Index

1.0 gamma script, *see* False profiles
1.4 gamma script, *see* False profiles
Abbiati, Giuliana, 146, 429
Actions, defined, 7, 116–117, 120
Adams, Ansel, 408, 428–429
Adobe RGB, 296, 324
Adjustment layers, *see* Layers and layer masks
Alpha channels, *see also* Layers and layer masks
  and Apply Image command, 97
  in Channels palette, 198
  defined, 197
  in Darken Sky actions, 199
  in H-K action, 339
Apply Image command, 73–74, 80, 97, 122
Auto Color command, 424
Auto Contrast command, 165
Auto Tone command, 108, 139, 165, 168, 171, 185
Arches National Park, 194–195, 210
Bach, Johann Sebastian, 339, 352
Background, blurring of, 333, 363
Beethoven, Ludwig van, 335, 347
Berlusconi, Silvio, 291
Bernardi, Alessandro, 132, 176, 219, 291, 324
Bigger Hammer action, *243–284*
  and Camera Raw, 399
  and clouds, 320
  darkening layer of, 334
  and faces, 329–334
  false profile/multiply compared, 329–334
  options for in PPW panel, 320
  Soft Light mode in, 263, 266
Black channel:
  characteristics of, 101–102, 356
  and ghosting of background, 357–358
  and H-K action, 104, 339, 356–366
  rules for construction of, 101–102, 356
  and shadow detail, 124, 366
Black point, *see* Shadow (graphic arts)
Blend If :
  choice of layer for, 132
  and LAB, 208
  limitations of, 134, 189
  splitting slider in, 132, 302
  to protect skies, 131–132, 206–210, 302
Blending channels:
  Darken/Lighten modes in, 90, 115, 117, 136, 235, 345
  in faces, 235
  green as target, dangers of, 85
  and neutrals, 206
  red as source, 115
  red as target, 90
  repetitions of, 97
  RGB composite as source, 97, 290, 295, 309, 320
  RGB composite as target, 92, 94, 319
Blending Options command, *see* Blend If
Blue channel:
  as darkest of three, 70, 106
  and hazy backgrounds, 140–141
  least important for contrast, 76
  and yellow casts, 52
  and yellow objects, 85, 115, 363
Bokeh, defined, 361
Bridge, Adobe, 384, 390
Brown, Russ, 46, 171, 353
Browns, characteristics of, 57, 83, 114–115, 206, 287, 311
Brunelleschi, Filippo, 285
Buonarroti, Michelangelo, 285
Cameras:
  vendor goals for, 165–66, 372
  and JPEG algorithms, 166, 383–385
  and multiple light sources, 304
  and sun-shade differentiation, 287
Camera Raw, Adobe:
  Blacks slider in, 399–400
  Brightness slider in, 400–403
  changes in, 372
  Clarity slider in, 398, 401
  Contrast slider in, 387, 400
  curves in, 385, 401, 404

Camera Raw, Adobe *(continued):*
Exposure slider in, 398
Fill Light slider in, 394, 399–400
Highlights slider in, 387, 390, 398–399
HSL/Grayscale panel in, 402
master curve approach in, 400–401
noise in, 402–405
presets, saving, 389–390
recommended presets for, 385
Recovery slider in, 387, 390, 394, 398
Saturation slider in, 401, 403–404
Shadows slider in, 399–400
sharpening in, 401–402
Split Toning panel in, 402
Tone Curve panel in, 389
Vibrance slider in, 401, 404
White Balance sliders, 238, 396–397
Whites slider, 398–399
Capitol Reef National Park, 154–160
Casts:
correcting with opponent color, 68, 238
attacking neutrals to prevent, 52
caused by harsh lighting, 49
cold, red channel to reduce, 42–43
conflicting, 234
cool, when unacceptable, 35, 42–43, 58, 234
curves as first resort for, 68
green always undesirable, 28, 88
pink, and green channel, 156
in shadows, 65
quartertones as indication of, 238
warm often preferable, 40, 88
yellow, and blue channel, 52
Chagnon, Bevi, 25, 75, 412
Channel Mixer command, 92
Channel blending, *see* Blending channels
Channels palette, 109
Chromatic adaptation, 65, 87–88, 232–233, 341; *see also* Human visual system
Clouds:
and Bigger Hammer, 320
color change with darkness of, 40
color settings in, 319
and Darken Sky actions, 320
as highlights, 9, 210, 287, 319
CMYK:
blue weakness in, 131, 133
black channel in, 101, 124, 356
how to convert into, 356–357, 384
gamut limitations in, 14, 124, 130, 133
shadow detail isolation in, 124, 366
Color Boost action, *111–144*
and cool casts, 35
curve angles in, 118
inverted mask with, 136
L channel as layer mask in, 122–123, 129
layer mask can be unusual, 120–121, 127
one-minute workflow with, 17, 121, 123
technical description of, 116–117
Color mode:
defined, 10–11, 38
and highlight protection, 53–54
and Luminosity mode distinguished, 315
with Luminosity mode layers, 317, 322
makes RGB behave like LAB, 42
Color sampler tool, 41, 46, 114
ColorMatch RGB, 324
Configurator, Adobe, 7, 120
Culture, influence of on preferences, 40
Curves:
adjustment dialogs for, 43, 73
as first resort, 68
initial color, correction of with, *35–70,* 234–5
interface issues with, 43
LAB, difficult to control, 42
master, 374
multiple, to adjust color, 319
multiple, to adjust contrast, 199
orientation of, 42–43, 119
S-shaped, 77, 90, 129, 235
S-shaped inverted, 255
and selections, 205
steepness, impact of, 77, 128–129
U-shaped, 129–130, 139, 396
to masks or layer masks, 121, 127, 129, 134–135, 396
Darken mode, 81–82, 214–215
Darker Color mode, defined, 81
Darken Sky actions, *193–215*; *see also* Skies
deleting alpha channel, 202

