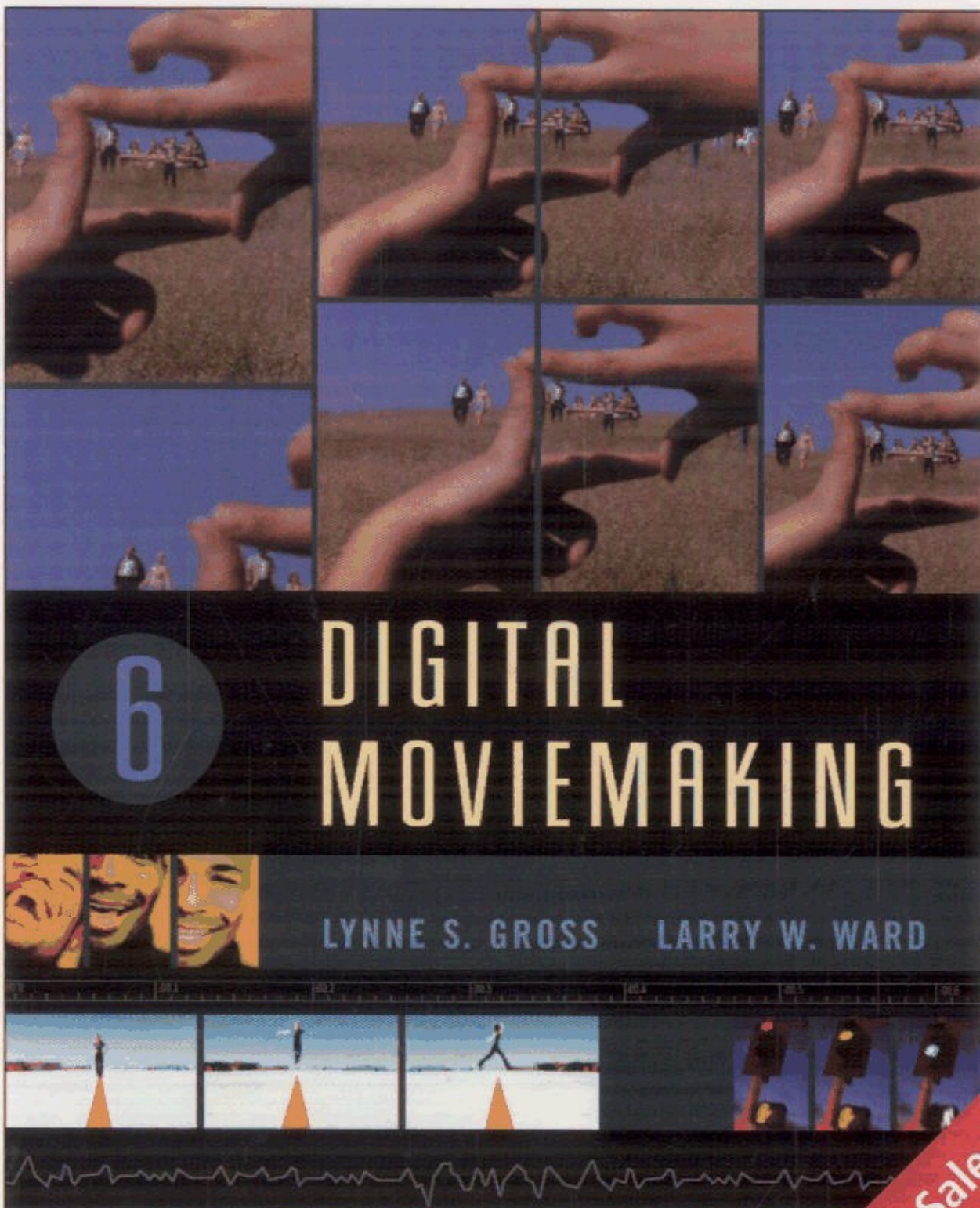


INTERNATIONAL STUDENT EDITION



Not for Sale in the  
United States

# Contents

Preface ix  
About the Authors xiii

## chapter one

### Overview of Moviemaking 2

#### Cast and Crew 2

Producing 2  
Writing 3  
Directing 6  
Acting 7  
Production Design 8  
Picture Creation 9  
Sound 10  
Editing 11  
Special and Visual Effects 12  
Other 13

