

中国设计·材料应用

丘斌 等 编著

Chinese Design: Application of Material
Liaoning Fine Arts Publishing House

辽宁美术出版社

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《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。

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 design.

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 function, 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 import form of modern culture.

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 colleges, separating the study of art from literature as an independent discipline. As a result, 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 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 educational circle.

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 orders. The simplest definition of design is the purposeful creative behaviour. The

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01

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设计思维

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引 言

常常听见一些大学生在“修炼”了几年的设计基础后，仍抱怨“不知从何下手”，而一些年轻的设计者“下了手”，作出的东西却粗糙俗气，格调不高。

你可能会对一件作品爱不释手，却不能说出它究竟美在何处，妙在何方。

你也许能把设计的理论讲得头头是道，辗转深入，但把它转化为一张叫人惊觉的作品却深深犯难。

似乎在你的脑和手之间出现了某种“断崖”。

逾越这个“断崖”，要靠桥，或者称之为愈合两者的“胶带”。

这本书是桥，是胶带，是结合两者之间的连接物。

这一切，促发了这本书的出生！

古人云：“授之鱼不如授之以渔。”讲的是提倡教人方法而不是结果。本书就是教你认识设计、实施设计的方法和思维，只不过我追求既“授之渔”，也“授之鱼”，用“鱼”（好的作品）来刺激你的“渔”（到位的设计思维）的欲望和激情，并从“渔”中获取无穷的“鱼”趣！

这不是一本阐述设计原理的书，但是设计的原理却始终如一地渗透其中，如影相随。

这是一本摆放了我瞬间思维的“抓拍”的影集。

翻阅此书，你完全可像看一本吸引你的时尚杂志一样，信手拈来，轻松地、跳跃着浏览，如果在那么一瞬间你的某根神经被其中的一个“点子”扯动了一下，哪怕是微弱的一“动”，我想这本书就有了它的价值。



第 1 章

基础 ——墙基·鼻子·卷心菜

本章要点

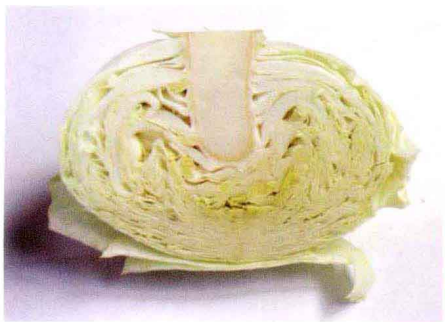
- “求大同，存小异”
- 发现美
- 设计内在的规律和共性
- 培养正确的设计意识

和你见过的造房子一样,设计必须要用相关的材料去营造一个全新的完整形体。这个实实在在的形体生命,其根本保证在于有一个坚固厚实的**墙体基础**。你面临的设计基础,不但包括造型基础中对素描和色彩的认识,还包括对图案形态的构成认识与分析,对工具与程序表现等基本规律的综合掌握。这个基础将伴随你整个实践过程,因为你的每一件设计作品都离不开它。

自然的形态是极为复杂微妙的,不能机械地、被动地在画面上照搬。物体的远与近、大与小、方与圆、红与绿、边缘与轮廓、虚与实的对比,由于光源、方向、距离的不同,所产生的色彩和明暗关系也不同,关键看你的正确理解、观察和完美塑造。比如用水粉进行色彩头像写生,当你先观察头部整体时,会有一个大色调,当转向观察细部的**鼻子**时——偏冷色,同时用眼睛的余光看耳朵——偏暖色;接下来观察耳朵,余光中的鼻下侧又变成了偏暖色。那么其他部位呢?左思右想,这些变幻莫测的色与光,有时真会让你眩惑。这时,“求大同,存小异”该是你长久不忘的法宝。你千万不能因为对细节的玩味,而忽略了整体关系的刻画。大处着眼,小处着手,小处着眼又大处着手,反反复复观察与塑造是你必需把握的。

平面构成中对点、线、面的对比认识,你在练习中已接触不少。实际上生活当中,点、线、面的美无处不在。当卷心菜被切开时,有的人只会使其食欲受到刺激,有的人却能惊喜地发现**卷心菜**叶片自然流畅的线条美。当你在乡间漫步时,看见浅水塘里黑压压的蝌蚪,你会感悟出那种游动的点的美吗?美就在你身边,关键在于学习设计的你懂得如何去发现美。

