

Unit

1

Introduction to Design

设计概述

Objectives

1. To understand the relationship between designs and our life
2. To become familiar with some definitions of design and to think about what a design is
3. To understand the relationship between a design and its related disciplines
4. To understand the attributes of a design
5. To learn about the design hierarchy of needs

Focus

- S:** Designs in Our Life (P2)
- L:** What Is Design? (P3)
- L:** Attributes of a Design (P3)
- S:** Design and Design Engineering (P4)
- R:** Art and Design: What's the Big Difference? (P5)
- R:** The Design Hierarchy of Needs (P7)
- W:** Introduction to a Design (P9)



1 Starter— Designs in Our Life

A. Designs are everywhere in our life. Look at the following pictures and choose the proper design purpose to complete the sentences.

- a. for promotion artistically
- b. for entertainment
- c. to live in comfortably
- d. for communication easily
- e. to dress comfortably and fashionably
- f. to transport quickly and comfortably



1. The building is designed _____



2. The car is designed _____



3. Clothes are designed _____



4. The poster is designed _____



5. The digital game is designed _____



6. The mobile phone is designed _____

B. Based on your design area, talk about the relationship between design and life.



2

What Is Design?

Listen to an interview with Charles Eames and fill in the blanks.

Host: Mr. Eames, thank you for participating in this interview. Can you start by telling us what your definition of “design” is?

Mr. Eames: Well, in my opinion, design is a plan for (1) _____ to best accomplish a particular purpose.

Host: Is design an (2) _____?

Mr. Eames: The design is an expression of the purpose. If it is good enough, it may later be judged as art.

Host: And do you think it is a method of (3) _____?

Mr. Eames: No — it is a method of (4) _____.

Host: Is design a creation of an (5) _____ or a creation of a group?

Mr. Eames: Often a creation of a group.

Host: What do you think about the opinion that the computer can substitute for the designer?

Mr. Eames: Probably, in some special cases, but usually the computer is an (6) _____ the designer.

Host: Thank you very much!

Mr. Eames: You’re welcome!



3

Attributes of a Design

Listen to the passage and take notes about the attributes of a design.

Notes

Attributes of a design

First: _____

Second: _____

Third: _____

Fourth: _____



4

Design and Design Engineering

Work with your partners to complete the conversation with the sentences given below and role-play it.

1. Design is an applied art and focuses on the relationship between people and things
2. But what's the link between them?
3. Could you give me some help?
4. So it's necessary for designers to know the basics of design engineering.
5. I'm confused by the relationship between design and engineering.

Tom: Good afternoon, Professor Smith. _____



Professor: Good afternoon. Please tell me your questions.

Tom: _____



Professor: Briefly, they are different, but closely related.

Tom: What's the difference between them?



Professor: _____, whereas design engineering focuses on transforming ideas and concepts into a product and making it work.

Tom: Oh, I see. _____



Professor: It's obvious that a design can not be realized without design engineering. A successful design should be ready for manufacturing.

Tom: _____



Professor: Exactly.

Tom: Thank you very much, Professor Smith.



Professor: You're welcome.



5

Art and Design: What's the Big Difference?

Read the following passage and do the exercises.



Art and design are words which are often used interchangeably, but they are different: they have different purposes, they are judged by different criteria, and they have different audiences.

Purposes

Design and art have totally different purposes, although they may look similar. Art is the result of inspiration. Artists create art just because they see beauty in it and want to express themselves, whereas the motivation for a designer is only to achieve a special goal through his design. For example, a person wanting to sell a product will be motivated to design a sales letter in order to solicit a sale. Design is utilitarian in a way that art is not.

Making judgments

Art is judged in terms of beauty and truth. Art evokes a sense of beauty and awe in the viewer, and can cause different reactions in different people; a critique of art depends on the varying taste of the viewers. Design is simply considered good or bad depending on the result it achieves. If it doesn't get the job done, the design is considered not good, or worse, not successful.

