.

But for our clientele, who may or may not be from this background, it could be very useful for us to show them elevations and 3D views. So, an interior elevation is a very important part of the interior architecture drawing portfolio. It is a vertically projected surface inside a building, and it gives us very crucial information, such as the height of the interior elements and the materials palettes that we have incorporated on these vertical surfaces, including any specific color palettes, designs, customizations, or highlights we have added to these vertical surfaces. So, it gives the overall idea of the space that is being conceptualized and designed.

Now, it is also possible to have elevations for surfaces, planes, or walls that may not be perpendicular to the wall, may not be completely straight, or may be at an angle. So, for that, we can have separate elevation drawings, and the arrows and numbering always help. So, this side elevation, this side, this side and since we are talking about this angle, we could make another set of drawings for these surfaces. So, looking at this plane, this one, and then this wall.

So, this entire set will help us conceptualize a 360-degree view of this space, which the user will eventually inhabit and experience. Interior elevation drawings—yes, as I said, they are very important, and we could keep adding a lot of details. We could keep adding numbers and make elevation drawings from different angles, positioning

the subject at different points. And the interior elevations could show us doors, windows, other openings, and even profiles of objects. Connections between the floor and ceiling, and so on, the information about the material palette, and, of course, the dimensioning and notation to highlight the information.

Like, this is one particular elevation, and if you look at this drawing, this is what I mean when I say God is in the details. Interior architecture drawings are quite elaborate. So, if you look over here, for example, this portion has a tile pattern over here, which is known as the herringbone tile pattern. In the lecture on tiles, this is discussed. Also, you know, what kind of lighting is it? Is it LED, incandescent, or fluorescent?

All of those kinds of information. If there is any kind of make, you know, whether it's a particular make or a proprietary item or whatever specification it is, that can even be put over here. For example, for a tile, whether it's Kajaria or another brand or whatever, even that set of information could be put if the discussion and approval is done by all the stakeholders. Then over here, adjustable shelves.

And then, you know, of course, we have the dimensioning, which is highlighted in another color over here. And then we have upper cabinets painted. This one over here, the lower section, is available for keeping plates. This kind of marking is for an oven, etc. All the equipment that we were talking about—the kitchen fixtures and equipment.

Then this countertop over here. What kind of countertop it is, whether it's a flat edge or is there a nosing like a bulbous round edge over there? What is it made out of, granite or any other kind of material? All those information must be incorporated in all of these interior architecture drawings. where the dishwasher is situated, what is the dimension, how much is this width, where is the microwave put, you know, and other kinds of details.

I mean, less is, in this case, less is not more. We need elaborate drawings for the interior architecture portfolio. This is another interior elevation drawing. It does represent material also. So, if it is a stone or concrete, if there is any mechanical box or any service that needs to be incorporated.

If there is some equipment here, it is refrigerator. If there is an opening like a door or window and then of course dimensions. They are done hierarchically like we were discussing. So this is the main outer dimension, then this one and then this one. So that there is no clutter and these dimension lines do not crisscross or overlap.

We maintain this sort of a hierarchy and keep it very clean. And here we also have, you know, a render. So, it is also an elevation, but it is explained, you know, very graphically through renders and human symbols and color coordination. This one is another one and here also we have a lot of information. So, this is the hall.

What is the major dimensioning like? The door opening. Then you know there are lighting fixtures installed and they are mentioned over there. Then there is a etched glass detail over here. If you can see this detail here.

There is a drop from the ceiling and there is a design element over there. It could be a chandelier, a false ceiling or any other element that, you know, you may have designed. So, what are those details and, you know, what is the level of drop from this ceiling? So, we usually take reference to the finished floor level and finished ceiling level and from there you know we mark the different levels in the interior architecture drawings. Mentioning the plaster, etc.

And the main door or the entrance all of that. And then, if there is a material palette that you would like to signify, such as a laminate base, etc. Something like a polished chrome circle. So, we can mark all of these, and even for further detailing, we can always produce another set of drawings. We can put a star or a number here, and then it could be referred to in the portfolio, right? Like in the entire set.

