

Art and Design Foundation

Year 1

SECTION

3

# INTRODUCTION TO THE CONCEPT OF DESIGN



# THE CREATIVE JOURNEY (FROM CAVES TO THE 21ST CENTURY)

## Design History

### INTRODUCTION

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In this section, you will be introduced to the concept of design and conditions that informed the making of design by the indigenous peoples. This knowledge is vital to enable the application of design conditions in any academic field such as inventor, engineer, educator or AI model developer. As you learn through reading and performing the activities in this section, continuously reflect to identify areas in your daily life where these concepts can be identified and practically used to your benefit and to the benefit of the community you live or to the world at large

#### At the end of this section, you will be able to:

- Explain design concepts in ancient cultures.
- Categorise *the social and material conditions that produced design in ancient cultures.*

#### Key Idea(s)

- Design gives direction and meaning to what we do as problem solvers in everyday life.
- The concept of design is about intentionally shaping and improving the world around us to make it better and enjoyable
- Design is a critical and creative thinking process towards developing concepts and ideas to help solve specific problems.
- Design involves various aspects such as visual design, functional design, experiential design, system and structural design
- Design can be applied to making life choices in various fields including fashion, culinary, agriculture, engineering, urban planning, teaching and learning.
- Conditions that influenced designs of ancient cultures include politics, religion, philosophy, sports, environments etc.
- The characteristics of the designs of various ancient cultures can be categorised into form, function, symbolism, and style among others.

# THE CONCEPT OF DESIGN

You have been learning about artworks produced by various cultures beginning with the indigenous Ghanaian artworks to global ancient cultures that have made great contributions and influenced our world today. It should also be noted that the works of each ancient culture have their own unique artistic designs. In this lesson, you will explore the concept of design in its broad sense and how it is applied in various aspects of our lives. You will be required to do a lot of reflections on things happening around you and, around the globe at large, to fully understand and apply the concept of design.

## Design Concepts in Ancient Cultures

Design concepts in ancient cultures are basic ideas that give meaning and direction to the creation of various objects, buildings, and artworks. These concepts can be expressed through sentences, visual cues, captions, or slogans that guide the design work. Understanding these design concepts provides insight into how ancient cultures approached their creations and the purposes they served. Here, we will explore the primary design concepts in ancient cultures, focusing on their features, quality, form, functionality, style, cultural significance, and sustainability.

### Key Design Concepts

- **Features:** Features refer to the distinctive aspects of a design that define its conception and implementation. They indicate what users can do with the object or design and often reveal the cultural context and technological capabilities of the time.
- **Quality:** This encompasses the strength and reliability of the product or service. In ancient cultures, quality was a testament to the artisans' skills and the materials available to them.
- **Form:** Form involves the physical appearance and structure of a design. It reflects the inspiration drawn from natural surroundings and the specific functions the design was meant to serve.
- **Functionality:** This refers to the practical use of a design. In ancient cultures, designs were often multifunctional, serving utilitarian, symbolic, and ceremonial purposes.
- **Style:** Style in design aims to evoke certain feelings or aesthetic responses in the user. It includes the artistic expressions and symbolic meanings embedded in the designs.
- **Culture:** Design concepts are often rooted in the cultural norms and practices of a society. They reflect the values, beliefs, and traditions of the people.
- **Sustainability:** Ancient designs often focused on sustainability, seeking to reduce environmental impact and improve quality of life. This included using locally available materials and creating designs built to last.

# ANCIENT CULTURES

## Egyptian Design Concepts

The Egyptians are renowned for their monumental architecture and symbolic art. Their design concepts were deeply intertwined with their religious beliefs and social hierarchy.

- **Functionality:** Egyptian designs were often created for religious and funerary purposes. For instance, the pyramids served as tombs for pharaohs, reflecting the Egyptians' beliefs in the afterlife.
- **Symbolism:** Egyptian art is rich in symbolism, with many designs incorporating hieroglyphs and motifs that conveyed religious and cultural messages.
- **Natural Environment:** The use of stone and other locally available materials in their construction projects is a testament to their adaptation to the natural environment.

## Greek Design Concepts

Greek design concepts are characterised by their emphasis on proportion, balance, and harmony. Greek art and architecture have significantly influenced Western design traditions.

- **Form and Functionality:** Greek temples, such as the Parthenon, exemplify the integration of form and functionality. They were designed to house statues of gods and to serve as places of worship.
- **Style:** Greek architecture is known for its column styles—Doric, Ionic, and Corinthian—which each have distinct aesthetic and structural features.
- **Cultural Identity:** Greek vase painting often depicted scenes of everyday life and mythology, reflecting the cultural and social practices of the time.

