



MASTERCLASS

FRANK GEHRY

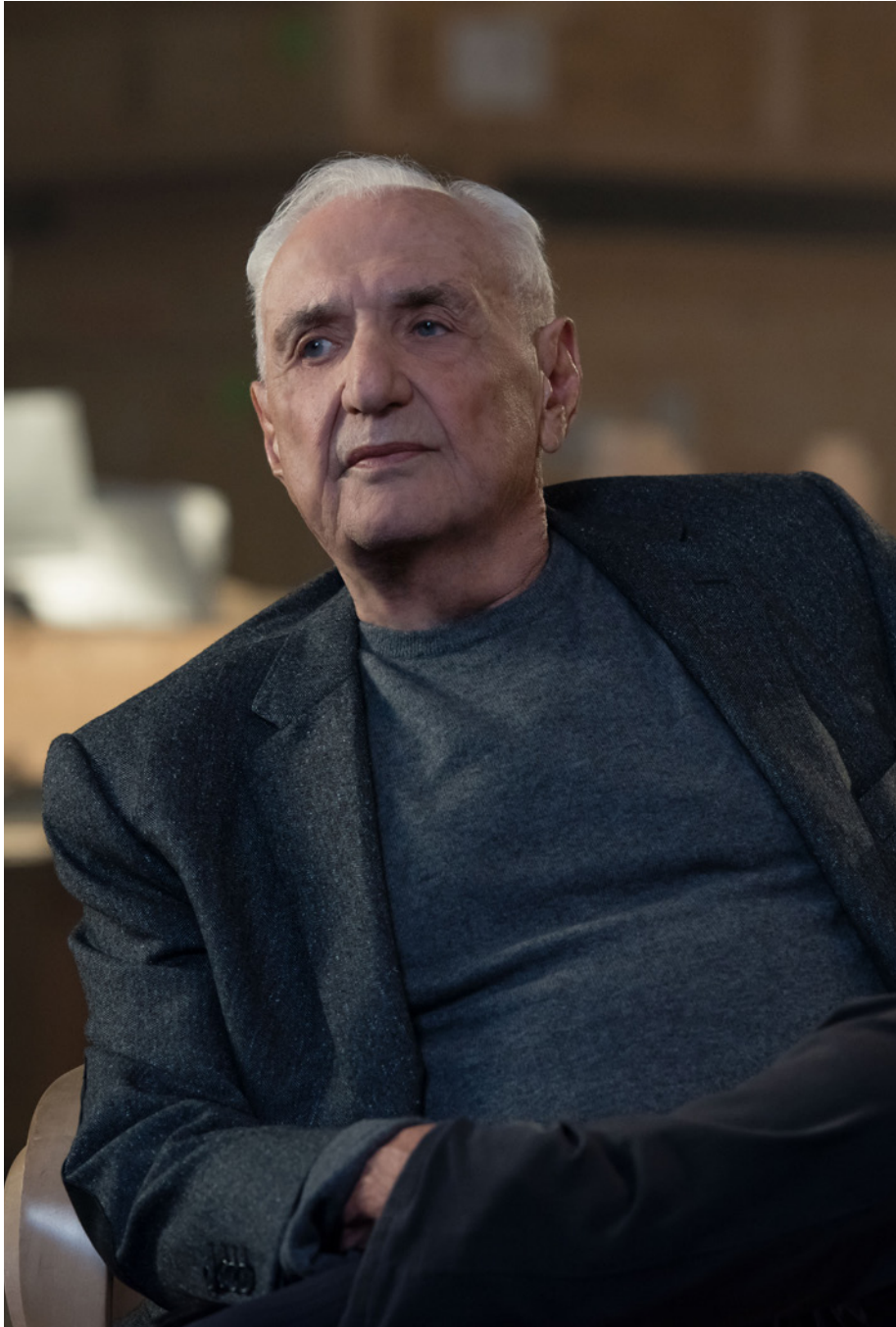
TEACHES DESIGN AND ARCHITECTURE



ABOUT

FRANK GEHRY

Frank Gehry was born in 1929 and raised in Canada until he immigrated to Los Angeles, California, in 1947. Frank graduated with a Bachelor of Architecture degree from the University of Southern California in 1954. From 1969 to 1973, Frank designed a furniture line called Easy Edges. The curved, swooping forms of his chairs, all constructed from corrugated cardboard, foreshadow the movement he wanted to express in future designs like the Walt Disney Concert Hall in Los Angeles and the Dancing House in Prague. An accomplished master, Frank has won many awards, chief among them the Pritzker Architecture Prize in 1989 and the Presidential Medal of Freedom in 2016.



