

中国设计 计算机应用与设计

王强 等 编著

Chinese Design: Computer Application and Design
Liaoning Fine Arts Publishing House

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序

《中国设计》系列丛书是超大型的重点出版工程。它汇集了全国顶尖高校数百位设计精英从现实出发整理出的具有前瞻性的教学研究成果，是设计学科建设不可或缺的基础理论书籍。

我国的设计领域正处于迅猛发展的时期，设计以其独特的表现手段覆盖了社会各个领域，成为综合国力迅速增长的重要推力。设计以其复杂的多学科背景和先进的系统整合功能成为当今全球发展最快的前沿交叉学科。从某种意义上说，设计改变了人类的生产和生活方式，成为当代文化的一种重要形态。

随着创意经济时代的到来，今天的艺术领域发生了飞速的变化。在工业化、全球化、城市化的大背景下，各类艺术不断拓展出新，社会经济发展对艺术、设计、创意人才的需求也在日益增加。2011年，国务院学位委员会、教育部对我国高等院校的学科门类作出了重要的调整，将艺术学从文学门类中分离出来，成为新的独立的学科门类。由此，美术学、设计学升为艺术学门类下的一级学科。这是艺术学科自身发展的必然结果，也是时代发展对艺术学科的要求。它将极大改变我国艺术教育的整体格局，直接关系到中华民族伟大复兴所必需的自主创新能力培养的大问题。

近两年来，根据艺术学学科设置的此项变化，为适应普通高等院校艺术专业教育发展的需要和社会人员对艺术学习和欣赏的需求，建构艺术学的学术框架和科学规范教学用书，我们组织编辑了《中国设计》大型丛书。本套书涵盖设计学下设的主要分级学科的内容，是大设计的概念，是针对中国人学习和认识艺术设计的需要所配备的图书。它的出版将有力地推动中国设计教育事业的发展，不论在理论界、设计界、教育界都具有里程碑的意义。

设计是一种把计划、规划、设想通过视觉的形式传达出来的活动过程，是一种为构建有意义的秩序而付出的有意识的努力。最简单的关于设计的定义就是“一种有目的的创作行为”。设计学包含的内容非常宽泛，凡与设计相关的所有基础学科和应用均可列入其中。

进入20世纪80年代，中国的艺术设计教育开始引入由德国包豪斯开创的现代设计体系，如平面构成、色彩构成、立体构成等课程。通过不断的探索和实践，包豪斯设计教育理论与我国的艺术教育实际相融合，逐渐形成了我国设计基础教学体系。目前，设计基础的基本构建点是培养学生艺术设计的创造性。在教学方法上主要通过案例式教学加以分析和启发，通过大量的理论结合实践的训练使学生对设计的基础知识从感性认识升华到更高、更广、更科学的审美境界即理性的思维方式中去，使学生了解设计艺术的特殊性，从而掌握其规律，并在设计中能够合理地运用设计基础理论和方法，发挥创造精神，最终达到满足符合功能和审美的设计要求。

本套丛书共分31种，主要围绕基础理论、创作、欣赏、研究四个方面展开。具体书目有：《构成基础》《设计素描》《平面构成》《色彩构成》《设计原理》《图案设计》《图形设计》《视觉识别系统设计》《VI设计》《广告设计》《POP设计》《环境空间设计》《公共空间设计》《园林景观设计》《室内设计》《展示设计》《建筑设计与表现》《包装设计》《书籍装帧设计》《字体设计》《工业产品设计》《家具设计》《工艺品设计》《材料应用》《计算机应用与设计》等。

设置艺术学门类为我国艺术类人才的培养提供了更大的空间和自主性。在新的学科门类体系下，针对设计学科的特性，有系统、有计划、有新意地推出设计学范畴的图书，以供社会广大美术爱好者学习者、高等院校师生之用，对繁荣和发展我国高等艺术教育事业有积极的作用。

Preface

Design is the active process which conveys plan, program and imagination through the form of visual. It is the conscious effort made to establish meaningful educational circle.

Chinese nation. For the past two years, based on the change of the art discipline and to accommodate to the development of art major of university and the need for art learning and appreciation, we compiled the large series of *Chinese Design* with the aim of establishing the academic framework and standardizing teaching books. The series covers the major part of the hierarchical subjects of art. It is the ideal book for Chinese to learn about the art design. The publication of the book will bring benefit to the Chinese art and has milestone significance in theoretical circle and the

With the arrival of the creative economy, the art has witnessed rapid development. With the industrialization, globalization and urbanization, various kinds of art have come into being and the social and economic development has greater need for talent in art, design and creativity. In 2011, the State Council Academic Degrees Committee and the Ministry of Education made major adjustment on the discipline of college, separating the study of art from literature as an independent discipline of colleges, artistic theory, fine arts and design science has become the first-level discipline of art. It is the inevitable result of the development of art and the requirement of age on art. It will greatly change the pattern of China's art education and is directly related to the cultivation of independent creativity of the education.

China's design field is in the period of rapid development. With the unique way of expression, design covers almost all the aspects of society and has become the important driving force for enhancement of the overall national power. With its complex multi-discipline background and the advanced system integration, design has become the fastest growing frontier cross-disciplinary branch. In a sense, design has revolutionized people's way of production and lifestyle and has become an design.

The Chinese Design series is a huge publishing project, which contains the forward-looking teaching and research result of design elites from China's top universities. It is an indispensable theoretical book for the discipline construction of universities.

orders. The simplest definition of design is the purposeful creative behaviour. Discipline of design covers a wide range. All the basic subjects and application related with design and application can be included.