#### The Production Process 13

The Traditional Film Production Model 13  
The Changing Nature of the Production Process 16

#### Notes 16

## chapter two

### Planning the Movie 18

#### Finding and Financing the Right

Script 18

#### Breaking Down the Script 19

#### Scheduling 21

Shooting Schedules 22  
Stripboards 23  
Production Schedules 24  
Call Sheets 25  
Other 27

#### Budgeting 27

Budgeting Procedures 27  
Budgeting a Student Production 29

#### Casting 33

#### Hiring Behind-the-Scenes Personnel 36

#### Finding Locations 37

#### Designing and Constructing Sets 38

#### Designing Costumes, Wardrobe, Makeup, and Hairstyling 42

#### Obtaining Props 42

#### Developing Effects 42

#### Planning Sound 43

#### Acquiring and Checking Equipment 43

#### Obtaining Rights 43

#### Arranging for Travel and Food 44

#### Buying Insurance 46

#### Notes 46

## chapter three

### Cameras 48

#### Aspect Ratio 48

#### Formats 49

Film Formats 49

Analog Video Formats 50

Digital Video Formats 51

High-Definition Video Formats 52

#### Technical Considerations 53

Resolution 54

Compression 54

Color Sampling 54

Bit Depth 55

#### Recording Media 55

Film Stock 55

Video Recording Media 56

#### Camera Construction 57

Film Cameras 57

Video Cameras 58

#### Time Code 58

#### Viewers 59

#### Basic Camera Features 60

Power 60

Recording Controls 60

Menus 61

Color Rendition 61

## contents

Gain	61
Shutter Speed	61
Other Features	62
Lenses	62
Focal Length	62
Focus	64
Aperture	64
Depth of Field	65
Camera Supports	66
Handheld Cameras	66
Tripods	66
Dollies and Cranes	67
Care of Equipment	68
Notes	68
chapter four	
<b>Approaches to Image Capturing</b>	<b>70</b>
Shot Determination	70
Basic Shots	70
Subjective Shots	71
Lens Selection	71
Focal Length Characteristics	72
Depth of Field	73
Camera Angle	74
Composing within the Static	
Frame	75
Manipulating the Mise-en-Scène	75
Balance	76
Creating Depth	77
On-Screen/Off-Screen Space	77
The Edge of the Frame	78
The Moving Frame	79
Camera Movements	79
Zooming	80
Time	80
Shooting Multi-Camera	80
Color and Tonality	82
Black and White or Color	82
Color Considerations	82
Shooting to Edit	83
Methods of Shooting Scenes	83
Shot Duration	84
Shooting for Continuity	84
Shooting for Visual Effects	86
Now That You Know the	
Rules . . .	87
Notes	87

## chapter five

### Lighting 88

Measuring the Light	88
Incident Meters	88
Reflected Light Meters	88
Spot Meters	89
Getting Correct Exposure	89
Problems with Automatic Metering Systems	89
Footcandles, F-Stops, and EI	90
Contrast Range	90
Using a Monitor to Help Evaluate Exposure	91
Using a Waveform Monitor to Evaluate Exposure	91
The Color of Light	92
The Electromagnetic Spectrum	92
The Kelvin Scale	93
Tungsten and Daylight-Balanced Light	93
Small-Scale Color Corrections	94
The Vectorscope	94
Filters for Light Intensity and Contrast	95
Mounting Filters	96
Lighting Instruments	96
Lamps	96
Classification of Lights	98
Mounting Equipment	100
Controlling Light	101
Electric Power Requirements	104
Lighting Safety	105
Notes	107

## chapter six

### Approaches to Lighting 108

Lighting Styles	108
Basic Three-Point Lighting	108
Comparison of Lighting for Film, SDTV, and HDTV	110
Preparing to Light	111
Outdoor Lighting	111
Contrast Reduction	112
Maintaining Continuity in Changing Light	113
Shooting at Night	113
Adapting to Weather Conditions	114
Indoor Lighting	114
Shooting in Available Light and Low Light	115
Bounce Lighting	115
Mixed Lighting	116
Lighting for Movement	117
Lighting for Multiple Cameras	120

