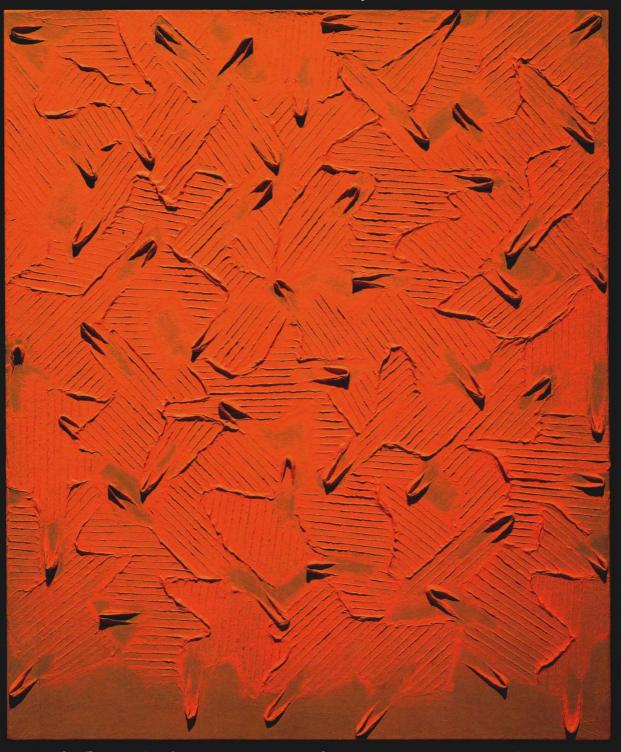
ART FUNDAMENTALS

Theory and Practice

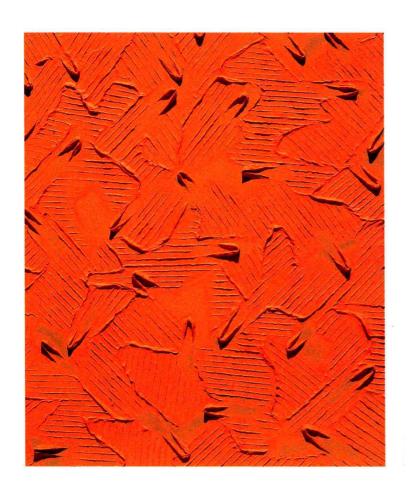


Ocvirk • Stinson • Wigg • Bone • Cayton

ART FUNDAMENTALS

Theory and Practice

TENTH EDITION



Otto G. Ocvirk
Robert E. Stinson
Philip R. Wigg
Robert O. Bone
David L. Cayton

School of Art Bowling Green State University



The McGraw Hill Companies



Published by McGraw-Hill, an imprint of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY 10020. Copyright 2006 by The McGraw-Hill Companies, Inc. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written consent of The McGraw-Hill Companies, Inc., including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning. Some ancillaries, including electronic and print components, may not be available to customers outside the United States.

This book is printed on acid-free paper.

1234567890DOW/DOW098765

ISBN 0-07-286233-5

Publisher: Lyn Uhl

Editor in Chief: Emily Barrosse Director of Development: Lisa Pinto Development Editor: Margaret Manos Editorial Assistant: Elizabeth Sigal

Executive Marketing Manager: Suzanna Ellison

Managing Editor: Melissa Williams Production Editor: Anne Fuzellier Senior Designer: Kim Menning Interior Designer: Glenda King Cover Designer: Joan Greenfield

Photo Research Coordinator: Natalia Peschiera

Photo Researcher: Emily Tietz Art Editor: Emma Ghiselli

Lead Media Producer: Shannon Gattens Media Project Manager: Michele Borrelli Production Supervisor: Richard De Vitto Supplement Producer: Louis Swaim

Library of Congress Cataloging-in-Publication Data

Art fundamentals: theory & practice / Otto G. Ocvirk. [et al.].—10th ed.

p. cm

Includes bibliographical references and index. ISBN 0-07-286233-5 (softcover : acid-free paper) 1. Art—Technique. 2. Art. I. Ocvirk, Otto G.

N7430.A697 2005 701'.8—dc22

2005047998

Cover and title page:

Seo-Bo Park, *Ecriture No. 940110*, 1994. Mixed media with Korean paper, 26×18 in. $(65.3 \times 46$ cm). Courtesy of Jean Art Gallery, Seoul, Korea.

www.mhhe.com

ART FUNDAMENTALS

Theory and Practice

TENTH EDITION

The foundations or fundamentals course presents a unique challenge to the instructor. It is a course profoundly based in doing-in the experience of exploring art elements and media on a level of practical curiosity. At the same time, foundations has a history and language that successful students will learn and master—as a way of avoiding common pitfalls, if nothing else.