INTRODUCTION

ABOUT THIS WORKBOOK

The MasterClass team has created this workbook as a supplement to Frank's class. Each chapter is supported here with a review and opportunities to take your learning further.

MASTERCLASS COMMUNITY

Throughout, we'll encourage you to discuss elements of the class and your training with your classmates in [The Hub](#).

You can also connect with your peers in the discussion section beneath each lesson video.

A SKETCHBOOK

This will be your go-to format for visual notetaking. Sketch out your impressions, responses, and any ideas that come to mind watching the lesson videos. You should also continue to use your sketchbook throughout the class to record your creative process.

SUGGESTED READING

Before you dive in, we have a few reading recommendations:

- *Building Art: The Life and Work of Frank Gehry* by Paul Goldberger
- *The Death and Life of Great American Cities* by Jane Jacobs
- *Modern Architecture Since 1900* by William J.R. Curtis
- *The Story of Art* by E. H. Gombrich
- *Ways of Seeing* by John Berger (or watch the BBC television series of the same name!)
- *Poetics of Space* by Gaston Bachelard
- *History of Modern Architecture* by Sir Bannister Fletcher

ON CREATIVITY

“You should enjoy finding yourself, and you should enjoy expressing yourself. You’re not killing anybody or hurting anybody, and they can reject you, and they will. Believe me, they will. And you gotta just keep doing it.”

—Frank Gehry

SUBCHAPTERS

- Find Your Creative Signature
- Healthy Insecurity
- Find Creativity Everywhere
- Dealing With Negativity

CHAPTER REVIEW

Frank advises you to be yourself and develop your creative signature. Your signature should be recognizable, different from your colleagues’, and should reveal something about you. As Frank says, your signature is “a prime example of the visual impact of your own persona.”

At the end of the first semester of his second year of college, Frank’s professor told him architecture was not the profession for him and suggested that he find another field of study. Frank ignored the advice. Many years later, Frank ran into the professor, who admitted his mistake. When someone says you’re not cut out for something, assess your critic and what he or she stands for, and decide if you agree. Harness the strength that comes from his or her statement. It will keep you going.

Always be curious, and let architecture open the door to different subjects, such as philosophy, literature, and music. Regardless of your profession, apply the self-propelled creativity required of an architect to your field or daily life.

Study the great architects—Le Corbusier, Zaha Hadid, Lina Bo Bardi, Borromini, Bernini, Michelangelo, Brunelleschi, Oscar Niemeyer, Louis Kahn, Julia Morgan, Ludwig Mies van der Rohe, Eiel Saarinen, Louis Sullivan, Frank Lloyd Wright—but remember that it is *your* conscience, *your* talent, and *your* mind that has a responsibility to others.

TAKE IT FURTHER

- Frank used to visit public schools and construct block cities with children. Find an opportunity like this for yourself or your firm, or pioneer one. Think about the kind of people you would like to support, what you’d like to show them about architecture and its potential to inspire a love of mathematics and the arts, and the kinds of projects you’d like to complete. Share your thoughts with your classmates in [The Hub](#).
- [Read](#) more about Frank’s philanthropic endeavors at public schools.

2.

ON CREATIVITY

TAKE IT FURTHER CONT.

- If you're academically inclined, read [this article](#) on the philosophy of architecture and a chapter on Kant in *The Missed Encounter of Radical Philosophy with Architecture*, or any of these texts:
 - *On the Art of Building in Ten Books* by Leon Battista Alberti (1485).
 - “The Eiffel Tower” by Roland Barthes (1979).
 - “The Work of Art in the Age of Mechanical Reproduction” by Walter Benjamin (1936). (We recommend the whole essay, but Section XV focuses on architecture.)
 - “Function and Sign: Semiotics of Architecture” by Umberto Eco (1968).
 - “Building Dwelling Thinking” by Martin Heidegger (1951).
 - *Critique of the Power of Judgment* by Immanuel Kant (1790).
 - *Ten Books on Architecture* by Vitruvius (15 BCE).
 - *The Pleasure of Finding Things Out* by Richard P. Feynman and Jeffrey Robbins (1999)

3+4.