Lighting for Visual Effects 120  
 Variations in Lighting 121  
 Notes 123

#### chapter seven

### Microphones and Recorders 124

The Nature of Sound 124  
     Pitch and Frequency 124  
     Loudness and Amplitude 125  
     Timbre 125  
     Duration 126  
     Velocity 126  
 Microphones: Characteristics and Placement Techniques 127  
     Directionality 127  
     Construction 129  
     Positioning 129  
 Cables and Connectors 131  
     Balanced and Unbalanced Cables 131  
     Connector Types 132  
 Recorders 133  
     Double System and Single System Sound Recording 133  
     Types of Recorders 134  
     Recording Methods 135  
     Features of Sound Recorders 135  
 Audio Mixers 136  
 Care of Audio Equipment 137  
 Notes 137

#### chapter eight

### Approaches to Sound Recording 138

Elements of Microphone Pickup 138  
     Presence 138  
     Perspective 139  
     Balance 139  
     Continuity 139  
 Eliminating Unwanted Noises 140  
 Miking Dialogue 141  
     Selecting the Mic 141  
     Setting Up the Mics 142  
     Special Dialogue Situations 142  
 Miking Automatic Dialogue Replacement 143  
 Miking Voice-Overs 144  
 Miking Sound Effects 144

Miking Foley 145  
 Miking Ambient Sounds 146  
 Miking Music 147  
 Recording Techniques 148  
 Notes 149

#### chapter nine

### Directing 150

The Roles of the Director 150  
 Working with the Script 151  
 Working with the Producer and the Writer 153  
 Working with a Crew 155  
     Hiring Crew 155  
     Handling Crew 156  
 Auditioning Actors 158  
     Preliminaries 158  
     The Process 158  
 Rehearsing 159  
     Early Rehearsing 159  
     Ways to Improve Rehearsals 160  
 Shooting 161  
     A Typical Pattern 161  
     Dailies 163  
     Other Considerations 163  
 Editing 166  
 Notes 168

#### chapter ten

### Editing 170

Making Material Computer Ready 170  
     Film 171  
     Analog Video 173  
     Digital Video 173  
 Setting Up the Computer 173  
 Logging 174  
 Capturing 175  
 Cutting Clips Together 176  
     Windows 177  
     The Assembly Process 177  
     Fine Tuning 179  
     Managing Audio 179  
     Adding Graphics 180  
     Creating Visual Effects 181  
     Adding Transitions 181  
     Useful Tools 183  
 Outputting the Project 184

## contents

Building a DVD 185

Notes 186

### chapter eleven

## Approaches to Editing 188

Editing Styles 188

The Classical Hollywood Pattern 188

Variations 190

Editing Elements 191

Continuity 192

Shot Selection 194

Shot Relationships 198

Screen Direction 199

Cutting Points 200

Rhythm 200

Time and Space 201

Transitions 203

Notes 204

### chapter twelve

## Enhanced Sound and Picture 206

Music 206

Sound Effects and Ambient Sounds 209

Foley 210

ADR and VO 213

Building Sound 214

Sweetening 214

Positioning 215

Mixing 216

Graphics 218

Visual Effects 219

Types of Visual Effects 220

The Process for Creating Computerized

Visual Effects 221

Filter Effects 223

Color Correction 223

Compositing 224

The Digital Intermediate 224

Notes 225

### chapter thirteen

## Approaches to Enhanced Sound and Picture 226

Functions of Sound 226

Supplying Information 226

Enhancing Reality and Fantasy 229

Establishing Time, Place, and

Character 230

Creating Mood and Emotion 231

Directing Attention 233

Functions of Picture 234

Supplying Information 234

Enhancing Reality and Fantasy 234

Establishing Time, Place, and

Character 236

Creating Mood and Emotion 236

Directing Attention 237

Relating Sound and Picture to Each

Other 238

Notes 239

### chapter fourteen

## The Final Stages of Moviemaking 240

Transferring Back to Film 240

Negative Cutting 240

Using a Digital Intermediate 241

Laboratory Work 241

Film Projection 242

Digital Cinema 243

Video Distribution 245

Netcasting 245

Festivals 246

Other Possibilities 246

Notes 247

Glossary 248

Index 263