So what differentiates a good artist and a good designer? We say that a good artist is talented, whereas a good designer is skilled in what he does. A person can either be talented to be an artist or not, whereas a person can develop skills to become a good designer.

The audiences

The audiences for art and design expect different things. The audience for art wants to look at the artwork or listen to the composition — perhaps to contemplate and reflect, perhaps to be transported by the power of the aesthetic experience or the scene portrayed — whereas, for example, a design's audience wants to use the design to meet his practical needs. Design may

indeed arrest the attention and engage the emotions of a viewer, but at some point, practical success is the hallmark of design.

Design graces our lives with the aesthetic presentation of useful and beneficial things, and art graces us with representations of things to ponder and perceive. Art and design are closely related but nonetheless separate. It is a good thing to keep them straight.

A. Find the differences between design and art according to the passage.

	Design	Art
Purposes	<hr/> <hr/>	<hr/> <hr/> <hr/>
Making judgments	<hr/> <hr/>	<hr/> <hr/> <hr/>
The audiences	<hr/> <hr/>	<hr/> <hr/> <hr/>

B. Translate the following paragraph of the passage into Chinese.

So what differentiates a good artist and a good designer? We say that a good artist is talented, whereas a good designer is skilled in what he does. A person can either be talented to be an artist or not, whereas a person can develop skills to become a good designer.

6 The Design Hierarchy of Needs

Read the following passage and do the exercises.

Functionality

A design must be able to function before anything else. An MP3 player needs to be able to play, pause, rewind, and fast-forward MP3 and other digital audio files in order to be considered an MP3 player. If it can't perform these functions, then the design has failed.



Designs that meet only basic functionality needs are considered to be of little value. A design is expected to meet basic functionality needs; doing so isn't considered anything special.

Reliability

Once your design has met functional needs, it can move up to the next level in the design hierarchy: reliability. Your design should now offer stable and consistent performance. It not only works, but works again and again. If your MP3 player sometimes plays and sometimes doesn't, then it has failed to meet reliability needs.

Designs that meet only reliability needs are perceived to be of low value. Again, we expect the products that we buy to work and to work consistently.

Usability

How easily can users accomplish basic tasks? Can the person with the MP3 player easily figure out how to turn it on and off? What about how to play, stop, pause and select a song? These are usability needs. Your design now works consistently. The question is, can people figure out how to use it?

Usable designs are perceived to be of moderate value. We do have some basic expectations of usability, but we recognize that many things don't quite work as we expect or would like.

Proficiency

Does your design empower people to do more and to do better? Does the MP3 player allow you to build playlists and easily search through songs? Does it provide an easy mechanism for downloading songs from the Internet and transferring them to and from other devices? These are proficiency needs.

Designs regarded as proficient are perceived to function at a high level. A design that allows people to do things not previously possible and to expand on basic functionality is considered to be great.

Creativity

Once all of the lower-level needs have been met, your design can move on to creative needs. With these met, your design can now interact with people in innovative ways. The design can explore and create things that expand on the product itself.

Your MP3 player might allow custom skins or allow you to combine parts of songs to create new music. Your MP3 player might be the most beautiful one on the market.

Designs that meet creative needs are perceived to be of the highest level. They generate a loyal fan base. If you're confounded by Apple's success, wonder no longer. It satisfies creative design needs.

A. Match the needs of design with the detailed description.

- | | |
|------------------|---|
| 1. Functionality | a. aesthetic, innovative interactions;
design perceived to be of highest level |
| 2. Reliability | b. design is forgiving, easy to use;
design perceived to be of moderate value |
| 3. Usability | c. stable and consistent performances;
design perceived to be of low value |
| 4. Proficiency | d. design works, meets basic functional needs;
design perceived to have little value |
| 5. Creativity | e. empower people to do more and better;
design perceived to be of high level |

B. Take an MP3 player as an example to explain the five design hierarchies of needs in detail.

Functionality: _____

Reliability: _____

Usability: _____

Proficiency: _____

Creativity: _____



7 Introduction to a Design

Write a short passage to introduce a design according to the information given below.