Darken Sky actions *(continued):*
isolating other blues in, 201–204
how masks are derived, 213–215
SC and B differentiated, 198, 213–215, 320
technical description of, 320
Darker Color mode, 81, 322
Darwin, Charles, 287, 424
Difference mode, 213–214
Domitian, 193
Donatello, 285
Engels, Friedrich, 232
Equalize command, 165–173
Esteves, Adriano, 5, 176–177, 353
Everglades National Park, 93–95
Exposure command, 239, 305–306, 309, 324, 366
Faces, *216–242; see also* Fleshtones
and Bigger Hammer action, 329
detail dangerous in, 92, 150, 219
exercise, influence on, 52–53
green channel role in, 92, 175, 223, 235, 316
and H-K action, 235, 237, 338
and Hiraloam Darken, 410, 417, 422, 427–428
LAB values in, 51–52, 233–234, 315
and makeup, 58, 315
male and female, 174, 326
and MMM Color layer, 317
and MMM Luminosity layer, 150, 174, 237, 317
quartertone moves in, 316
refusal to accept redness in, 150, 217, 317
relation of color to detail in, 234
two-version approach to, 225, 234–242
False CMYK action, 356–357, 364–366
False profiles, *305–334,* 366:
and 1.0 gamma script, 306, 324–325
and 1.4 gamma script, 306, 309, 324
and Bigger Hammer compared, 328–334
choice of layer for mask with, 309
dangers of, 324
defined, 324
and Exposure compared, 305–306, 324
Fariña, Richard, 43
Ferdinand and Isabella, 303, 306, 310
Fleshtones:
impact of ethnicity on, 52–53
recommended LAB values for, 51–52, 229, 315
and makeup, 315
role of green channel in, 92, 175, 223, 235, 316
Florence, Italy, 285–286
Gamma, *see* Adobe RGB; Exposure command; False profiles; sRGB
Gaussian Blur filter, 290, 296–302
Ghiberti, Lorenzo, 285
Grand Canyon National Park, 71–71, 87–91
Grass, *see* greenery
Gray, James, 5, 16, 36, 232–233, 302, 323, 373
Grays, gray card, *see* Neutrals
Green channel:
danger of blending into, 85
in faces, 92, 175, 223, 235, 316
most important channel for detail, 76, 100, 237
multiple curves in, 106–107. 199
in natural greenery, 320
similarity to CMYK magenta, 42, 44
Greenery, natural:
channel structure of, 293
evergreens, values for, 57
green channel role in, 320
LAB values in, 45, 51, 154, 170, 287, 320
H-K action, *335–368*
Ersatz Black characteristics, 339–356
and faces, 235, 237, 338
Hair:
black, and simultaneous contrast, 242
LAB values for, 58, 234
and sharpening, 419
Haloing:
and Bigger Hammer, 274–284
and Blend If, 302
blur filters, choice of to avoid 296–302
and Lighten mode, 302
painting to avoid, 301–302
requirements for obvious, 276, 301–302
in skies, 194–296, 301
HDR, 189
Helmholtz-Kohlrausch Effect, 104, 242, 341, 358 *see also* H-K action
Helmholtz, Hermann von, 104, 341, 343–344
Highlight:
defined, 6, 49, 179
identification of, 46, 49, 51, 114, 123–124, 140, 199, 234, 316, 326