This one, again, we have the exterior elevation and then how we do the dimensioning. So, we take this reference of the roof ridge over here, and then this is the grade. So, you have your ground floor, and then, from here, from the earth to the roof ridge all this dimensioning is done so neatly. First floor, second floor, and so on. And then again, the amount of detailing that I have been talking about.

So, cedar board. So, cedar is a kind of timber. Any kind of material palette—whether it's glass, any kind of insulation, any kind of timber detailing, any kind of laminate. Then, this dimensioning for your opening this side and this side, x and y coordinates,

all the other internal dimensioning. So, it's very neat and clean, quite readable, understandable, and then, you know,

From here, this grid, which is at the bottom of the footing to the roof of the ridge, we can do this entire set of dimensioning. Then we have section drawings. So, a section drawing is basically a vertical cut through a space or object. So, if you see over here, this is like a plane, and we are just cutting it through. And then, what are the materials that we can see over here?

What are the details? That is what a section depicts. So, we can have section drawings, which are also very technical and very important. It will show us the wall thicknesses and the kind of material that is there in this wall. And, you know, what are the different kinds of details—whether it's the material, Corian or timber or metal, whether it's half an inch thick or one inch thick, whether it's an MJF board, whether it's 8mm, 10mm, epoxy bond, or any other kind of adhesive.

Here we see this molding. So, whether it's oak or cherry or mahogany, what kind of wood it is. Also, these kinds of details—again, which plywood, what make, what kind of inches because there are also standard sizes available in the market. There could be customized details also, but yes, there are standard sizes available. And then we try to put those dimensions and drawings over here if we are procuring those standard typologies.

Whether there is a lacquer finish or it's a varnish done over there. So all these details a section helps us understand. So, the material, the cross section, the thickness, the make, the different kind of specifications within a material family. So, all of that we will get to you know understand through section drawings. So, they are very very crucial.

This is like a building section and here again we see all the details from the footing to the you know, the topmost slab, where which space is and again, you know, treated wood or whether there is a paint or gypsum board over here, whether there is timber here or not, what is the thickness like, what is the material over here, so like red pine and whether it takes an oil stain or not, if there is a furring strip or any insulation material or not. So those kinds of details a section helps us understand and it's very very crucial for executing the projects on site. And it may appear a bit you know

complex or overwhelming but once we understand the fundamentals it's not so difficult to create these kinds of drawings. And of course, we have software support in any case but the fundamental understanding is important for execution on site even though we have software support.

then we have more drawings like you know for ceiling so if there is a ceiling like this and if i were to draw a section again what will be the details like so there is a steel plate over here there is an air chamber which is which we have to sort of incorporate And you know what kind of nuts and bolts and screws or metal details or all of those things if there is an AC, if there is a service that has to be incorporated, how much is the drop of the false ceiling, whether there is a false ceiling or not. So, corresponding to this drawing this is the section and we give all these details over here. Then schedules are also very important for interior architecture projects. So, there is door schedule, which is very crucial.

So again, we mark some points, how many numbers, what are the sizes and whether it's a flush door or a panel door. Whether it is made out of birch wood or pine or some kind of a fabric or glass, whether there is a natural finish or it is polished, the glass is tempered glass or tinted glass or colored glass or a clear glass. Whether it has a, you know, film on it or not. So, we give all those kinds of details through these kinds of schedules and inventories. So, this is the markup which we saw in the table, you know, on the slide before.

