

Google Arts & Culture

**Zaha Hadid: Groundbreaking
Architect and Visionary**

in association with  sixredmarbles

[London 2066, Zaha Hadid 1991, Serpentine Galleries](#)

How to Make the Most of This Lesson

This lesson serves as a **roadmap** for your journey through a rich and exciting collection of online content made available by **Google Arts & Culture's partners**. You will explore photographs, slideshows, voice recordings, and more. The images in this lesson are just a sample of what's available to you via the **Google Arts & Culture** website.

You can complete this lesson independently or with fellow students, a teacher, or another adult. The content is accessible to a wide range of ages, but it's especially geared toward students ages 13 to 16.

Your journey in this lesson will take you through three major topics:

Chapter 1: Hadid's Philosophy of Art and Architecture

Chapter 2: Hadid and the Digital World

Chapter 3: Hadid's Designs, Executed

You'll see some helpful signs along the way:



Estimated time for completing the chapter



Audio recording or video



Link to more online content



Learning activity

Tools for Learning

Below are tools for learning that you may need for Digital Discovery lessons:



A device that connects to the internet
(a computer or tablet)



A tool for writing your responses and
big ideas (pen, pencil, computer, etc.)



Art supplies (markers, crayons, paint)



Scissors



A notebook



Scrap paper

Explore! Google Arts & Culture pictures are **big**. If you want to explore a picture in greater detail, click on the magnifying glass symbol and zoom in with the zoom slider. By dragging the white box around, you can see even **tiny** details.

Welcome to *Zaha Hadid: Groundbreaking Architect and Visionary*

Imagine a multistory building, constructed of glass and steel, within a city skyline. In your mind's eye, you may see a tall rectangle, melding into a landscape of similar rectangles. But what if this model were turned on its head? What if there were no 90-degree angles at all? In this lesson, you'll learn about an architect who broke boundaries to reach beyond what had been done before. You'll see how her ideas were realized in a fantastical structure in the middle of a bustling city. Finally, you'll work on a model for a building of your own, in the style of architect Zaha Hadid.

What will you do?

1. Learn how Hadid saw the world and its architectural forms.
2. View radical concepts for city landscapes, as visualized by Hadid.
3. Take virtual reality tours of Hadid's designs.
4. See how Hadid's mind reimagined everyday objects.



Zaha Hadid by Brigitte Lacombe, Serpentine Galleries

What's in this lesson?

1. See paintings and drawings created by Hadid for building projects.
2. Discover the inspiration behind Hadid's paintings.
3. Find out how Hadid incorporated her concepts of space into her designs.
4. Uncover how Hadid's architectural concepts utilized digital tools.

By participating in this lesson, you will be able to:

1. See fascinating abstract paintings and drawings that were foundational to Hadid's architectural concepts.
2. Compare Hadid's paintings with their virtual reality representations.
3. Examine one of Hadid's buildings up close.

Vocabulary

progressive, suprematism, abstraction, three-dimensional, virtual reality, parametric design

Need help with some of these terms? See the glossary at the end of this lesson.



Victoria City Aerial: Aerial Perspective, Zaha Hadid, 1988, Serpentine Galleries

Hadid's Philosophy of Art and Architecture



What is this chapter about?
Zaha Hadid's architectural philosophy and early work



How long will this chapter take?
1 hour

Chapter 1: Warming Up

Before you explore, answer the questions below in your notebook.

Consider

1. The word **progressive** means *making use of new ideas and opportunities*.
 - What might make a building design progressive?
 - How might a progressive architect's buildings be different from those working in traditional styles?



Discover

2. What do you know about architects' creative processes? What might an architect have to consider when designing a building?



Hadid's Early Career

Zaha Hadid (1950–2016) was born in Iraq and moved to London in 1972, where she attended a progressive school of architecture called the Architectural Association. She opened her own architecture firm, Zaha Hadid Architects, in 1979.

In 1983 Hadid won a competition for a recreational and leisure center design in Hong Kong. Known as 'The Peak,' Hadid's design reflected her fragmented, fluid, and geometric style. 'The Peak' was never built, but it led to international acclaim for Hadid and cemented her progressive style.



Learn more about 'The Peak' and how it reflects Hadid's architecture by viewing this [exhibit](#).