DESIGN PHILOSOPHY, PARTS 1 AND 2

“We’re living in a kind of imperfect messiness... So it’s kind of logical that we would express that when [we] build.”

—Frank Gehry

SUBCHAPTERS

- “Not Knowing Cheers the Knowing”
- Design for Real Life
- Imagine You Are the Audience
- Transfer Your Feelings
- Focus on Expression Not Symmetry
- Respect Your Neighbor
- Consider Common Materials
- Begin Your Process on Paper
- No Small Projects
- Knowing When You’re Done
- Don’t Dine Out on Your Successes

CHAPTER REVIEW

Frank sees the world as a collision of thoughts represented through buildings, music, and art that is not properly expressed through the simplicity of the neat, clean squares of Modernism. The white boxes that are the architectural hallmarks of the twentieth century—while beautiful—can be unfriendly. Frank sees this kind of architecture as overpowering to the lives of the people who live in them and instead advocates for buildings and interiors that serve as a background for life.

The mission of an architect is to design something that one would want to be a part of, something one would want to visit and enjoy in an attempt to improve one’s quality of life. Architecture is the quest to transfer the feelings of humanity through inert materials. You want to create a feeling or emotional response that is not only comforting but enlightening. Work to see asymmetry as Frank does: democratically. The freedom asymmetry provides an architect is similar to the freedom of human expression; endless curiosity will lead to limitless solutions and ideas which may at first seem threatened by the restrictions of economics. Know, though, that there is always freedom to work within these limitations. The same advice applies to creative roadblocks.

Your goal as an architect is to engender an uplifting and positive experience through your design. Frank attempted this with the Walt Disney Concert Hall, creating a space in which a reciprocal relationship between the feelings of the musicians and those of the audience could flourish. He consciously tried to understand what would make performers and listeners feel comfortable. Frank also put thought into the surroundings of the Walt Disney Concert Hall, as he wanted the building to relate to the neighboring structures. You should always attempt to do the same with your designs.

You shouldn’t rely on your prior successes. Respect the motivation and pressure a deadline places on you and always keep in mind that there’s no such thing as a small project, so put your best effort forward in everything you plan and construct.

3+4.

DESIGN PHILOSOPHY, PARTS 1 AND 2

TAKE IT FURTHER

- In this chapter, Frank recalls seeing a statue of a charioteer from 500 BC in Delphi. While studying this piece of art, he was deeply moved by the transference of humanity he felt radiating through the sculpture. Look at the [Delphi Charioteer](#); then think of an artwork or building that had a similar effect on you. Draw it in your sketchbook, and share your drawing and a description of your experience seeing it for the first time with your classmates in [The Hub](#).

5.

GENERATING IDEAS

“If you’re relentless, you can make the fly that stops the train.”

—Frank Gehry

SUBCHAPTERS

- Explore the Crazy Ideas
- Repeat Yourself
- Creative Block
- Question Your Eureka Moments
- A Typical Workday

CHAPTER REVIEW

Designing a building is like playing jazz. You improvise, you respond, and you work intuitively to create something. The idea evolves and things happen, and you go with it. Trust it, don’t overthink it, and allow it to take you somewhere new.

The job of an architect is sometimes fraught with anxiety, so embrace the struggle and take risks. Have a firm idea for your project from the start, but also create the logic for it as you go. For example, Frank mentions brick and the kinds of connotations it has. Try to use it and other materials in new and exciting ways people haven’t seen before. Because they are familiar with the material, they might be more accepting of its use in innovative, creative designs that will emerge as you theorize throughout the project. Run with your ideas and forget about creative block. Keep trying ideas and designs, allowing them to naturally evolve. Creative block is merely an excuse you make in order to delay the process.

FRANK'S INSPIRATION

“You have to be curious and search out these great works from the past. Not to copy them, but to at least understand what [they] meant.”