The original text that set the standard for introduction to art courses across the country, Art Fundamentals has guided generations of students through both the essential elements of art and the rich and varied history of their uses.

The tenth edition features a broader array of media and represents more diverse artists than the previous edition, particularly from the late twentieth century, including many new women artists and artists from non-Western cultures. New sections have been added on video art, contemporary photography, and global art, and many of the computer-aided illustrations in the text have been updated. In addition, the entire manuscript has been reviewed and refreshed for readability.

This edition of Art Fundamentals expands the wealth of study materials available to students and faculty by offering a free student Core Concepts in Art CD-ROM bound in the back of each new copy of the textbook purchased from McGraw-Hill, and a complete Online Learning Center.

CORE CONCEPTS IN ART, VERSION 3.0

This CD-ROM, designed McGraw-Hill by leading instructional designer Bonnie Mitchell, of Bowling Green State University, offers a wealth of resources for art students. Updated and expanded, Core Concepts offers teachers and students hundreds of interactive exercises, over an hour of narrated video, and text-specific, chapter-by-chapter pedagogical resources such as images for study and reference, quizzes, and more. Exercises meant to encourage students to investigate the CD-ROM appear at the end of each chapter in the text. Please see A Guide to the CD-ROM on the following page for more detailed information.



Students can interact with the formal elements and principles of art by working through more than seventy exercises that illustrate fundamental principles such as line, shape, color, and texture.



Students are invited to tour a variety of art studios. In extensive narrated video segments, this section illustrates techniques for working in a variety of media-from bronze to paint to film.



Study resources correlated to each chapter in Art Fundamentals include key

terms, chapter summaries, and selfcorrecting study quizzes.



The Study Skills section provides broad, practical advice on adjusting to the rigors of college work.



The Research and the Internet section introduces students to the research

process—from idea generation, to organization, to researching on- and off-line-and includes guidelines for incorporating sources for term papers and bibliographies.

www.mhhe.com/ artfundamentals10

The student section of the Online Learning Center contains study materials such as quizzes, key terms, flashcards, and crossword puzzles for each chapter in the book, plus a link to McGraw-Hill's Art Supersite, where students can research career opportunities. The instructor section includes sample student projects and links to multiple professional resources.

Also available for instructors are a set of high-quality art image slides; The McGraw-Hill Guide to Electronic Research in Art (ISBN 0-07-232956-4), and The McGraw-Hill Museum-Goer's Guide (ISBN 0-07-038731-1).

Together the various teaching and learning materials help reinforce the principles and elements of design with practical exercises, self-guided tutorials, interactive examples, and assignable student projects.

A Guide to Core Concepts in Art CD-ROM, Version 3.0



GETTING STARTED

System Requirements

In order to run this CD-ROM properly, please make sure that your computer meets the minimum system requirements:

WINDOWS

- Intel Pentium II 200
- 128 MB RAM (64 MB available RAM)
- Windows 95/98, 2000, XP, or NT 4.0+
- 4x (or better) CD-ROM drive
- SVGA or higher monitor with 800x600 resolution running 16-bit color

MACINTOSH OSX

- G3 running 10.1 or better
- 128 MG of available RAM
- Color monitor with 800x600 resolution running 16-bit color

MACINTOSH CLASSIC

- Power Macintosh 180 (G3 recommended)
- 128 MG of available RAM
- System 8.6 or later
- 4x (or better) CD-ROM drive
- Color monitor with 800x600 resolution running 16-bit color
- Sound capability

QuickTime Requirements

QuickTime is required to run the program. You can click the InstallQuicktime.html file on this CD-ROM, which will bring you directly to the Apple QuickTime website, where you can download the program. The website is www.apple.com/quicktime/download.

Starting the CD-ROM

Follow these steps to install the CD-ROM and begin working with the program:

WINDOWS

- 1. Insert the CD into the CD-ROM drive.
- 2. Double click on My Computer on your desktop.
- 3. Double click on the CD-ROM drive, most commonly called the D:/drive.
- 4. Double click on the Start_HerePC.exe file from the CD-ROM.

MACINTOSH

- 1. Insert the CD into the CD-ROM drive.
- Double click on the "Launching the Imagination" CD-ROM.
- Double click on the Start_Here (OSX) or Start_Here (Classic) file from the CD-ROM. Use Start_Here (OSX) for Macintosh 0SX 10.1 or higher, and Start_Here (Classic) for System 9.2 or lower.