## Roman Design Concepts

Roman design concepts expanded on Greek traditions and introduced new elements that catered to the needs of their extensive empire.

- **Functionality:** Roman architecture included structures like the Colosseum and aqueducts, which served public entertainment, transportation, and water supply needs.
- **Durability:** The use of concrete and advanced engineering techniques allowed Romans to create durable structures that have lasted for centuries.
- **Cultural Synthesis:** Roman designs often incorporated elements from the cultures they conquered, reflecting a blend of influences and promoting a unified identity.

## African Design Concepts

African design concepts are diverse, reflecting the continent's vast cultural heritage. Each culture developed unique designs that served specific functions and embodied symbolic meanings.

- **Functionality:** Designs from African cultures often served practical purposes, such as the Nok culture's terracotta sculptures used in religious and ceremonial contexts.
- **Symbolism:** African designs are rich in symbolism, with motifs representing spiritual beliefs, social status, and cultural narratives.
- **Traditional Techniques:** Many African cultures employed traditional techniques passed down through generations, using locally sourced materials and indigenous craftsmanship.

## RELEVANCE OF DESIGN CONCEPTS

Design concepts in ancient cultures were not just about aesthetics; they were integral to the development and functioning of societies. They played a crucial role in various aspects, including:

1. **Cultural Identity:** Designs often symbolised the cultural identity of a community, reflecting their values, beliefs, and traditions.
2. **Social Hierarchy:** The use of certain materials and motifs could indicate social status and hierarchy, as seen in the gold weights of the Ashanti culture.
3. **Technological Advancement:** Design concepts drove technological innovations, such as the Roman development of concrete and the Egyptian mastery of stone carving.
4. **Artistic Expression:** Designs served as a medium for artistic expression, allowing cultures to convey their creativity and aesthetic sensibilities.
5. **Spiritual Significance:** Many designs had spiritual and religious significance, serving as objects of worship or as representations of deities.
6. **Economic Exchange:** Designs often became commodities for trade, fostering economic exchanges between different cultures.

## Examples of Ancient Designs

### 1. Egyptian Pyramids

The Pyramids of Giza are monumental structures that exemplify Egyptian architectural prowess and their belief in the afterlife. These pyramids were designed to be eternal resting places for pharaohs, showcasing the Egyptians' engineering skills and their use of local limestone.

## 2. Greek Parthenon

The Parthenon in Athens is a prime example of Greek architecture, reflecting the principles of proportion and harmony. It was built to honour the goddess Athena and served as a treasury and a symbol of Athenian power and culture.

## 3. Roman Colosseum

The Colosseum in Rome is an iconic structure that illustrates Roman engineering and architectural innovation. It was used for gladiatorial contests and public spectacles, highlighting the Roman emphasis on public entertainment and communal gatherings.

Design concepts in ancient cultures are multifaceted and deeply rooted in the societal, cultural, and environmental contexts of the time. By examining these concepts, we gain a greater appreciation for the ingenuity and creativity of ancient civilisations. These designs served practical purposes and embodied the cultural identity, social values, and technological advancements of their respective societies. Understanding these design concepts allows us to appreciate the rich heritage of ancient art and design and its enduring influence on contemporary design practices.

### Activity 3.1

Work on this activity independently to gain an understanding of the meaning of design in the context of ancient cultures.

1. Select at least two of the ancient cultures you learned about in the previous lessons.
2. Critically observe some of their artistic expressions to observe the nature of their designs and note them down.
3. Search (*from this learning material or other resources such as dictionaries, books or the internet*) and investigate the definition of design and note it down.
4. Consider what design means in the context of ancient cultures by comparing the works of your selected ancient cultures to the concept of design you found through your investigations.
5. Note down in your own words the meaning of the concept of design in the context of ancient cultures.
6. Present your written notes in class or to peers at home for discussions and review.
7. Use the feedback from peers to improve the notes and file it in your manual or digital portfolio for future reference.

#### **Tips on how to save your digital files**

- a. Use a File Title that describes the content of the file e.g.
- b. Include the date for easy tracking.

- c. You can add your name too.
- d. Use underscore\_ to separate the items.

*Here is an example of how to name your digital files for saving*

**Title\_Your Name\_Date** (e.g.: The Concept of Design in Ancient Cultures\_Asempa\_June 2 2024)

### Activity 3.2

Try this independently or in a group or at home or school to create a scrapbook (manual or digital) of selected designs of ancient cultures. Click [here](#) to learn about scrapbooks.

