

Table of Contents

Preface	1	3 Composition in Photography	59
1 Introduction	3	3.1 Image Considerations	60
2 Cameras and Accessories	7	3.2 Composition Diagrams	62
2.1 Digital Cameras	8	3.3 Designing with Camera Techniques	72
2.2 Camera Technology	10	3.4 A Stockpile of Image Elements	72
2.2.1 Image Sensor	10	4 Types of Photography	75
2.2.2 Camera Optics – Lenses	13	4.1 Basic Photographic Techniques	76
2.2.3 Viewfinders	19	4.1.1 Preparation	76
2.2.4 Camera Program Modes	20	4.1.2 Correct Exposure	78
2.2.5 Storage Media for Digital Cameras	22	4.1.3 From Analog to Digital Photography	80
2.3 Accessories	26	4.1.4 The Histogram – An Important Aid	82
2.3.1 Camera Bag	27	4.2 Portraits and Group Photographs	84
2.3.2 Rechargeable Batteries	27	4.2.1 Portraits	84
2.3.3 Chargers	28	4.2.2 Images of Children	86
2.3.4 Tripods	29	4.2.3 Group Photos	87
2.3.5 Lens Hoods, Filters, and Adapters	30	4.3 Animal Photography	89
2.3.6 Auxiliary Lenses	32	4.4 Landscape Photography	91
2.3.7 Flash Units	32	4.5 Sports Photography	93
2.3.8 Additional Useful Tools	34	4.6 Architectural Photography	94
2.4 Choosing Your Camera	35	4.7 Light, Shadows, and Reflections	97
2.5 Computer Equipment	37	4.8 Night Photography	99
2.5.1 Road from the Camera to the Computer	37	4.9 Flash Photography	100
2.5.2 Computer Requirements	40	4.10 Closeup or Macro Photography	103
2.6 Image Formats	40	4.11 Panoramas	105
2.6.4 Other Image Formats	43	4.12 Tabletop Photography	110
2.7 Pixels, Points, and Lines	46	4.13 Studio Backgrounds	113
2.8 Color Temperature	50	4.14 Reproductions	114
2.9 Depth of Field	53	4.15 General Photo Tips	116
2.10 Aperture and Shutter Speed	55	4.16 Applications	119
		4.16.1 Documentary Photography	119

4.16.2	Evidence for Insurance Companies	120	5.13.1	Copy and Cover Up	186
4.16.3	Collections	121	5.13.2	Clone Stamp and Pattern Stamp	187
4.16.4	Images for Internet Sales	121	5.13.3	Brush and Pen	189
4.16.5	Construction Documentation	122	5.13.4	Dodge, Burn, and More	189
4.16.6	The Mobile Copy Machine	122	5.13.5	Blur Filter	191
4.16.7	Ideas for Presents	123	5.13.6	Remove Image Noise	193
4.17	Privacy and Publicity Rights	124	5.13.7	Noise Filter (Remove Dust and Scratches)	195
5	Image Editing	127	5.13.8	Distort, Deskew, and Transform	196
5.1	Image-Editing Software	128	5.13.9	Removing Red Eyes	200
5.2	Image-Editing Procedure	130	5.14	Changing Image Size and Resolution	201
5.3	Basic Functions	133	5.15	Vector Graphics – Scalable Forms	203
5.3.1	Preparation	133	5.16	Extracting Image Areas	204
5.3.2	Browse, Rate, and Sort	135	5.17	Paths	205
5.3.3	Image-Editing Screen	138	5.18	Image Collage	208
5.3.4	Tools for Image Editing	140	5.19	Filters and Filter Experiments	210
5.3.5	Informational Windows and Palettes	146	5.20	More on Layers	212
5.3.6	Selecting and Masking	147	5.20.1	Muted Layer Effect	212
5.3.7	Tool Cursors	151	5.20.2	Composite Layers	213
5.3.8	Layers	152	5.20.3	Layer Masks	213
5.4	Color Modes and Color Management	155	5.21	Saving in the Correct Format	214
5.4.1	Color Depth	155	5.21.1	Saving Work Files	214
5.4.2	Color Modes	155	5.21.2	Saving Image Files for Archiving	214
5.4.3	Color Reproduction, Color Management	158	5.21.3	File Formats for the Web	215
5.4.4	Color Spaces	160	5.21.4	File Formats for Printing Photographs	216
5.4.5	Color Mode Conversions	163	5.21.5	File Formats for Book and Magazine Printing	217
5.4.6	Color Channels	165	5.21.6	File Formats for Other Purposes	217
5.5	The Actual Photo Editing Workflow	166	5.22	Undo Functions and Automated Processes	218
5.6	Straightening Images	167	5.22.1	Undo Work History	218
5.7	Tonal Range Correction (Levels)	168	5.22.2	Batch Processing and Macros	218
5.8	Color Corrections	169	5.23	Profiling Devices	220
5.8.1	Removing Color Casts	170	5.23.1	Monitor Calibration	222
5.8.2	Hue, Saturation, Lightness	172	5.24	Automatic Corrections	229
5.8.3	From Color to Black and White	173	5.25	Thoughts on Image Manipulation	230
5.9	Curves	176	5.26	Troubleshooting	231
5.10	Shadow/Highlight	178			
5.11	Sharpen and Unsharp Mask	181			
5.12	Text/Type Tool	185			
5.13	Retouching	186			