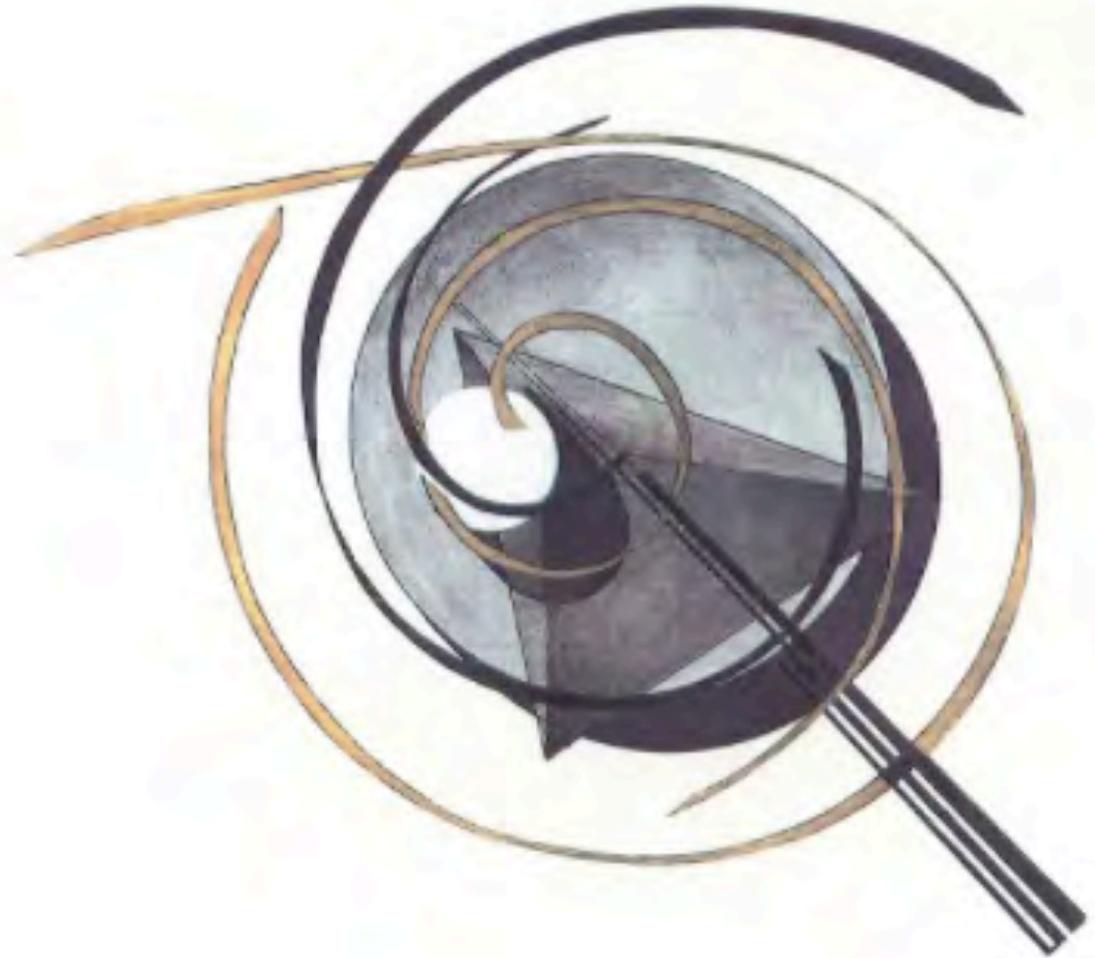
The Design Process

Hadid's creative process for architecture began with paintings and drawings. She was inspired by Russian artists of the **suprematism** movement, particularly Kazimir Malevich, Vladimir Tatlin, and Aleksandr Mikhailovich Rodchenko. Suprematist painters' work focused on geometrical **abstraction**. Hadid's meticulous, beautiful paintings showed abstract versions of what she intended to realize in fully constructed buildings. She said that approaching design in this way allowed her to think differently about how to organize space.

The artwork here, 'Interpretation of Tatlin's Spiral, Plan,' is a reference to a model designed by Tatlin for a monument to the Soviet Union. The monument, commonly known as Tatlin's Tower, was never constructed due to expense and a lack of materials in the Soviet Union.



See more about the influence of Tatlin and the suprematism movement on Hadid's work [here](#).



[Interpretation of Tatlin's Spiral, plan, Zaha Hadid, 1992/1993, Serpentine Galleries](#)

Abstract, Fluid, and Fragmented

In Hadid's paintings and drawings, she investigated architecture's relationship to the world we live in. She did so using abstract forms, bright colors, and a sense of movement.



See an exhibition of Hadid's early paintings and drawings [here](#).