—Frank Gehry

SUBCHAPTERS

- Learn From Other Masters
- Contemporary Inspirations
- Be True to Yourself

CHAPTER REVIEW

In this chapter, Frank speaks about the fine artists and architects that inspire him. While studying city planning at Harvard, he spent time with people that worked in the office of renowned architect Le Corbusier. A show of Le Corbusier’s paintings was particularly formative for Frank. Looking at the paintings, Frank realized that it was possible for architects to work out building and structural ideas through media other than standard blueprints.

In his early days of practicing architecture in Los Angeles, Frank was involved in the local art scene. He became close to artists and was inspired by their hands-on approach. Frank also cites Michael Heizer, Gordon Matta-Clark, and Robert Smithson as inspirations. If you see a painting and can’t forget it, its influence starts on you there. If you subconsciously start riffing on it, even if you aren’t familiar with the work or the artist, trust the instinct and explore it.

Never stop being influenced by the work of others. Frank reads, studies, and observes many sources and mediums, and believes this encourages and engages one in his or her architectural work. There is no substitute for it. Be curious and seek out great works from the past. Don’t copy them but rather try to understand them.

TAKE IT FURTHER

- [Read](#) about Le Corbusier’s Notre Dame du Ronchamp.
- [Read](#) Le Corbusier’s *Towards a New Architecture*.
- [Explore](#) the works of Michael Heizer.
- [Check out](#) *Splitting* by Gordon Matta-Clark, a piece that inspired Frank. [Watch](#) a short film that documents Matta-Clark’s process.
- The philosophy of earthworks artist Robert Smithson influenced Frank. [Read](#) Smithson’s selected writings.

6.

FRANK'S INSPIRATION

TAKE IT FURTHER CONT.

- Frank and his friend Irving Lavin, a professor of art history, look at works of art together during their travel. Plan an architectural or fine art tour. What buildings, structures, and artworks have you always wanted to see? What sketchbooks and materials will you take with you? How will you use these experiences to generate your own ideas? Set flight alerts so you can be notified of cheap airfare and make your trip a reality!
- Identify five to six buildings that you absolutely love. Using the library, museums, online archives, and galleries, identify two pieces of art that you think could have inspired your selected buildings. Think of when the building was designed, and try to seek out works of art from the same time period. Share your images and notes in [The Hub](#).

7.

DESIGN OBSTACLES

“There are so many rules. There’s a lot of room for creativity outside that, you know. You can meet all those constraints and still make architecture out of it.”

—Frank Gehry

SUBCHAPTERS

- 15%
- Identify What Is Beyond Your Control
- Mistakes Are Important Too

CHAPTER REVIEW

There are many rules that govern architecture, from the codes of the building department, to budget restrictions, to the desires of the client. However, there’s a lot of room for creativity outside of these mandates. You have 15% freedom to make your art. View your constraints as opportunities.

Throughout your career, you will constantly have small victories and make small mistakes. You must keep moving ahead, learning from the mistakes, and building on the successes. There will be continual evaluating, re-evaluating, missed and seized opportunities, and bad and good advice. The people involved in projects are like pieces of a puzzle that you have to put together. At the end, everything should fit perfectly.

TAKE IT FURTHER

- Share with your classmates in [The Hub](#) an experience in which you dealt with creative disagreements or issues with funding. What compromises did you reach? How did you make your voice heard? If you’re not a practicing architect, share a story in which similar problems occurred at work or school and explain how you came to a resolution.
- Read *Building Codes Illustrated* or *Building Construction Illustrated* by Francis Ching.

EXPRESSING MOVEMENT

“We live in a society where everything is moving—cars, planes, trains. That messiness has given a sort of humanity to everything. I was interested in expressing movement with inert materials.”

—Frank Gehry

SUBCHAPTERS

- From Inspiration and Intention...
- ...To Realization

CHAPTER REVIEW

Expressing movement with inert materials is a tradition that goes back to the Greeks with the Elgin Marbles, continued through Baroque Italy with Bernini and others, and influences architects to this day—especially Frank. He has always been fascinated with the folds of dresses and costumes in portraits, and urges you to spend more time looking at the folds than the faces.