6	RAW Conversion	235	8.4.1	Selection of a Scanner	301
6.1	RAW Format	236	8.4.2	Correct Scan Resolution	304
6.2	RAW Converter Modules	238	8.4.3	Preparation for Scanning	305
6.3	RAW Conversion	239	8.4.4	Scanning	306
6.4	Using Adobe Camera Raw (ACR)	240	8.5	Scanning Slides and Negatives	309
6.4.1	Main Conversion Settings on the Basic Tab	244	8.5.1	From Film to CD	309
6.4.2	Settings on the Detail Tab	250	8.5.2	Capturing Slides Yourself	310
6.5	Actual RAW Conversion	253	8.6	Image Management	311
6.6	Nondestructive Editing	254	8.6.1	Formula for Filenames	312
6.6	Auto Conversion or Not?	255	8.6.2	Data Backup	313
			8.6.3	Backup Software	314
7	Printing and Presenting of Digital Photographs	257	8.7	Browsers, Archives, Image Databases	315
7.1	Photo Printers	259	8.7.1	Requirements of Image Management	316
7.1.1	Photographic Print Services for the Consumer Market	260	8.7.2	Metadata as Key for Image Management	317
7.1.2	High-Quality Photographic Print Services	264	8.7.3	Downloader	322
7.1.3	Photo Books	265	8.7.4	Extended Features	322
7.2	Printing with Ink-Jet Printers	266	8.7.5	Image Management Programs	323
7.2.1	Choosing a Good Ink-Jet Printer	266	8.8	All-in-One Programs	326
7.2.2	Print Strategy	269	8.8.1	Apple Aperture	327
7.2.3	Printer Profile	270	8.8.2	Adobe Lightroom	328
7.2.4	Papers	271	A	Tables	331
7.2.5	Print Preparation	273	A.1	Where Are ICC Profiles Located?	331
7.2.6	Actual Printing	274	A.2	Image Formats, Resolutions, and Sizes	332
7.3	Print Applications	280	A.3	Color Temperature and Color Spaces	335
7.3.1	Qimage	280	B	Glossary	337
7.4	Electronic Presentation	284	C	Literature and Internet Sources	343
7.4.1	Slideshows on the Computer Screen	285	C.1	Books	343
7.4.2	Slideshows in Video CD Formats	286	C.2	Organizations and Institutes	343
7.4.3	Internet Presentations – Photo Galleries	287	C.3	Information on the Internet	343
7.4.4	Emailing Images	289	C.4	Tools on the Internet	344
7.5	Other Forms of Presentation	291	C.5	Examples of Internet Photo Print Services	347
8	Image Capture and Management	295	Index	349	
8.1	From the Camera to the Visible Image	296			
8.2	The Toolkit	297			
8.3	From the Camera to the Computer	299			
8.4	Scanners and Scanning	301			