[Zaha Hadid: Early Paintings and Drawings, Installation View, 2016, Serpentine Galleries](#)

Chapter 1: Wrapping Up

Now that you've read the chapter, reflect on what you've learned by answering the question below.



You learned that **progressive** means “making use of new ideas and opportunities.” In what ways would Hadid’s painting be described as progressive? Give examples.

Chapter 2

Hadid and the Digital World

I Think there should
be no end to
Experimentation



What is this chapter about?

How modern technology provides new ways of exploring Hadid's concepts



How long will this chapter take?

1 hour

Chapter 2: Warming Up

Before you explore, answer the questions below in your notebook.

Consider

1. Think about the role technology plays in today's world.
 - How has technology changed the way people live, work, and entertain themselves?
 - How is technology used in your everyday life?



Discover

2. In what ways might technology impact the field of architecture?

Hadid and the Digital World

As digital technology became a part of the everyday world, Hadid saw that her design vision could expand even further. **Three-dimensional** modeling and other digital tools allowed the architect and her team to re-create landscapes in the virtual world and envision new concepts for spaces.



Find out more about the relationship between Hadid's artworks and technology [here](#).



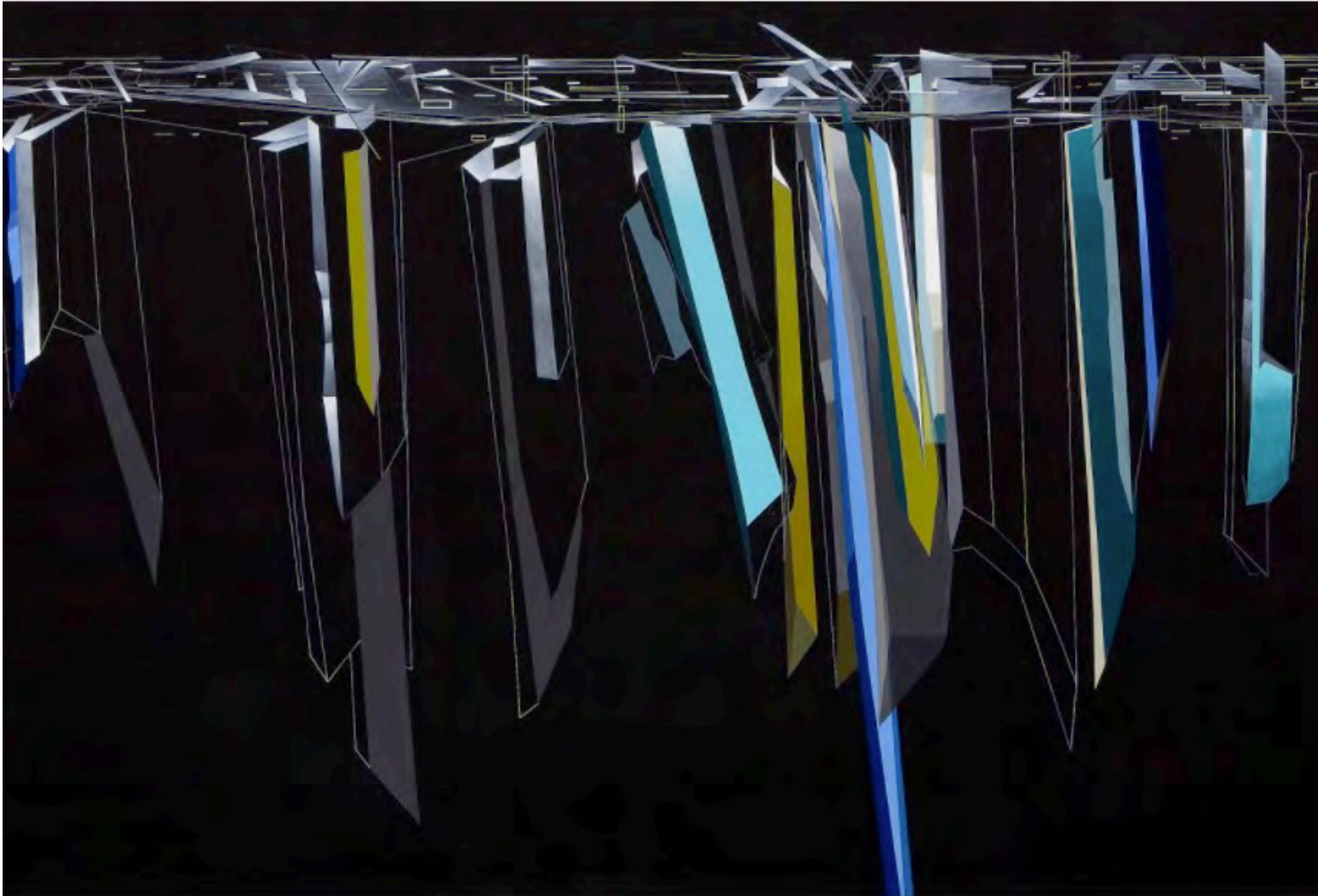
See how Hadid saw 'The World' (at right) in this [exhibit](#).