Notice the objects you continually draw in your sketchbooks, as these things might lead to something great. In a lecture Frank gave, he told his listeners that the Greek temples they were emulating were anthropomorphic, and that if they wanted to look to the past, they should go back 300 million years to fish. Following that statement, Frank began drawing fish in his sketchbooks constantly, but never intended to build them. His sketches of buildings that resembled fish attracted a fashion house in Italy, and they invited him to make a fish sculpture for a fashion show in Rome.

Frank considered the 35-foot-long wooden fish a piece of kitsch, but it opened up opportunities for him; later, the Walker Art Center displayed one of his lead and copper fish sculptures. This also inspired Frank to play with curved forms, which led to the exterior designs of the Guggenheim Museum Bilbao, as well as the Walt Disney Concert Hall. Frank sees the sense of movement in these buildings as a replacement for the dead-end of minimalism and decoration.

TAKE IT FURTHER

- [Learn](#) about the Elgin Marbles, also known as the Parthenon Marbles.
- [Learn](#) about the history and formal elements of Gian Lorenzo Bernini’s sculpture *The Ecstasy of Santa Teresa*. Notice Bernini’s attention to the folds of the fabrics that drape the figures, as well as the statue’s expression of movement.
- [Take a look](#) at Hiroshige’s woodblock print series *Uo-zukushi (A Shoal of Fishes)*.
- Read *Michelangelo Drawings: Closer to the Master* by Hugo Chapman.

CREATING WITH YOUR CLIENT

“It’s all about making people happier, richer, friendlier, so they stop building fences and [we] stop separating ourselves.”
—Frank Gehry

SUBCHAPTERS

- Understand Your Client’s Needs
- Respect the Budget
- Decide If It’s the Right Project for You
- Create and Experiment With Site Models
- Explore Materials That Fit Both Budget and Design
- Vet Technical Issues as You Go
- Keep Your Client Engaged Throughout the Entire Process

CHAPTER REVIEW

Frank encourages you to be conscious and accepting of the fact that clients have feelings and needs that can change from day to day. Think of yourself as the captain of a ship, navigating waters that can change from placid to stormy at any given moment; you must steer accordingly and remain open to the changes your client might make.

Internalize everything pertinent to your client, from the location of their home, to the contents of their art collection, to the size of their family. Also be cognizant of the different cultures of your clients. Frank finds it helpful when talking to clients about their values to have a pencil in hand so he can sketch freely as they converse. Try thinking out loud with your clients and drawing as you go in order to create a visual, spatial response to their words. For Frank, these sessions occur over many visits and take several forms—a visit to the site, a visit to the house the clients live in, and sometimes a dinner at their favorite restaurant. Taking the time to get to know your client will lead to a higher satisfaction rate and more jobs as they recommend you to others.

Remember that square footage always has a price tag attached. You need to discuss this reality with your client and inform them about the cost of more luxurious materials. Talk through issues of sustainability as well, and be sure to reconcile your economics with your client’s economics throughout the entirety of the project. Don’t make assumptions about your client’s willingness to spend based on their financial situation. Similarly, leave yourself open to the preferences of clients that might not have occurred to you; a feature of the land that you originally intended to highlight may be a component your client would rather diminish.

9.

CREATING WITH YOUR CLIENT

You must also know yourself. As an architect, you naturally bring your aesthetic to every project. Frank has learned to recognize when his fingerprint doesn't match a project. In these instances, he suggests another architect better suited for the job. Be sure to loop in technical experts throughout a project. Frank's method is to have them look over his work, keeping an eye out for anything he might have overlooked from a technical standpoint. This helps his team avoid large problems that could delay a project. Remember, you are attempting to enrich the life of your client with a project, so always have this objective in mind.

TAKE IT FURTHER

- In this chapter, Frank discusses a residential project for an Iranian client whose idea of a family home differs from that of people from other cultures. [Learn](#) how homes vary across regions of China, [read](#) about the changes in Japan's residential architecture after WWII, and [see](#) the differences between America's domestic architectural designs.

TAKE AWAYS FROM THE WALT DISNEY CONCERT HALL

“I was looking for what I always look for—the humanity of it.”