Product	“Juicy Salif” lemon squeezer
Designed	by Philippe Starck in 1990
Client	Italian kitchenware company Alessi
Form	inspired by squid, looks like an alien
Material	cast and polished aluminum
Comment	innovative, futuristic, and relatively functional, a classic of postmodern product design of the 1990s
Achievement	became a bestselling item for Alessi, served as a status symbol, welcomed by young, middle-class professionals

A large blue-bordered box containing a dashed blue rectangle. Inside the dashed rectangle are ten horizontal wavy lines for writing.



Further Reading

Read the following passage and choose the best answer to each question.

1. Why can designers help companies innovate while mitigating risk? ()
 - A. Because they can create products which are ahead of their time.
 - B. Because they can innovate in a way that addresses the goals of the company and the desires of consumers.
 - C. Because they can synthesize functionality and aesthetics in design.
 - D. Because they know how to make products perform as promised.
2. Which is not true according to the passage? ()
 - A. Consumers often select the product in which they can see a little bit of themselves (or who they would like to be).
 - B. Many of the world's top brands are also design leaders.
 - C. Marketing and promotions can boost a poor concept as well as a good one.
 - D. Design is fundamental for creating an image and experience of exclusivity.
3. We can generate revenue and sustainable growth for business by incorporating design, because _____. ()
 - A. designers can help companies connect and establish a dialogue with consumers
 - B. design has an important role in some business challenges (such as sustainability)
 - C. great designers, like visionary business leaders, can create value by exploring without limitation the psyche and psychology of consumers
 - D. all of the above

The Role of Design in Business

The frequent question asked of design is of its value to business. The query itself makes little sense. Quite simply, the role of designers has always been to translate and communicate the value of a business idea to consumers. The best designers can do far more — they can help companies connect and establish a dialogue with consumers, thus enabling firms to innovate more efficiently.

The challenge for most corporations today is about how to innovate while mitigating (减轻; 缓和) risk. For consumers, choices are made by balancing the need for evolution with the force of habit. Designers are trained to understand how people think and how to make things. For this reason, there are four basic areas in which design has an important role to play in value creation.

Understanding the Consumer

Entrepreneurs (企业家) and large companies alike invest heavily in understanding their consumers. Consumers themselves often give detailed suggestions about how to improve various offerings. Still, most products that perform as promised are rejected in the marketplace. So designers must not only synthesize (综合) functionality and aesthetics, they must understand a consumer's thought process and emotions in order to motivate behavior change.

Risk Mitigation

How many times have companies pronounced that an innovation failed because it was “ahead of its time”? How often does corporate risk aversion (讨厌; 厌恶) result in lackluster (无光泽的; 暗淡的) offerings that are ultimately taken off the market? Design is a process of synthesizing insights into a tangible offering in a way that addresses the goals of the company and the desires of consumers. Many of the firms that can perform at this level were early in bringing design into their cultures.

Boosting (促进; 改善) Marketing and Branding

Take a look at any list of the top global brands; it's no accident that many of the world's top brands are also design leaders. Design is a fundamental part of creating an image and experience of luxury, exclusivity (排他性; 独特性), and tribal (部落的) belonging. And yet the consumers who purchase these items often select them because they see a little bit of themselves (or who they would like to be) on the shelf. That's great design. The 80% of new products that fail each year show that marketing and promotions can boost the impact of a good concept, but they can rarely compensate (弥补; 补偿) for a poor one.

Sustainability (可持续性)

Design will also be a fundamental (基本的; 重大的) part of one of the next great challenges to touch every industry. How can the need to consume be balanced with the need to be good stewards (管理员; 管家) of the planet? How can brands retain their image and deliver a superior experience while reducing parts, waste, and carbon footprint? These are business challenges where design has an important role. If the solutions are not aspirational (有抱负的) and adopted by large numbers, the potential benefit to the planet is limited.