"Our designs become more ambitious as we see the new possibilities created by the technology of other industries."

—Zaha Hadid



The World (89 degrees), Zaha Hadid, 1983, Serpentine Galleries



Zaha Hadid and her team incorporated digital tools into their designs in groundbreaking ways. Sadly, Hadid passed away unexpectedly in March 2016. Her team carries on her legacy. **Virtual reality** design has become one of the group's specialties. Working together with **Google Arts & Culture**, Zaha Hadid Virtual Reality Group created VR versions of Hadid's paintings in order to experience the work in new ways.



Experience a VR exploration of Hadid's Leicester Square Project in [this exhibit](#).

Chapter 2: Wrapping Up

Now that you've read the chapter, reflect on what you've learned by answering the question below.



You considered the role of technology in today's world and saw how Hadid's paintings could be viewed through a VR setting. What other benefits might tools like virtual reality have for architects beyond viewing a painting in a new way?



[Reference Image, Zaha Hadid, Serpentine Galleries](#)

Chapter 3:

Hadid's Designs Executed



What is this chapter about?

An up-close look at the execution of some of Hadid's designs



How long will this chapter take?

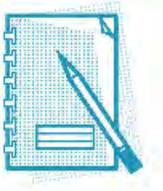
1 hour

Chapter 3: Warming Up

Before you explore, answer the questions below in your notebook.

Consider

1. If you were to design a cultural center for your community, what would you include? Consider the following:
 - Where would the center be located?
 - What materials would you use?
 - What features would be important to your community?



Discover

2. What do you think Hadid's design concepts might look like when executed?

The DDP

The Dongdaemun Design Plaza (DDP) in Seoul, South Korea, was designed by a Hadid-led team of architects as a cultural center for the historic city of Dongdaemun. The DDP includes cafes, public spaces, exhibit halls, event spaces, a park, and more. The complex was the first public project in Korea to use advanced digital tools, including 3-D modeling.