—Frank Gehry

SUBCHAPTERS

- Research What Works
- Prototyping
- Adding Movement and Humanity to the Exterior
- Listen to Your End User (Aand Become Their Hero)
- Knowing When It Works: The Joy of Architecture

CHAPTER REVIEW

Frank discusses the buildings that inspired the Walt Disney Concert Hall and the reasoning behind his design choices. The relationship between the orchestra and the audience was an important factor to Frank. He looked to the main hall of the Berliner Philharmonie for inspiration, the layout of which makes the audience feel as if they’re connected with the performers. Its concrete floor, unpainted pipe rails, and raw quality are engaging. The Concertgebouw in Amsterdam also influenced the design for the Walt Disney Concert Hall; Frank adopted its feature of seats placed behind the orchestra.

The original plan for the concert hall was stone. Frank liked the quality of light that stone reflects at night, a soft glow evocative of the historic buildings of Europe. In the end, however, it was 5 million dollars less expensive to use metal, so the powers that be insisted that the main material be changed. Frank attempted to convey a sense of movement with the wave of the metal, instead of the flatness of an inert box.

Using a model, Frank explains the thought process behind the design, explaining piece by piece the reasoning for the placement of the roof, bathrooms, staircases, and the like. Frank and his team used a one to ten scale model. They put figures in it, filled it with nitrogen, and then played Mozart inside the model in order to test the acoustics. This method was devised by the Japanese acousticians involved with the project and was very effective, allowing the team to critically evaluate the space and compare its sound to that of other concert halls.

Frank also recounts memories from before the hall was revealed and on its opening night. An emotional moment occurred when the first violinist came to play unaccompanied Bach in the unfinished hall. Frank, his son, and the conductor of the orchestra grabbed each other’s hands and wept at the beauty of the sound. On opening night, Frank had his eye on the bass player, because his instrument had not been done justice in Chandler Hall, the venue in which the orchestra had previously played. During the first few bars, the bassist gave Frank a thumbs up. For Frank, these kinds of experiences within the profession are the most rewarding.

10.

TAKE AWAYS FROM THE WALT DISNEY CONCERT HALL

TAKE IT FURTHER

- [Experience](#) the Berliner Philharmonie, and [view](#) the interior of the Concertgebouw in Amsterdam, both of which inspired Frank's design for the Walt Disney Concert Hall. Also look up the New World Symphony in Miami, the Pierre Boulez Hall in Berlin, the Millennium Park in Chicago, the Boston Symphony Hall, the Musikverein in Vienna, the Great Theater in Ephesus, Turkey, and the Greek Theater in Taormina, Sicily.
- Take a guided tour of your local auditorium or symphony. Notice the acoustics of the space—how your voice carries, how footsteps echo. Write down your impressions in your sketchbook. Treat yourself to an evening of music or performance in the same space. Notice how the theater's acoustics differ when the theater is filled with music or amplified voices. Do you feel removed from the orchestra or actors? What would improve the space?

TAKE AWAYS FROM 8 SPRUCE STREET

“For this building, we [were] trying to come up with a language that resonated with the older buildings around us. And we were also trying to get some feeling into the building with the curtain wall. That it would have a humanity to it that those faceless buildings that are all over the world don’t have.”

—Frank Gehry

SUBCHAPTERS

- Begin With the Basic Program
- The Art of the Curtain Wall

CHAPTER REVIEW

For 8 Spruce Street in New York, Frank and his team asked their client to hire the architect behind all the standard apartment buildings in the city. That architect made a model of the cheapest and most straightforward structure he would build for any client, which provided a base upon which Frank built.

One of the most important elements of a tower is the curtain wall, or the exterior skin of the building. Frank wanted to play with the concept of bay windows because of the feeling they give a building’s inhabitant; their quality of space makes one feel as if one were outside and closer to the world. There was economic rationale behind the bay window, too, as it is an element that someone might pay extra for.

Instead of placing each bay window in the same position, which would have created a straight visual line on the exterior, Frank and his team varied each window’s location in an attempt to make the curtain wall look like fabric blowing in the wind. This feature gives the building a feeling of movement and a human quality, which people often point out to Frank.

TAKE IT FURTHER

- Read the New York by Gehry [brochure](#) and [fact sheet](#), and explore the [official website](#).
- [Read](#) what residents of 8 Spruce Street have to say about their building.
- [Read](#) the *New York Times*’ architecture review of 8 Spruce Street.
- [Read](#) the Harvard Business School report on 8 Spruce Street.
- [Read](#) about the technology behind 8 Spruce Street.