To say that design is an important part of business success does not mean that all corporate efforts to incorporate design represent money well spent. But that's true of all business functions. The debate about the value of design is healthy and signals a need for more frequent and thoughtful dialogue. In our view, there is far more in common between design and business than may be readily apparent (明显的; 清晰可见的). Great designers, like visionary (有眼光的; 有远见的) business leaders, can create value by exploring without limitation the psyche (灵魂; 心灵; 精神) and psychology (心理特点) of consumers. By so doing, we generate revenue (收益) and sustainable growth for business.



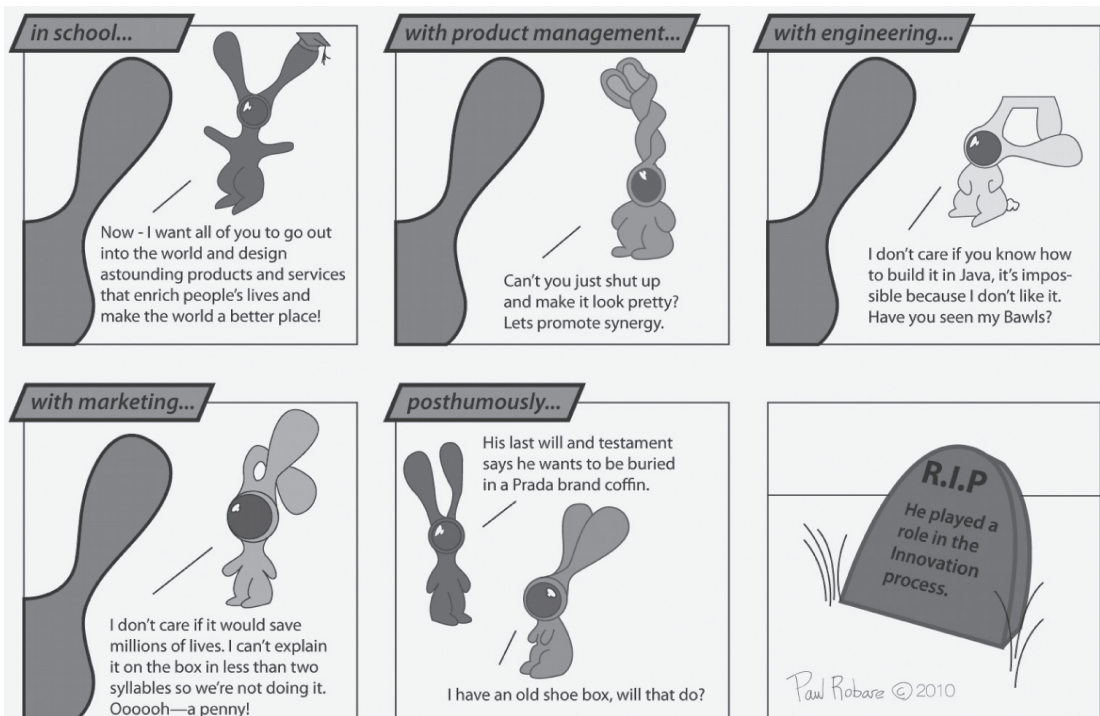
9 Surfing the Internet

What is a design? It is hard to just give one precise answer because design lives in so many areas of our lives. Search the Internet for some definitions of design (ten or more).