1. Search through old magazines and newspapers to identify art and design works of ancient cultures.
2. Cut out the designs or artworks of the ancient cultures identified.
3. Get an empty book and paste your cut-out designs in it with paper glue or gum from plants (**You can also use starch from cassava. Click here to learn how: watch** ).
4. write captions on each page to describe the images in the scrapbook.
5. Present your scrapbook to peers, teachers or elderly people for discussion and review.
6. Keep your scrapbook in your digital manual portfolio for future reference.

**Try this Personal Challenge:**

*You will need a smartphone, tablet, laptop or computer for this challenge.*

- a. Explore how to create a digital scrapbook by clicking this link: how-to-make-a-scrapbook
- b. Use the ideas and skills you gained to create your digital scrapbook using an application of your choice.
- c. Present the first draft to our peers or teachers for discussion and review.
- d. Improve your work using the feedback from peers and teachers and save the final work in your digital portfolio.

I hope you enjoyed this activity. Great! Let us explore one more activity for this lesson.

### Activity 3.3

This activity will help you to organise the types of designs from ancient cultures according to their functions and physical characteristics. **Try it independently or with a group at school or home.**

1. Use the notes you made about the arts of the various ancient cultures around the world as a reference
2. Identify the design types such as architecture, stadia, monuments, typography, ideographs pictograph paintings, etc. and write them down.
3. Organise your information according to design types, functions and physical characteristics in a tabular format as shown in **Table 3.1** (*You can do it digitally or manually using any available writing material*).

**NB: You can modify the table to better suit your preferences.**

4. Present your work to peers and teachers for feedback and review.
5. Improve the work using the feedback and file it in your digital or manual portfolio.

**Table 3.1:** Design Types, Functions and Characteristics of Selected Ancient Cultures

| Ancient Culture | Type of Design                                | Function Design                                    | Characteristic   |
|-----------------|---|--|--|
| Roman Empire    | Architecture, Colosseum, Stadia, Amphitheatre | Sports, Prisons, Entertainment, Communal Gathering | Local materials, Natural elements, Local decorative motifs |

## Extended Reading

- Read more on Concept of design in ancient cultures
- Find out more on ancient civilisation: <https://kids.britannica.com/students/article/ancient-civilization/272856>
- Ancient civilisation: <https://www.lessonplanet.com/article/history/art-of-ancient-civilizations>



# CONDITIONS OF DESIGN IN ANCIENT CULTURES

In this final lesson of this section, you will learn about the conditions for which the designs of ancient cultures were made. Identifying and categorising the ancient designs, according to the conditions in and for which they were made will deepen your appreciation of them. It will also help you gain insight and possibly ideas for making your designs.

Consider the examples that follow reflecting on the common conditions in which some ancient designs were produced.

## Conditions for Design in Ancient Cultures

### 1. Material Condition

The material condition of design refers to the resources available to ancient cultures and how these resources influenced the creation of various objects and structures. Ancient designers often used materials that were readily available in their immediate environment. For example, the Egyptians utilised the abundant limestone and granite in their region to construct their iconic pyramids and temples. These materials were chosen for their durability and ease of carving, which facilitated the construction of grand structures that have stood the test of time. The extensive use of limestone in the Great Pyramid of Giza and the polished granite used in the interiors of temples highlight how local resources were effectively harnessed.

Similarly, the Mesopotamians used clay from riverbeds to produce bricks for building their ziggurats and cities. The alluvial plains of the Tigris and Euphrates rivers provided a rich supply of clay, which was shaped into bricks and dried in the sun or baked in kilns for added strength. This adaptation to local materials enabled the construction of towering ziggurats and extensive urban settlements, such as the city of Ur.

In some instances, materials were transported over long distances to meet specific design needs. The transportation of obelisks in Egypt is a notable example of this. These massive stone monuments, often weighing several hundred tons, were quarried in Aswan and then transported to various locations across Egypt. The logistics of moving such colossal structures over vast distances involved sophisticated planning and engineering, showcasing the lengths to which ancient cultures would go to obtain the necessary materials for their design projects. This effort not only reflects the value placed on specific materials but also the technological ingenuity and organisational skills of these ancient societies.

Furthermore, the use of imported materials such as lapis lazuli in Mesopotamian artefacts or cedarwood in Egyptian construction reveal trade networks that extended far beyond local regions, emphasising the interconnectedness of ancient cultures and the diverse sources of their material wealth. These examples illustrate how the material conditions in ancient societies shaped their architectural and artistic achievements, reflecting both the limitations and the ingenuity of their resource use.