NEIGHBORHOOD AND CONTEXT

“You...begin to see a sense of humanity that works with the cultural center that’s different than with the financial district. They’re two different things.”

—Frank Gehry

SUBCHAPTERS

- Design Elements That Reference Your Neighbors
- Design for Human Interaction First and Neighborhood Scale Second

CHAPTER REVIEW

First and foremost, places and buildings are for people. A building can respect its neighborhood if the architect attempts to have it speak to the buildings that surround it.

The scale of a building is dictated by economics and zoning—the value of the land upon which the edifice stands, the marketing of the building as a workspace or dwelling and the parameters attached to each. While a building will be held to certain standards regarding height and accessibility, Frank contends that there is still much freedom within these restrictions. It’s up to you to discover and explore this freedom.

When designing the Grand Avenue Project, which included retail spaces, apartments, condos, and a hotel, Frank had the sense of downtown Los Angeles’s humanity in mind at all times; in particular, he had to respond to the Walt Disney Concert Hall, which is directly across the street. He opted for a collection of buildings mid-range in height in order to create dialogue with the varied scale of the concert hall.

Frank’s decisions were based on human scale, and by incorporating a cluster of buildings with a courtyard and multiple landscaping opportunities for the Grand Avenue Project, Frank made the space user-friendly for many types of activity.

TAKE IT FURTHER

- In this chapter, Frank discusses the human scale’s influence on 19th century architecture. [Learn](#) more about this subject.

13.

MATERIALS AND PROTOTYPING

“You...get focused on something you want to accomplish, and then you just doggedly figure out how to make [that material] work.”

—Frank Gehry

SUBCHAPTERS

- Research and Play With the Latest Materials
- Test How New Materials Play With Light
- Get Creative With Materials That Suit Your Budget
- Show Clients What Can Be Done

CHAPTER REVIEW

From brick to glass, Frank is always playing with materials and the aesthetic and energy issues that are specific to them. Really explore materials and put the effort into researching them, because this will lead to breakthroughs. Don't be afraid to abandon a material if it does not fit the original concept when realized. Spend time with those in charge of the different systems and ask them about materials that can be used given your budget, then convey this budgetary information to your client. Follow Frank's golden rule for materials: if the light paints on it, you've used the right material.

TAKE IT FURTHER

- Explore new possibilities in architectural materials. [Discover](#) the potential of carbon fiber, [see how](#) architects and designers are elevating plastic to unprecedented levels, and [learn](#) about a Cal Poly San Luis Obispo assistant professor's invention of a brick that sucks pollution from the air. Do you use concrete in your designs? [Educate yourself](#) about the environmental impacts of this material and its substitutes. Do you refrain from using wood in your buildings? [Open your mind](#) to this natural material's potential by listening to a podcast or participating in a webinar sourced by reThink Wood.

RESIDENTIAL PROJECTS

“In the first few months of working with a client on a building, you get to know them, you get to understand what it is they’re looking for. Why they want to do this and why they’re taking their hard-earned savings to spend on it. I mean you have to respect all of that... That’s a big deal.”

—Frank Gehry

SUBCHAPTERS

- Ask Questions and Listen
- Keep the Client Involved
- Be Parental

CHAPTER REVIEW

The first few months of working with a client are key. During this time, you get to know them and what they’re looking for. Respect their time and money. Planning and constructing a house can be challenging, as oftentimes a couple contracts the work, and they inevitably argue, leaving you in the middle of a domestic feud. You should visit the house where your clients live and observe their collections and the objects they treasure to get a better idea of the space that would best suit them. Frank uses block models when he begins a house or residential project that include the site and its surroundings. He uses the blocks, which represent the scale of rooms, to explore spatial relationships with his clients.

Know that your clients’ main concerns will be about money, schedule, and technical things like leaking and longevity of materials, but be sure to discuss with them the aesthetics of the neighborhood and landscape in which they live. Obtain information about closets, bathrooms, openness versus privacy, colors and materials they dislike, and even things as seemingly insignificant as which way they like their bed to face. It’s better to know their preferences, however trivial, before you begin designing. Remember that this is a very personal process, so keep it light and fun for your clients, but also be parental: take charge and convince them that you can complete their project within their budget. Encourage them, talk with them, and convey to them that you’re on top of every element.