写生课程不单是训练必要的写生技巧和窍门,更重要的是学会如何观察物体。不仅要用眼睛看,更要学会在观察后去理解,用视觉形象



表达自己的思想。马蒂斯说得对，“当我吃西红柿时，只看见了西红柿。但是，当我画西红柿时，我用不同的眼光来观察它。”这个西红柿画出来还是西红柿吗？可能像，可能不像，但它是艺术化了的西红柿。

基础设计教学的一些规律是非常科学的，它是艺术设计的根源，是“宗”。“万变不离其宗”，这个“宗”就是设计内在的规律和共性，它在基础教学里有，在设计创作中也有，学会用设计内在的“宗”去应对它的“万变”。

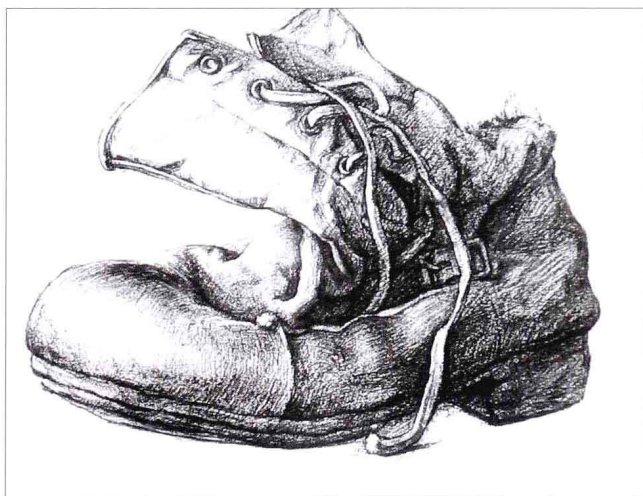
写生式素描：写生式素描是一个纯基础性的素描练习，即在固定光源、固定环境和固定视点条件下面对实物写生，训练深入理解和掌握物体的形体与结构关系，以及依附在形体结构上的明暗关系的能力。

特写式素描：素描本意不是充当复印机或镜子，而是在于对物体的发现与再创造，所以我们强调要用感觉去感知大自然姿态的特异的生态美，特写式素描就是加强我们这种能力的表现方式。它在仔细观摩对象的基础上，选择特定的角度和画面，找出对象材质的肌理特征，寻找局部的特殊造型，作特殊技法与形式的突出表现，例如寻求原有物象“切割”后的特殊形态。

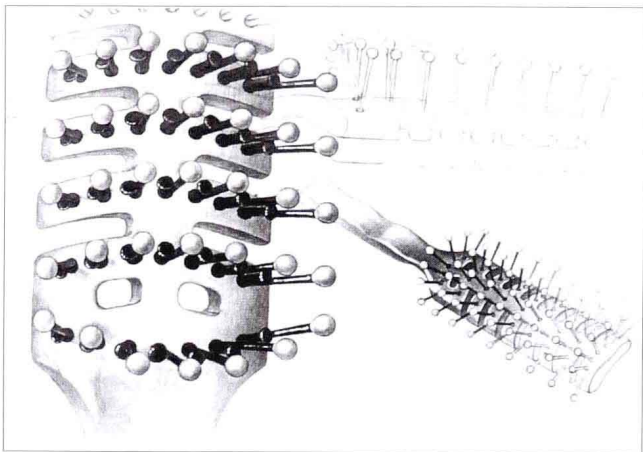
结构式素描：结构式素描又称设计式素描，它偏重理性认识，强调用线的形式将物象结构更全面、更概括、更本质地表现，从而加强想象力和培养记忆力。它不仅表现物象看得到的部分，还要表现看不到但实质存在的部分。这要求认真观摩、研究和分析对象整体与局部的构造、比例尺度与肌理状态，着重分析有特征的关键部分，并尽可能地对其进行拆装以增加视觉与触觉认识。

命题式素描：有了以上的获益，我们可以增加命题式的形体组合、添加写生和想象的表现练习，也就是命题式素描。例如，戏谑形的、悖架形的、仿透形的、重叠形的、换置形的、复合形的等，这些形式都有益于引导学生的艺术观察力、注意力、分析力、记忆力、想象力和表现力的提高，更有助于未来你的设计创作表现和艺术独创性发展。要提醒的是，以上四个素描的理解和表现就是时下强调的设计素描的过程。