After 1980s, the education of China's art design began to introduce the modern design system by Bauhaus from Germany, including courses such as plane composition, colour composition and three-dimentional composition. With constant exploration and practice, the design instruction theory of Bauhaus has integrated with China's art education practices, which gradually forms fundamental design teaching system. Currently, the starting point of design fundamentals is to cultivate the creativity of students' art design. Case study and analysis as well as inspiration are adopted as the instruction method. With the intensive training of combining theories with practices, the perpetual knowledge of design could be developed into the rational way of thinking, which is a higher, wider and scientific aesthetic realm. Students are required to learn about the particularity of art design and grasped the rules to put the theories and methods into practices rationally. With creative spirit, the students are expected to meet the requirement of function and aesthetic design.

There are 31 kinds of books in the series, which centered on basic theory, creation, appreciation and research. Specifically the books are as follows: *The Basis of Composition*, *Design Sketching*, *Plane Composition*, *The Composition of Color*, *The Principle of Design*, *Pattern Design*, *Figure Design*, *The Visual Identification System Design*, *VI Design*, *The Aduertisement Design*, *POP Design*, *Design for Environment Space*, *Design for Public Space*, *Landscape Design*, *Indoor Design*, *Design and Display*, *Architectural Design and Expression*, *Package Design*, *Design for Binding and Layout of Book*, *Font Design*, *Design for Industrial Product*, *Furniture Design*, *Design for Artwork*, *Application of Material*, *Computer Application and Design and so on*.

The establishment of art provides larger space and autonomy for China's art talents. Based on the characteristics of the art discipline, to promote artistic books in a systematic, planned and creative way for art lovers and universities students and teacher has significance to the prosperity and development of China's higher art education.

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第一章 平面设计

第一节 // 平面设计的概念

平面设计一词源自英文“Graphic Design”，最早是由美国平面设计家威廉·阿迪逊·德维金斯于1922年提出的。平面设计一词正式成为国际设计界通用的术语是在20世纪70年代，这期间，由于市场经济的发展，商品市场的竞争愈演愈烈，平面设计在市场竞争的环境中扮演的角色越来越重要。同时，社会组织之间需要用视觉的方式进行信息的传

播，因此，平面设计的功能愈显强大，平面设计的职业特性日趋发展和完善，平面设计已演变成一门专门学科。

所谓的“平面设计”，指的是在二维空间中的设计活动，换一种理解，它特指的是以印刷手段为基础的平面作品的设计。目前，随着信息时代计算机辅助设计带来新技术冲击，平面设计已经演变成一种信息识别和信息传播的重要工具，建立起一套完整的设计理念和体系（见图1-1~1-5）。



图1-1



图1-2



图1-4



图1-3



图1-5

第二节 // 平面设计的内容

平面设计涉及的范围广泛，平面设计经过多年的发展，涵盖的内容不断扩展，目前主要包括如下领域：广告设计、书籍和出版物设计、商业传播设计、视觉识别系统设计、字体设计、包装设计、展示设计等（见图1-6~1-10）。

平面设计的具体应用形式主要分为：以文字为主的设计、以图形为主的设计、综合性设计。

以文字为主的设计主要是文字与字体的设计，

包括：字母设计、文字编排设计、字体设计、标志设计、标牌设计等。

以图形为主的设计主要是图形和摄影（在平面上的运用），包括：标志设计、图表设计、插图、摄影、装饰性设计等。

综合性设计是运用字体、语言、图形等各种设计元素进行整合的设计，包括：出版物的设计、招贴设计、图表设计、视觉识别系统设计、包装设计、展示设计、环境设计等（见图1-11~1-14）。

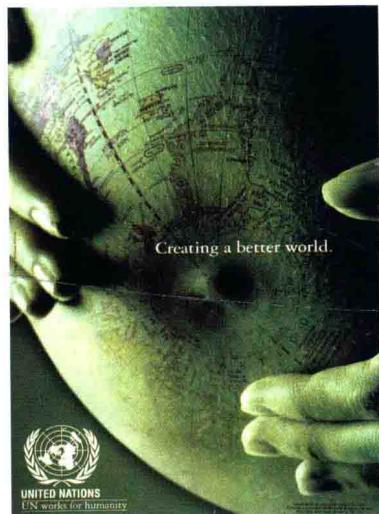


图1-6

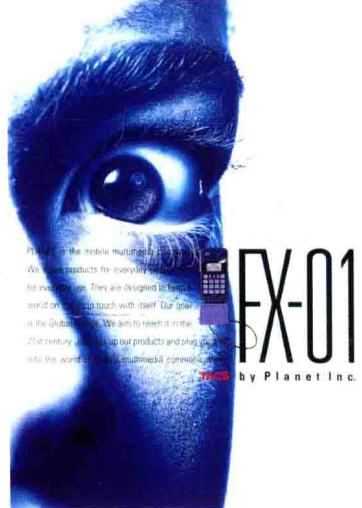


图1-7



图1-8

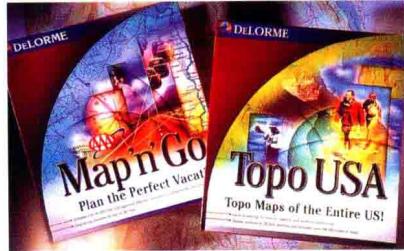


图1-9



图1-10

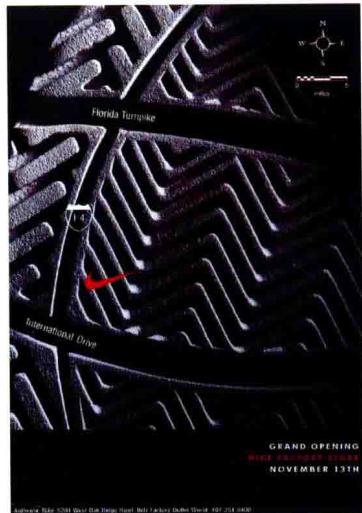


图1-11