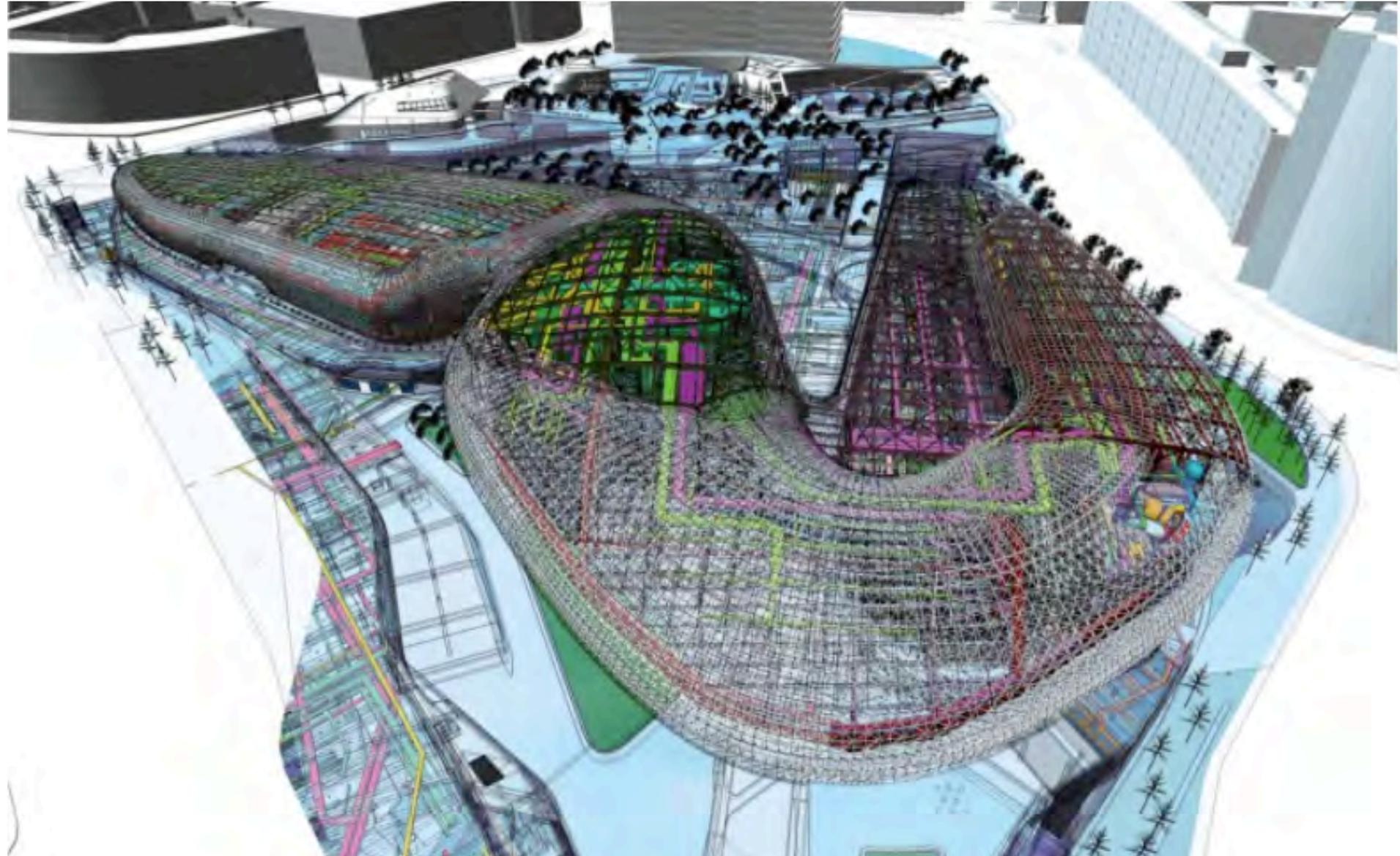


Learn more about the concepts of the DDP [here](#).

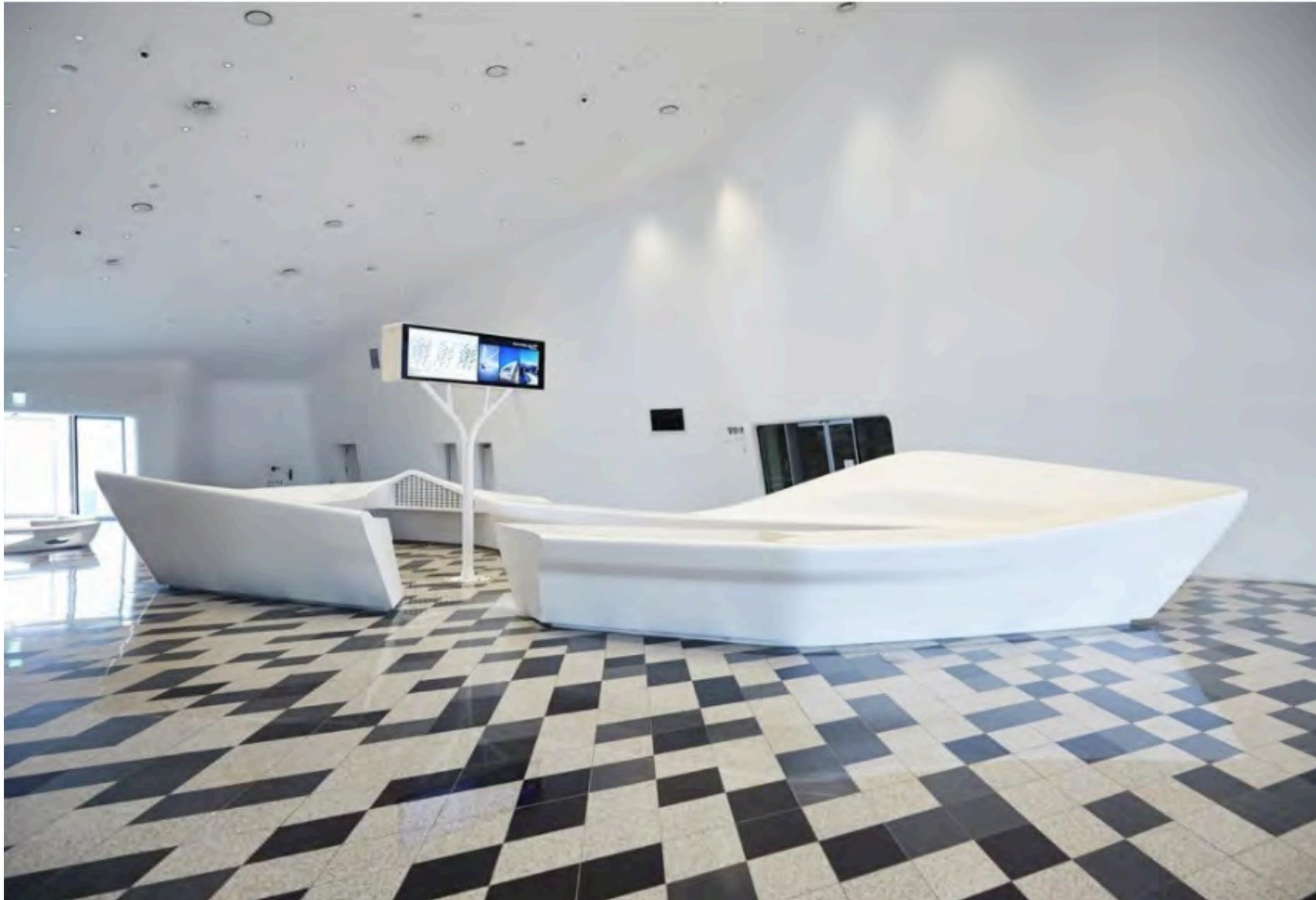
[The Nightview of DDP, photographer Park Haewook, 2014/2014, DDP](#)