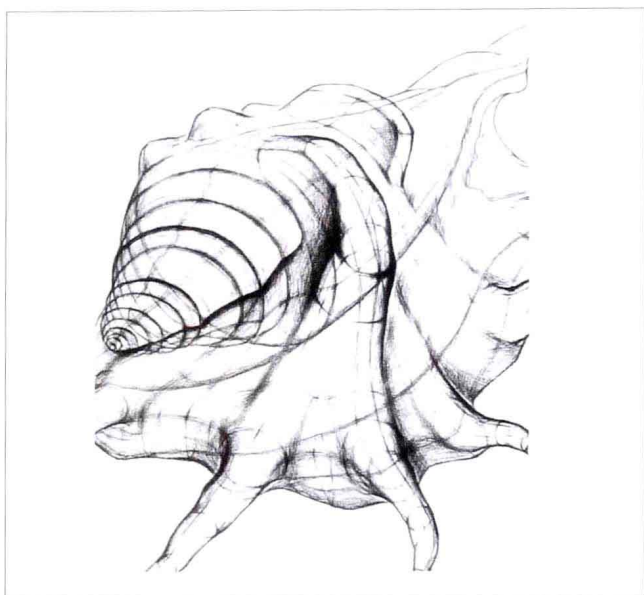
对设计色彩的认识和表现与设计素描的四个阶段——写生、特写、结构、命题四个环节的处理大致相同。但对色彩特性的理解是要经过长期训练的。法国



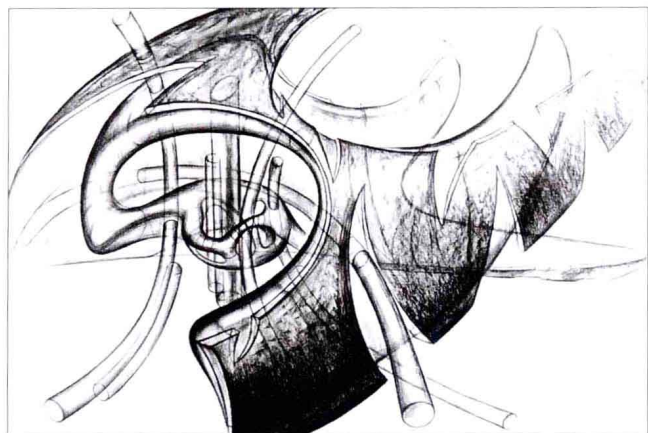
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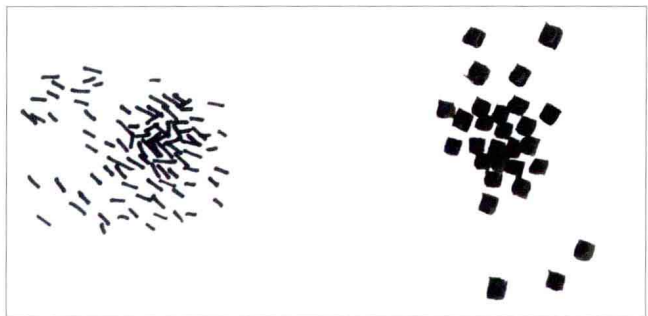
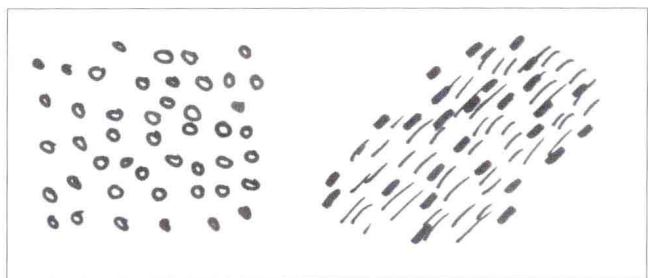
特写式素描



结构式素描



命题式素描



点的发散、密集、轻重、方向会给你带来怎样不同的感受呢？

画家德加的一句名言：“素描画的不是形体，而是对形体的观察”应能引发你的深思。其实素描、色彩一样都是要对物体有客观的正确的观察。

一旦你学会从各个不同的角度去观察点、线、面的构成和变化规律，你也会发现，应用在绘画创作（譬如中国画或油画）中的点、线、面因素同样神奇和美妙！如果养成好的观察习惯，你自然会运用平面构成规律，在设计作品中充分展现它的魅力。