10 Enjoying Yourself

A Little “Design” Joke



Vocabulary

New Words

promotion /prə'məʊʃn/ <i>n.</i> 宣传; 促销	The promotion was a success.	1.1
transport /,træn'spɔ:t/ <i>v.</i> 运输; 运送	It has become easier to transport passengers from Shanghai to Beijing by railway.	1.1
element /'elɪmənt/ <i>n.</i> 元素; 组成要素	Hue is one of the three elements of color.	1.2
accomplish /ə'kʌmplɪʃ/ <i>v.</i> 达到; 完成; 实现	The design group accomplished their goal successfully through hard work.	1.2
expression /ɪk'spreʃn/ <i>n.</i> 表达; 表现	Art tends to focus on the expression of emotions.	1.2
judge /dʒʌdʒ/ <i>v.</i> 评判; 断定	It's more difficult to judge art than design.	1.2
substitute /'sʌbstɪtju:t/ <i>v.</i> 代替; 替换	She is good enough to substitute for you.	1.2
attribute /ə'trɪbjʊ:t/ <i>n.</i> 属性; 特征; <i>v.</i> 认为……是; 归因于……	Kindness is his greatest attribute.	1.3
tangible /'tændʒəbl/ <i>a.</i> 有形的; 可触摸的	Sculpture is a tangible art form.	1.3
translate /træns'leɪt/ <i>v.</i> 转化; 翻译	In order to be successful, it's necessary to translate ideas into reality.	1.3
human-centered /,hju:mən'sentəd/ <i>a.</i> 以人为本的	Human-centered thinking sprouted in ancient Greece.	1.3
simplicity /sɪm'plɪsəti/ <i>n.</i> 简单; 朴素; 率直	The slogan of Philips is “sense and simplicity”.	1.3
communicate /kə'mju:nɪkeɪt/ <i>v.</i> 传达; 交流	In today's China, people mainly communicate by mobile phone.	1.3
collaborative /kə'læbərətɪv/ <i>a.</i> 合作的; 协作的	They are a dynamic, young, collaborative team of designers.	1.3
tackle /'tækl/ <i>v.</i> 解决; 应付	Every family has problems to tackle.	1.3
applied /ə'plaid/ <i>a.</i> 应用的; 实用的	As a designer, you should grasp some applied skills of CAD software.	1.4
confused /kən'fju:zd/ <i>a.</i> 糊涂的; 不清楚的	He is a little confused about these concepts.	1.4
transform /træns'fɔ:m/ <i>v.</i> 转换; 改变	It can transform heat into power.	1.4

manufacture /ˌmænjuˈfæktʃə(r)/ v. 制造	It can be manufactured in various ways.	1.4
interchangeably /ˌɪntə'tʃeɪndʒəblɪ/ ad. 可交换地; 可替换地	They have the same functions and can be used interchangeably.	1.5
criteria /kraɪ'tɪəriə/ n. (批评, 判断的) 标准	What criteria were used for development?	1.5
whereas /ˌweər'æz/ conj. 但是; 然而	Western people like coffee, whereas Chinese like tea.	1.5
motivate /'məʊtɪveɪt/ v. 激发; 诱发	It's a big challenge for a project manager to motivate the team to succeed.	1.5
solicit /sə'lɪsɪt/ v. 恳求; 请求	We should often solicit opinions from the consumers.	1.5
utilitarian /juːtɪlɪ'teəriən/ a. 有效用的; 实用的	The buildings were utilitarian rather than decorative.	1.5
evoke /ɪ'vəʊk/ v. 产生; 引起; 唤起	These old songs can evoke memories of the past.	1.5
awe /ɔː/ n. 敬畏; 使惊奇	We looked at the ancient buildings with a sense of awe.	1.5
critique /krɪ'tɪ:k/ n. 评论; 评论文章	This book provides a thorough critique of current design.	1.5
differentiate /ˌdɪfə'reɪnʃɪeɪt/ v. 区分; 区别	It is difficult to differentiate between the two design styles.	1.5
talented /'tæləntɪd/ a. 有才能的; 天才的	Philippe Starck is a talented designer.	1.5
contemplate /'kɒntəmpleɪt/ v. 深思; 细想; 仔细考虑	Contemplate the problem before making a final decision.	1.5
aesthetic /i:s'θetɪk/ a. 美学的; 美感的	Design is not only about the function, but also about the aesthetic experience.	1.5
portray /pɔː'treɪ/ v. 描绘; 描画	It is difficult to portray feelings in words.	1.5
hallmark /'hɔːlmɑ:k/ n. 特点; 特征; 标志	Attention to the details is the hallmark of a fine designer.	1.5
grace /greɪs/ v. 美化; 使优雅	They graced the house with flowers.	1.5
beneficial /ˌbenɪ'fɪʃl/ a. 有益的; 有用的	Proficiency in painting is beneficial for the design.	1.5
ponder /'pɒndə(r)/ v. 沉思; 深思熟虑	Sometimes, you should pause and ponder.	1.5
perceive /pə'si:v/ v. 感觉; 察觉; 理解	As designers, we should be good at perceiving the changes in our society.	1.5
nonetheless /ˌnʌndə'les/ ad. 虽然如此; 但是	Nonetheless, they were finally successful.	1.5