Parametric design

methods were used for the construction of the DDP. This process involves using computers to establish a set of rules (parameters) for a digital model. By using this process, you can make changes to your model, and the entire model updates accordingly. The modeling process used for the DDP is called 3-Dimensional Building Information Modeling (BIM).



Read more about the parametric design process of the DDP in [this exhibit](#).



The design process for the DDP also included interiors and furnishings. Many of the interiors and furnishings were designed by Hadid and reflect the flowing lines and forms of the complex itself.



View [this exhibit](#) to view more of the interiors and furnishings of the DDP.

Other Designs by Hadid

Zaha Hadid Architects designed several other built structures, including the Serpentine Sackler Gallery in London (2013), the London Aquatics Centre (2011), and the Guangzhou Opera House (2010).

But Hadid didn't just create paintings, drawings, and buildings. She also designed some everyday objects, such as the coffee and tea service shown here.



What everyday objects do you think are included in this coffee and tea service? Find out [here](#).

See another tea and coffee service designed by Hadid [here](#).



[Tea and Coffee Towers, Zaha Hadid 2003/2003, High Museum of Art Atlanta](#)

This pair of women's shoes was designed by Hadid around 2013.



What do you think these shoes are made of?

Read more about the 'Nova shoes' [here](#).



Chapter 3: Wrapping Up

Now that you've read the chapter, reflect on what you've learned by answering the question below.



At the beginning of the chapter, you thought about how Hadid's design concepts might look when constructed. Were you correct in your assumptions? If not, how did the constructions differ from your imagination?

Digital Learning in Action

So, what did you learn? Read the questions and complete the learning activities below to extend your learning based on what you just experienced.



Reflect: Answer these questions:

- What role did geometrical abstraction play in Hadid's paintings and drawings?
- Why is Hadid's work considered progressive?
- What benefits did digital tools bring to Hadid and her team?



Summarize: [View](#) the VR version of 'The Great Utopia,' and then look at 'Tectonic: "The Great Utopia"' [here](#). Next, write a paragraph summarizing how VR can change the viewer's experience of a painting, using examples from 'The Great Utopia.'



Create:

You have learned about progressive art and architecture in this lesson and how they can be used to reimagine existing spaces. You also considered what you might include in a cultural center you designed for your community. Using Hadid's paintings, drawings, and the DDP as inspiration, create a design for your cultural center. Include a sketch of the building(s), a list of its components and materials, and a description of your site location.



Want to see more on Zaha Hadid? Check out her full Google Arts & Culture page [here](#).

Glossary

- **abstraction:** a lack of qualities that represent actual physical objects
- **parametric design:** a process that uses computer modeling guided by set rules (parameters) to create consistency within a design model
- **progressive:** making use of new ideas and opportunities
- **suprematism:** a Russian abstract art movement founded by Kazimir Malevich that focused on abstract geometrical forms
- **three-dimensional (3-D):** giving the illusion of depth and shape in a pictorial representation
- **virtual reality:** an artificial, computerized environment that includes sensory input and allows the viewer to manipulate the environment in some way