## 2. Social Condition

The social condition of design encompasses the societal challenges and needs that prompted the creation of specific designs. In ancient cultures, designs often emerged as solutions to persistent community issues, addressing practical needs while also reflecting the social dynamics and organisational capabilities of the society.

For instance, the construction of aqueducts in Rome was driven by the imperative to supply water to growing urban populations. This monumental engineering feat involved the transportation of water from distant sources into cities, ensuring a reliable supply for drinking, bathing, and irrigation. The Roman aqueducts not only addressed a vital need but also demonstrated the advanced state of Roman engineering and their ability to plan and execute large-scale public works. These structures were a testament to Roman ingenuity, administrative efficiency, and the prioritisation of public welfare. The success of such projects reinforced the power of the state and its commitment to improving the quality of life for its citizens.

Similarly, the Great Wall of Zimbabwe served both a defensive purpose and a symbol of social and political organisation. Built between the 11th and 15th centuries, the stone walls of Great Zimbabwe enclosed a complex of structures that included royal palaces and religious sites. These walls provided protection against invaders and symbolised the unity and strength of the community. The construction of such an extensive and durable structure required a high degree of social cooperation and organisation, reflecting a well-structured society capable of mobilising resources and labour for a common goal.

Both examples illustrate how social conditions, such as the need for security, resource management, and public welfare, drove the creation of significant designs in ancient cultures. These designs not only fulfilled practical purposes but also reinforced social cohesion, identity, and the authority of the ruling entities, thereby playing a crucial role in the development and stability of these ancient societies.

## 3. Cultural Condition

Cultural conditions are deeply embedded in the beliefs, traditions, and values of a society. These conditions shape the unique designs that are characteristic of specific cultures, influencing not only the form and function of objects but also their symbolic meanings. For instance, the Egyptian sarcophagus was intricately designed according to the Egyptians' beliefs in the afterlife. The sarcophagus, often made of stone or wood, was elaborately carved and decorated with hieroglyphics and scenes depicting the journey of the deceased to the afterlife. These designs were not merely decorative; they served a vital religious purpose, ensuring the safe passage and protection of the soul in the afterlife. The sarcophagus symbolised the Egyptians' profound respect for the dead and their intricate belief system surrounding death and rebirth.

In Ghana, the Akan stools are culturally significant objects that reflect the social status and spiritual beliefs of the Akan people. These stools are not merely functional objects for seating; they are imbued with deep cultural meanings and are central to important ceremonies and rituals. Each stool is uniquely carved to represent the soul of its owner and is often used in rites of passage, such as enstoolment

ceremonies where a new chief is installed. The designs on the stools, including motifs and symbols, convey various aspects of the Akan cosmology and societal values, such as wisdom, strength, and unity.

The cultural condition of design also ensures the preservation and transmission of traditional knowledge and skills. Through the creation and use of culturally significant objects, societies maintain their heritage and identity across generations. Thus, the cultural condition is a powerful force in the realm of design, weaving together aesthetics, functionality, and symbolic meaning to create objects that are not only beautiful but also profoundly meaningful within their cultural contexts.

## 4. Economic Condition

Economics includes all activity that targets the exchange of goods and services such as buying and selling. The economic condition of a society greatly influences its design practices by affecting resource availability and labour division. In ancient times, wealthier societies with more resources created elaborate and numerous artefacts, reflecting their prosperity. For example, ancient Egypt's intricate gold jewellery showed both their wealth from Nubian gold mines and the specialised skills of their artisans. These luxury items were mainly for the elite, highlighting economic differences within society.

Everyday items like simple earthenware bowls were made from inexpensive, local clay for common people, showing practical and economic considerations. In contrast, ceremonial items like swords and palanquins for royalty used precious materials and intricate designs, requiring skilled labour supported by a strong economy.

Thus, the economic conditions of ancient societies influenced the materials, techniques, and social significance of their designs, reflecting broader economic realities and social hierarchies.

## 5. Political Condition

In ancient cultures, political conditions significantly shaped design by regulating who could create and use certain objects and dictating the materials and techniques allowed. This reflected societal hierarchies and power structures. For instance, only specific artisans could produce items for the elite, using the best materials and craftsmanship, reinforcing social stratification and the authority of rulers.

Political power was often shown through grand projects like monuments, temples, and public buildings, which served both functional and propagandistic purposes. The Egyptian pyramids, for example, were tombs and symbols of the pharaohs' divine right to rule.