If you need help installing this program, please call 1-800-331-5094 between 9am and 5pm EST.



The five icons on the main menu correspond to the five components of the *Core Concepts in Art* CD-ROM.





Elements and Principles of Art

Explore the elements of 2D, 3D, and time design through interactive exercises and animated demonstrations. Experiment with the principles of unity and variety, pattern and rhythm, balance, scale and proportion, emphasis and focal point, and illusion of space.



Art Techniques

Observe techniques for painting, sculpture, printmaking, glass, jewelry, photography, and new media in a series of video demonstrations.



Chapter Resources

Review the content of each chapter in *Art Fundamentals*, Tenth Edition, in this section of the CD-ROM.



More extensive chapter review materials are also available at the McGraw-Hill **Online Learning Center** (www.mhhe.com/artfundamentals10), which can be launched from the Internet Resources section.



Applicable to all your courses, this primer offers tips on study and organizational skills. It also includes advice on documenting sources.



Internet Resources

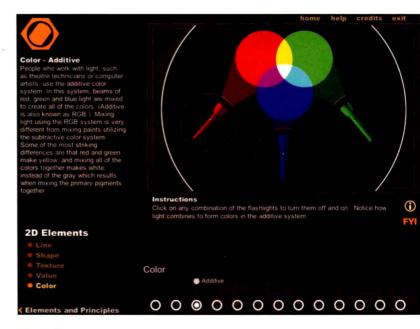
This section is helpful if you are new to using the Internet for research. It offers basic "how-to's" on using the Web, along with an introduction to computer terminology and netiquette.



You can also access the McGraw-Hill **Online Learning Center** through a link in this section.



The following screen shots are examples of the types of demonstrations and interactive exercises found in the CD-ROM. For a guide to correlating the CD-ROM with this text, see the "Investigate the CD-ROM: Questions to Ask Yourself" feature at the end of every chapter.



Pattern & Rhythm - Module
Tessellation involves dividing a module into shapes that begin to have an ambiguous figure (ground relationship. These modules are then assembled into a grid structure so that when the portions of the module that were originally perceived as negative space are arranged side by side, they complete a shape that can now be perceived as a positive shape. The artist M.C. Escher used tessellation to create illusions that reveal the contradictions between what makes visual sense and what makes visual sense and what makes logical sense.

Principles
Unity & Variety
Pattern & Rhythm
Balance
Scale & Proportion
Emphasis & Focal Point
Illusion of Space

Elements and Principles

Elements and Principles

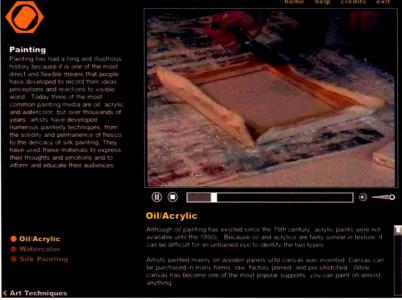
An interactive activity that allows you to experiment with additive color, found in "Elements and Principles of Art"

An interactive activity that allows you to experiment with positive and negative space, found in "Elements and Principles of Art"



A video demonstration of the lost-wax method of bronze casting, found in "Techniques"

A video demonstration of painting with oils and acrylics, found in "Techniques"





An interactive activity that allows you to experiment with positive and negative space, found in "Elements and Principles of Art" We owe a debt of gratitude to our publisher, McGraw-Hill, and its Higher Education staff for their excellent support. We would like to thank the many artists, museums, galleries, and art collectors for providing us with permissions and materials. We are especially indebted to the efforts and insights of the many reviewers whose comments and criticisms have guided this recent revision. Foremost among these is Sally Packard of the University of North Texas, who suggested image and text revisions throughout the book. Other reviewers whose opinions helped shape this edition are:

Lynda E. Andrus

Kansas State University

Roger Baer

Iowa State University

Stephanie Bowman

Pittsburg State University

D. Duane Chapman

Glenville State College

Tom Coaker

University of Arizona

Pat Conant

Westfield State College

Jennifer Costa

Illinois Central College

James A. J. Davies II

Rockingham Community College

Herb Goodman

Louisiana State University

Christopher Johns

Louisiana State University

Janice Kmetz

University of Minnesota, Duluth

Mark Nisenholt

Lakehead University

Elaine Oehmich

Appalachian State University

Teresa Paschke

Iowa State University

Carolyn Quinn-Hensley

Mesa State College

Linda Vanderkolk

Purdue University

Michelle Wiebe Zederayko

George Brown College

Preface ix	Measure 74
Acknowledgments xiv	Type 74
	Direction 74
CHAPTER ONE	Location 76
Introduction 2	Character 77 THE EXPRESSIVE PROPERTIES OF LINE 78
THE VOCABULARY OF INTRODUCTORY TERMS 3	LINE AND THE OTHER ART ELEMENTS 79
THE NEED AND SEARCH FOR ART 5	Line and Shape 79
THE INGREDIENTS OF ART 10	Line and Value 81
The Three Basic Components of a Work of Art 11	Line and Texture 81
Subject 11	Line and Color 81
Form 11	THE SPATIAL CHARACTERISTICS OF LINE 84
Content 12	LINE AND REPRESENTATION 84
Savoring the Ingredients 15	
THE INGREDIENTS ASSEMBLED 18 Two-Dimensional Media and Techniques 20	CHAPTER FOUR
The Two-Dimensional Picture Plane 22	Shape 88
The Picture Frame 22	THE VOCABULARY OF SHAPE 90
Positive and Negative Areas 22	INTRODUCTION TO SHAPE 91
The Art Elements 24	THE DEFINITION OF SHAPE 91
OUARTER TWO	
CHAPTER TWO	THE USE OF SHAPES 95
Form 26	Shape Dimensions 96 The Illusions of Two-Dimensional Shapes 96
THE VOCABULARY OF FORM 28	The Illusions of Three-Dimensional Shapes 97
FORM AND VISUAL ORDERING 29	Shape and Principles of Design 100
The Seven Principles of Organization 31	Balance 101
Harmony (1) 31	Direction 101 Duration and Relative Dominance 103
Variety (2) 47	Harmony and Variety 104
Balance (3) 50 Proportion (4) 56	Shapes and the Space Concept 104
Dominance (5) 62	SHAPE AND CONTENT 104
Movement (6) 63	
Economy (7) 65	CHAPTER FIVE
Space: Result of Elements/Principles 66	
FORM UNITY: A SUMMARY 67	Value 110
	THE VOCABULARY OF VALUE 112
CHAPTER THREE	INTRODUCTION TO VALUE RELATIONSHIPS 112
Line 68	DESCRIPTIVE USES OF VALUE 113
	EXPRESSIVE USES OF VALUE 114
THE VOCABULARY OF LINE 70	Chiaroscuro 116
LINE: THE ELEMENTARY MEANS OF COMMUNICATION 70	Tenebrism 119
THE PHYSICAL CHARACTERISTICS OF LINE 74	Printmaking Techniques and Value 119 Decorative Value 121
	Decorative value 121