hierarchy /'haɪə,rɑ:kɪ/ <i>n.</i> 层次体系; 等级制度	We should put honesty first in our hierarchy of values.	1.6
perform /pə'fɔ:m/ <i>v.</i> 表现; 表演; 执行	The system performs very well.	1.6
reliability /rɪ,lɪəʊ'bɪlətɪ/ <i>n.</i> 可靠性; 可信赖	The reliability of a computer system is very important.	1.6
stable /'steɪbl/ <i>a.</i> 稳定的; 安定的	The government is taking measures to make prices stable.	1.6
consistent /kən'sɪstənt/ <i>a.</i> 始终如一的; 持续的	His actions are always consistent with his words.	1.6
usability /ju:zə'bɪlətɪ/ <i>n.</i> 可用性	Usability is becoming more and more important in website design.	1.6
moderate /'mɒdəreɪt/ <i>a.</i> 中等的; 适度的	Moderate exercise will benefit you.	1.6
proficiency /prə'fɪʃnsɪ/ <i>n.</i> 熟练; 精通	Proficiency in both spoken and written English desired.	1.6
empower /ɪm'paʊə(r)/ <i>v.</i> 授权; 准许	The computer can empower designers to work more easily and better.	1.6
mechanism /'mekənɪzəm/ <i>n.</i> 机制; 构造	It is not easy for us to understand the mechanism of the system.	1.6
loyal /'lɔɪəl/ <i>a.</i> 忠诚的; 忠心的	We should be loyal to our country.	1.6
confound /kən'faʊnd/ <i>v.</i> 弄糊涂; 搞乱	She was confounded by his words.	1.6
wonder /'wʌndə(r)/ <i>n.</i> 奇迹; <i>v.</i> 惊奇; 惊讶; 想知道	I wonder what the real meaning of design is.	1.6
inspire /ɪn'spaɪə(r)/ <i>v.</i> 启迪; 赋予某人灵感	As teachers, we should inspire students to think.	1.7
squid /skwɪd/ <i>n.</i> 乌贼	A squid has a lot of long leg-like tentacles.	1.7
alien /'eɪlɪən/ <i>n.</i> 外星人	The film tells the story of an alien.	1.7
futuristic /,fju:tʃə'rɪstɪk/ <i>a.</i> 合乎未来的; 未来主义的	The building was designed in a futuristic style.	1.7
postmodern /pəʊst'mɒdən/ <i>a.</i> 后现代的	He is one of the most famous postmodern writers in the world.	1.7
status /,stetəs/ <i>n.</i> 身份; 地位	It is not only a car, but also a representation of power, status, and wealth.	1.7
symbol /'sɪmbəl/ <i>n.</i> 符号; 象征	White is the symbol of purity.	1.7

Phrases and Expressions

participate in	参加；出席	1.2
in one's opinion	在某人看来	1.2
substitute for	代替	1.2
applied art	实用艺术	1.4
focus on	聚焦于；以……为中心	1.4
be ready for	为……做好准备	1.4
in terms of	根据；依据；就……而言	1.5
depend on	依赖于；随……而定	1.5
figure out	弄明白；理解	1.6
interact with	与……互动	1.6
lemon squeezer	柠檬榨汁机	1.7
cast polished aluminum	铸造抛光铝	1.7
serve as	充当；担任	1.7

Proper Noun

Charles Eames	(人名) 查尔斯·埃姆斯	1.2
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