TAKE IT FURTHER

- Take a look at some of Frank’s residential projects:
 - [Gehry Residence in Venice, California](#)
 - [Robert Benson Residence in Calabasas, California](#)
 - [Davis Studio and Residence in Malibu, California](#)
 - [Schnabel House in Los Angeles, California](#)
 - [Norton House in Venice, California](#)

BUSINESS

“You don’t have to be super rich to do this stuff. I think you have to have the heart and the will and the tenacity to not fold under pressure and understand your responsibility in the game.”

—Frank Gehry

SUBCHAPTERS

- “Business Model”
- Have Financial Integrity
- Be a Master Builder
- Prove Your Design Can Be Built
- Fight Waste

CHAPTER REVIEW

Frank has run a successful architecture firm since 1964. In this chapter, he presents some of the tenets of his business model: no free labor, no borrowing money, and no signing on for projects with clients he doesn’t like. Frank contends that one needn’t be rich to be successful in the field of architecture. He’s careful with whom he takes on as clients, as he knows he will be spending a lot of time with them. Understand your clients’ intentions before you sign on, and if you don’t feel comfortable, pass on the project.

Be aware of the waste involved in construction for both profit and the environment’s sake. Translating two-dimensional drawings into three-dimensional buildings leads to misunderstandings, so be as clear as possible in your sketches and models. Gehry Technologies has largely eliminated these misunderstandings through the use of aircraft software, saving 15 to 20% with each project.

Take responsibility for your work and deliver. Your ideas and figures must be as solid as the building you’re constructing. Complete your project in a reasonable length of time with a realistic budget. You want to give confidence to the people who are paying for it. Assure them that they’re on the right path with your work.

TAKE IT FURTHER

- [Read](#) about Gehry Technologies.
- Check out [this interview](#) with Frank from the *Harvard Business Review*.
- Read *Managing as Designing* by Richard Boland and Fred Collopy.

WORKING WITH A TEAM

“Developing participatory activity is really healthy.”
—Frank Gehry

SUBCHAPTERS

- Putting a Team Together
- As the Team Grows, Focus on Adding Technical Staff
- Encourage Participation and Empower Your Employees

CHAPTER REVIEW

When Frank began his business, his employees worked together in small teams. Frank developed a rule: one couldn't work for him for more than five years, otherwise he worried that he or she would lose his or her own artistic voice.

Your goal from the beginning should be to add experienced technical staff to your business. These employees will prove themselves invaluable, capable of working with international companies and clients as well as meeting time and budget constraints.

Frank's management style is friendly and open. In the studio, he works to foster candid discussions and conversation. Frank is aware of the gravity of his name. He consciously tries to include and support his employees in order to lessen the nervousness his repute might cause them. Communal ownership of projects and participatory activity are of the utmost importance in Frank's office.

TAKE IT FURTHER

- You probably collaborate with a multitude of people every day, from colleagues in the office to construction workers on site, but have you ever wondered if you're communicating as effectively as you can? [Read this article](#) on the social science behind collaboration, how technology has changed decision-making in the field, and the efficacy of multi-centered leadership.
- Read *LOYAL: Listen Or You Always Lose: A Leader's Guide to Winning Customer and Employee Loyalty* by Aaron Painter.

17.

FINAL THOUGHTS

CONGRATULATIONS!

“Take your time. Move into it slowly. Learn how you fit in and what you have, where your assets are most valuable, and where you enjoy doing it the most, the parts of it you enjoy doing. And then build on that.”

—Frank Gehry

- You’ve finished your MasterClass with Frank Gehry! We hope you feel inspired to achieve your goals as an aspiring architect or designer. If you’re a practicing architect, we hope that you have gained a fresh perspective on your profession.
- We want to make sure that your experience with Frank and your peers doesn’t end when you finish watching the video lessons. Here are a few ways to stay in touch:
 - Join the Frank Gehry community in [The Hub](#) to connect with your peers.
 - Contribute to the lesson discussions after each video lesson and read what others have to say.



MASTERCLASS