Crowns and thrones, like King Tutankhamun's gold-inlaid throne, were designed to reflect the power and status of their owners. Similarly, in various African cultures, masks used in important ceremonies legitimised leaders' authority, blending artistic expression with political and spiritual significance. Therefore, the intersection of political conditions and design in ancient cultures shows that art and artefacts were tools of power and control, not just creativity.

## 6. Technical Condition

The technical condition of design reflects the knowledge, skills, and technology available to a society, enabling complex and sophisticated creations. Ancient civilisations often showcased remarkable ingenuity and craftsmanship, laying the foundation for many admired technologies and techniques.

For example, the construction of the Egyptian pyramids required advanced engineering, mathematics, and labour organisation. These structures, with precise alignment and intricate internal chambers, demonstrate the technical expertise of ancient Egyptian builders and their ability to manage large workforces and use innovative tools.

In Ghana, the craft of Kente weaving shows technical prowess. Weavers use specialised techniques to create intricate patterns and designs, each with cultural significance. The meticulous skill required for Kente weaving reflects a deep understanding of materials and methods.

Similarly, the lost-wax casting technique used in West Africa for bronze sculptures shows advanced technical sophistication. This method involves creating a wax model, covering it with clay or plaster, melting away the wax, and pouring molten metal into the mould. The detailed bronze sculptures produced demonstrate artistic creativity and metallurgical knowledge. These examples highlight how ancient cultures used their technical skills to produce influential designs in engineering, textiles, and metallurgy, shaping their artistic and practical achievements.

## 7. Aesthetic Condition

The technical condition of design reflects the knowledge, skills, and technology available to a society, enabling complex and sophisticated creations. Ancient civilisations often showcased remarkable ingenuity and craftsmanship, laying the foundation for many admired technologies and techniques.

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These examples highlight how ancient cultures used their technical skills to produce influential designs in engineering, textiles, and metallurgy, shaping their artistic and practical achievements.

### Activity 3.4

*Work on this task with your friends.*

Follow the steps below to help you learn how to create charts to help identify and organise the various conditions that influenced ancient designs.

1. Select some of the ancient designs you have already identified and documented in the previous learning activities.
2. Investigate and identify the various conditions in which the ancient designs were produced by the ancient cultures around the world and note them down.

**NB:** *You can use the learning material or search the internet or other available books or magazines.*

3. Use the information you have to generate a chart or table (digital or manual) showing the categories of ancient designs and the conditions that influenced their making (see example in **Table 3.2** for ideas. You can modify the table by including images).
4. Present your table or chart to peers and teachers for feedback.
5. Use the feedback to improve your chart or table and file the final work in your manual or digital portfolios for future reference.

**Table 3.2:** Sample organisation of designs of ancient cultures based on conditions that influenced their making

| Name of ancient design | Name of ancient culture that produced it | Location of the design (e.g. town, country, etc.) | The year in which the design was made | Materials and techniques used for the design | Conditions that influenced the making of the design (e.g. religion, politics) |
|------------------------|--|---|---------------------------------------|--|---|
|                        |  |   |                                       |  |   |

## Extended Reading

- More on ancient civilisations here:
- <https://kids.britannica.com/students/article/ancient-civilization/272856>
- <https://www.lessonplanet.com/article/history/art-of-ancient-civilizations>

## REVIEW QUESTIONS 3.1

To assess your knowledge and understanding of this section answer the following questions independently. *Remember to be honest with yourself in answering the questions.* Set a time limit and when completed pass your answers to a peer or teacher to mark for you.

1. List at least one ancient civilization known for its impressive architecture.
2. Imagine you're visiting an ancient Egyptian tomb. The walls are decorated with colourful paintings depicting gods, pharaohs, and daily life. What design principle do you think is most important in these paintings, and why?
3. Many ancient cultures used geometric patterns extensively in their art and architecture. Why do you think these recurring geometric patterns were so significant? Consider their cultural beliefs, symbolic meanings, and practical applications.
4. Ancient cultures often developed unique design styles that reflected their values and beliefs. Choose two specific ancient cultures (e.g., Maya, Ancient Greece) and compare and contrast their design principles and elements used in their artwork. How did these design choices reflect their respective cultures?
5. What is one material often used in ancient Egyptian art and architecture?
6. Think about the use of pyramids in ancient Egypt. What design principle is most evident in their pyramid structures, and why might this principle have been important to the Egyptians?
7. Many ancient cultures incorporated symbolic meanings into their art and design. Explain how understanding these symbolic meanings can help us learn more about the beliefs and values of those cultures.
8. Imagine you are creating an exhibition showcasing designs from two different ancient civilizations. How would you arrange the artefacts to highlight the unique design principles and elements used by each culture?

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