当你走进书店拿起一本书时，那书是有形有面积的，而当你把书放回到浩瀚的书海里，便感觉到它只是一个点而已。点所依存的环境发生变化，点的特性便会改变。

点在几何学中没有面积的概念，它充其量只占了一个位置，但在视觉造型艺术里，点却具有面的概念，或叫面的形态，如点的接近、点的密集等。做个试验：将三个点散开，我们可以感觉到有一个三角形的概念，同时也有了面的感受，这是点与点之间隐形的直线在起作用。

分离、相接、减缺……以及那些显性和隐性的点与线、点与面、线的直与曲的运用，都能产生一定的衬托关系，产生空间感与层次感。

轮廓是画面存在的实体的边框线，其中包括对有形线 and 无形线的理解与应用。

表现设计空间的三元素即色彩、文字、图形，它们在设计过程中必须“动”起来，彼此相互组合、碰撞产生的对比就是“动”，“动”起来才能产生火花和妙笔，才会有画面的新鲜“空气”。这个“空气”就



水平线趋于稳定感；发散线具刺激和爆发感；曲线有活泼、柔美和流动感；而粗细线的变化更具韵律美感。

是我们常说的设计“空间”。

视觉空间设计意识的培养及运用是设计表现中的一个关键环节,也是你容易忽视的重要问题。设计中是否能触摸到它的空间元素,就看点线面、图形、文字及色彩的互动力度,这个空间应该是通透的、流动的、新鲜的。

自你学习美术起,你总在充满激情地观察自然、享受色彩,并寻找你心中的颜色。色彩激发着设计家的创作灵感,就像演奏家的创作欲望被某个天籁之音所激发一样。

大自然的颜色如此丰富,而你始终要抓住一个准绳:物体因受光的变化而呈被动,人是积极主动的。如果能把握环境色的感觉,那是由于灵气与经验的完美结合。

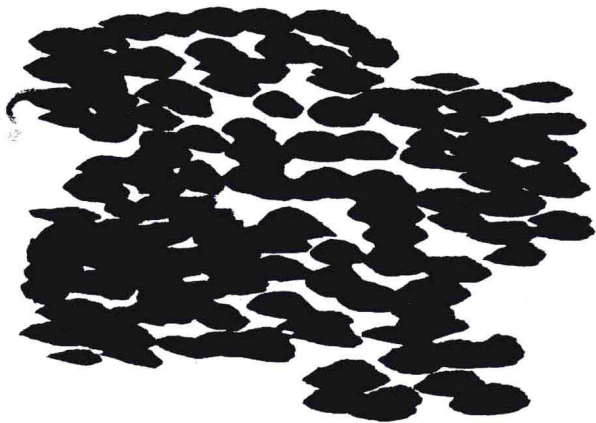
对绘画色彩和设计色彩原理的认识基本是一致的,其区别在于:写实性绘画用色侧重于空间塑造的科学再现(趋感性),设计用色则偏重于抽象而概括的装饰(趋理性),它不受光源色、环境色、固有色的影响而变动,力求色彩的装饰性效果。

图案是一种从属艺术,但你不能因其从属性而小看它的艺术魅力,自古以来它就与人们的衣食起居结下了不解之缘。一件衣服,一只茶杯,一本新书,总无时无刻地与你发生着联系,你肯定不会拒绝那些美轮美奂的图案给你带来的愉悦。

空间、图形、文字、色彩这几个要素,就像交响乐中四种不同的乐器,演奏着设计构成的主旋律,而构成基础的点、线、面与造型基础中素描的黑、白、灰,就是构成主旋律的一个个跳动的音符,它们谁也离不开谁,少了谁便不尽完美。

如果你把素描单纯地理解为绘画的基础,那你的损失就大了。素描对设计有着至关重要的作用,而转换两者的关键词就是设计素描。设计素描的目的是基于造型能力基础之上的形式美感的提高。在这里我们可以获得对视觉语言中的基本要素——点、线、面及黑、白、灰的训练和理解,初步领略平面构成中的大小、方向、黑、白、灰及点、线、面和黄金分割规律等基本形态要素,让你听到了设计的第一个脚步声。

速写是视觉艺术的基本功之一,是视觉艺术创作



这个画面你也许会觉得很美,而美在哪里呢?你会把叶子看成点,把树枝看成线,把墙看成面吗?只要你细心观察,你会发现生活中的点、线、面之美无处不在。我们如此强调基础概念的点、线、面,是因为设计表现离不开这些元素。