COMPOSITIONAL FUNCTIONS OF VALUE 121

Value Patterns 123

Open and Closed Compositions 125

CHAPTER SIX

Texture 126

THE VOCABULARY OF TEXTURE 128

INTRODUCTION TO TEXTURE 129

TEXTURE AND THE VISUAL ARTS 129

THE NATURE OF TEXTURE 131

TYPES OF TEXTURES 131

Actual Texture 131

Simulated Texture 133

Abstract Texture 134

Invented Texture 135

TEXTURE AND PATTERN 136

TEXTURE AND COMPOSITION 137

Relative Dominance and Movement 137

Psychological Factors 138

TEXTURE AND SPACE 138

TEXTURE AND ART MEDIA 139

CHAPTER SEVEN

Color 140

THE VOCABULARY OF COLOR 142

THE CHARACTERISTICS OF COLOR 143

Light: The Source of Color 143

Additive Color 144

Subtractive Color 145

Artist's Color Mixing 146

The Triadic Color System 147

Neutrals 148

The Physical Properties of Color 148

Hue 149

Value 149

Intensity 150

Developing Aesthetic Color Relationships 152

Complements and Split-Complements 152

Triads 153

Tetrads 154

Analogous and Monochromatic Colors 154

Warm and Cool Colors 154

Plastic Colors 155

Simultaneous Contrast 156

Color and Emotion 161

Psychological Application of Color 161

The Evolution of the Color Wheel 163

The Origins of Color Systems 163

The Discovery of Pigment Primaries 163

The First Triadic Color Wheel 163

American Educators 163

The Ostwald Color System 163

The Munsell Color System 163

The Subtractive Printing System

(Process Color System) 165

Color Photography 166

Color Computer Printing 167

The Discovery of Light Primaries 167

THE ROLE OF COLOR IN COMPOSITION 168

COLOR BALANCE 168

Color and Harmony 170

Color and Variety 171

CHAPTER EIGHT

Space 176

THE VOCABULARY OF SPACE 178

INTRODUCTION TO SPACE 179

SPATIAL PERCEPTION 179

MAJOR TYPES OF SPACE 179

Decorative Space 179

Plastic Space 180

Divisions of Plastic Space 180

SPATIAL INDICATORS 181

Sharp and Diminishing Detail 181

Size 182

Position 182

Overlapping 183

Transparency 183

Interpenetration 184

Fractional Representation 184

Converging Parallels 185

Linear Perspective 186

Major Systems of Linear Perspective 188

Perspective Concepts Applied 195

The Disadvantages of Linear Perspective 198

Other Projection Systems 200

Intuitive Space 200

THE SPATIAL PROPERTIES OF THE ELEMENTS 202 Movement 242 Installations 243 Line and Space 202 Shape and Space 204 Value and Space 204 **CHAPTER TEN** Texture and Space 206 Content and Style 246 Color and Space 206 INTRODUCTION TO CONTENT AND STYLE 248 RECENT CONCEPTS OF SPACE 207 The Search for a New Spatial Dimension 207 NINETEENTH-CENTURY ART 248 Plastic Images 209 Neoclassicism (c. 1750-1820) 248 Pictorial Representations of Movement in Time 210 Romanticism 250 Motion Pictures 213 Beginning of Photography 255 Video 214 Realism 255 The Computer and Art 215 Technological Developments in Photography 256 Impressionism 258 CHAPTER NINE Post-Impressionism 262 Photographic Trends 266 The Art of the EARLY-TWENTIETH-CENTURY ART 267 Third Dimension Expressionism 267 THE VOCABULARY OF THE THIRD DIMENSION 220 French Expressionism: The Fauves 267 German Expressionism 268 BASIC CONCEPTS OF THREE-DIMENSIONAL ART 221 Sculpture in the Early 1900s 270 Sculpture 222 Expressionism in the United States 272 Other Areas of Three-Dimensional Art 223 Expressionism in Mexico 272 Architecture 225 Color Photography and Other New Trends 273 Metalwork 225 Cubism 274 Glass Design 226 Futurism 276 Ceramics 227 Fiberwork 227 Abstract Art 278 Product Design 227 Abstract Art in Europe 278 Abstract Art in the United States 279 THE COMPONENTS OF THREE-DIMENSIONAL ART 228 Abstract Sculpture 280 Materials and Techniques 228 Abstract and Realist Photography 281 Subtraction 229 Fantastic Art 284 Manipulation 229 Dadaism 284 Addition 229 Individual Fantasists 286 Substitution 230 Surrealist Painting 287 The Elements of Three-Dimensional Form 230 Surrealist Sculpture 289 Shape 230 Surrealism and Photography 290 Value 232 LATE-TWENTIETH-CENTURY ART 291 Space 234 Texture 236 Abstract Expressionist Painting 291 Line 236 Abstract Expressionist Sculpture 298 Color 237 Abstract Expressionism and Photography 301 Time (The Fourth Dimension) 237 Kinetic Sculpture 302 Principles of Three-Dimensional Order 238 Pop Art and Assemblage 302 Harmony and Variety 238 Happenings and Performance or Action Art 306 Balance 240

Op Art 309

Minimalism 310

Proportion 240

Economy 241

Environmental Art and Installations 312
Postmodernism 316
New Realism (Photorealism) 317
Process and Conceptual Art 319
Neo-Expressionism 320
Feminist Art 322
Other Trends: Neo-Abstraction, Film Stills, Photography 325
Neo-Abstraction 325

Film Stills 326 Photography 327

NEW GLOBAL ART 330

Chronological Outline of Western Art 333 Glossary 338 Bibliography 343 Index 345

ART FUNDAMENTALS

Theory and Practice

TENTH EDITION

HER ONE

Introduction

THE VOCABULARY OF INTRODUCTORY TERMS

THE NEED AND SEARCH FOR ART

THE INGREDIENTS OF ART

The Three Basic Components of a Work of Art
Subject
Form
Content
Savoring the Ingredients

THE INGREDIENTS ASSEMBLED

Two-Dimensional Media and Techniques
The Two-Dimensional Picture Plane
The Picture Frame
Positive and Negative Areas
The Art Elements



Piet Mondrian, *The Grey Tree*, 1911. Oil on canvas, 30½ × 42½ in. (79.7 × 109.1 cm). © 2005 Mondrian/Hotzman Trust c/o HCR International Warrenton Virginia.