And then the quantity of these or number of these and then the other details. So again, the mark, the number and all the details. And these are the important details that we have to give in a schedule. This is another example. So, you know, the numbering and marking.

and then type of the door, quantity of the door, and then the door opening. what is the size what is the type, which material, what is the finish. Then you know what material, what is the frame like so we can break the door also you know in terms of opening frame jamb hardware other details and we can put some remarks also so like this is for the hardware So these kinds of schedules are very, very handy for site. You also have like window schedules again, right? So different kinds of sizes and then different kind of opening, what material. and whether there's a fixed window or what kind of glazing is there all of that what kind of finish is there and here also like if we

see again different kinds of windows or openings and then accordingly this schedule is made. So, like one project could have a variety of these openings or different typologies of windows or doors and they will all get reflected in this schedule we also have an interior finish schedule

Which is a very good piece of information for site execution. So, what room is it? Foyer, living room, or dining room, etc. What is the floor made of? For the foyer, it is ceramic.

For the family room, it is natural caulk or hardwood. Then, what is the base like? What are the finishes on the walls? We have wallpaper here in the living room. Those kinds of details.

Then, what is the ceiling like? Gypsum board or any other material. Ceiling height. It will depend on services and whether you are going for a false ceiling or not. Also, sometimes there may be remarks, like specific details, coffers in the ceiling, POP work in the ceiling, etc.

So, POP, plaster of Paris, we will keep using some terms in one or the other lecture, and then you'll be able to connect the dots. We do have this discussion in the lecture on finishes. Here again, right the room finish schedule: Office 1, Office 2, Office 3—carpet, whether there is a carpet or not, whether there is vinyl tile or ceramic tile, ceiling height again, and then the remarks. So here also, we can break that room into building elements like floor, base, walls, ceiling, and then accordingly give different sets of finishes for each room. We also have something very important, which is called the FF&E schedule.

So, furnishings, furniture, and equipment. So here, if you see, if you have to install furniture somewhere on the site, this is the kind of elaborate drawing with the entire layout, with all the symbols, and you know, in space, how these will be placed along with the circulation spaces between them. What material it is, so we have this entire schedule over here. What kind of tables, how many, what is the make, what is the description, what is the finish, and you know where it is installed.

So, this kind of notation and representation on the drawing, along with this kind of furniture schedule, comes very, very handy on-site, and we can mark the equipment and other details also. So, this is one example of an FF&E schedule. So, you know,

what is the, I was telling you that sometimes you also talk about the make, the manufacturer, or the brand. So, Herman Miller chair, Falcon product, or is it NOL? So, chair, chair, and this one is the.

custom wood tabletop and then again you know finishes and some remarks. So, this is very crucial for interior architecture projects. This is a small example of a Montessori school. This is done by a friend and a student Kishika. She is based in Kolkata.

She has done some work with us on a project and this is the location, this is the area, this is the given plot. And she did this exercise very, very meticulously. And we are very happy and thankful for her to contribute this. And let us share this with all of you. So, I really like this proximity and criteria matrix that she developed.

And what are these spaces adjacent or functions adjacent to each other, nearby and not related? So, if we are able to map these, we will be able to have an informed design decision wherever, you know, we use a design decision, it will be very informed and functional and effective. So, entrance, also in terms of privacy, services, daylight or ventilation, quantity, area and then is it adjacent to principal's room or is it having any proximity to principal's room or is it not related at all to teacher's room. So that kind of matrix has been designed and accordingly she then designed spaces.

So, this matrix is very useful, and it's a good tool for interior architecture projects. And then, of course, the bubble diagram. But if you do it with an idea of scale and the actual area, then it will help. If it is done very randomly, then it may not be a very good exercise. So again, try to connect the dots and see how the user navigates from one space to another.

This always helps. Of course, the zoning. How the zoning is done within a classroom, and then otherwise on a larger scale. And then, of course, the entire site plan how you develop it. And then the detailed drawing within a space.

So, these are some examples from a portfolio. But I would insist again that the proximity matrix and mapping are very useful for projects, interior architecture or otherwise. So, I always like to share some interesting quotes, and here it's about precision because we are talking about interior architecture and these drawings, and they have to be really precise. So be precise. A lack of precision is dangerous when the margin of error is small.

So, a very profound quote. Next, we will discuss the summary for the entire week. These are some of the references, mostly the books that I have referred to and mentioned on the slides, along with some websites. Thank you. I'll see you next time.