Highlight *(continued):*
neutrality considerations in, 316
Bigger Hammer action to enhance, *245–284*
when to establish, 54, 115, 378
threshold layer to locate, 51, 114, 234, 347
recommended values in LAB, 125
Hiraloam, *see* Sharpening and Sharpen action
Histograms, 165–166
Hue/Saturation command, 68, 136, 154, 205, 398, 402
Human visual system, *see also* Chromatic adaptation; Simultaneous contrast:
age, effect on, 235
cool casts rejected by, 46
compared to camera, 11, 87–88, 104
and fog, 132
and harsh lighting, 141
and multiple lighting conditions, 65
in scenes both light and dark, 11, 287
last thing seen can warp judgment 7, 14, 22, 44–45, 113, 274
quartertone sensitivity in, 128, 360–361
and survival, 232–233, 360–361, 423–424
Hunt, R.W.G., 176, 178, 339
Info palette, 39–41, 52
Khrushchev, Nikita Sergeyevich, 307–310
Kohlrausch, Rudolf, 341
LAB:
50% gray fill in, 214–215
A channel, characteristics of, 39, 42, 88, 117–118, 138–139, 152, 170, 351–352
AB channels as mask sources, 215, 255
angles of curves in, 118
and Blend If, 208
cast detection in, 39, 41, 319
and Camera Raw White Balance sliders, 396
and Color Boost action, 38
and Color/Luminosity modes, 98–100
and simultaneous contrast, 65
B channel, characteristics of, 39, 117–118, 131, 134, 151, 139, 170, 208, 255
Darken mode to isolate colors in, 214–215
described, 39, 83, 117, 139
faces, recommended values for, 51
gamut problems with, 130, 133
greenery, recommended values in, 45, 51, 287
imaginary colors in, 100, 124, 133
in Info palette, 40
inverted S curve to AB, 255
L channel, characteristics of, 97, 102, 118, 124, 233
Luminosity mode in, 90–100
neutrality defined in, 40, 117–118
subtle adjustments difficult in, 38, 42
skies, recommended values for, 39–40, 51
and Shadows/Highlights command, 186–187
and sharpening, 409, 429
Layers and layer masks:
A or B of LAB as, 15, 133–135, 138, 235
activity of, how to verify, 290
alternate sources for, 315
artificial black channel as, 295, 366
when to blur, 258, 290, 293, 322–323. 363
changing opacity of, 128–129
choice of channels for, 292, 301, 309
choice of source layer for, 292, 300–301
and Color Boost action, 120–121
and colorspace conversions, 201
curves to, 121, 127, 129, 134–135, 396
defined, 120
filling with black, 201
inverted L channel as, 136
and multiplication, 306
quartertone retention with, 290
retaining copy of, 202
RGB composite as, 189, 238, 290, 320, 325, 394
unusual styles of, 127, 129, 139
Lighten mode, 70, 356
Lightroom, Adobe, 391–392, 402
Luminosity mode:
and Color mode distinguished, 10–11, 315
with Color mode layers, 317, 322
defined, 10–11, 73, 76, 86
LAB-RGB differences in, 98–100
recomputation of highlight in, 106–107
Man from Mars, *see* MMM action
Masks palette, *see* Properties panel
Maslowski, Clarence, 219, 427–428
Median filter, 298–301
Mergenthaler, Ottmar, 369
Midtone, defined, 6, 179

MMM action *145–178:*
early versions of, 12, 31, 150–152, 363
and faces, 160–163, 174, 219, 237, 241
neutral protection in, 152, 159–161
saturation layer in, 176–178
when to avoid, 212, 219
which photos benefit from, 150, 161
MMM + Color Boost Action, *see* Color Boost action; MMM action
Modern Man from Mars, *see* MMM action
Motion Blur filter, 298–301
Multiple versions approach, 9, 17, 234–242, 355, 398, 415–416
Multiplication:
and colorspace, 302
curves added to, 330, 333
more than one to same file, 292–293, 298–299
Multiply mode, 306, 309
Neutrals:
and channel blending, 206
defined, 28
evaluation of, 36, 46, 52, 54–55, 58
and eyedropper, 38
and gray card, 60–65
as key to focus, 381–382
LAB formula for, 40
and MMM action, 152
and predators, 232
RGB formula for, 28, 46, 75, 374
Olivotto, Marco, 5, 46, 132, 235, 324, 355
Overlay mode, 245, 247–250, *258–284*
Pavel, John, 25, 153, 205, 306
Pedro the Cruel, 303–304, 310
Photoshop LAB Color, 118
Pizarro González, Francisco, 185–190, 323
Portraits, *see* Faces, Fleshtones
PPW panel:
and Bigger Hammer options, 320
and false profile scripts, 306
and image history, 164
Professional Photoshop, 174–175, 363–364
Properties panel, 119, 121, 295
ProPhoto RGB, 324
Quartertone:
defined, 6, 179
evolutionary factors in evaluating, 232–233, 361
and faces, 316, 417
human sensitivity to, 65, 128, 360
and JPEG algorithms, 384
layer mask to hold depth of, 290
and Sharpen action, 418
Radius, *see* Bigger Hammer action; Dust & Scratches filter; Gaussian Blur filter; Median filter; Motion Blur filter; Shadows/Highlights command; Sharpen action; Surface Blur filter; Unsharp Mask filter
Range, defined, 6
Raw files:
advantages/disadvantages of, 372
batch processing in, 387–391, 394–396
and Bridge, 384
converters can preempt later improvements, 375
converters changing rapidly, 372
converters, limitations of, 377–378
defined, 372
definition of *original* in, 373
and highlight recovery, 385–387
white balance information in, 373
RawTherapee, 392
Red channel:
in browns, 114–115
and cool cast reduction, 42–43
cyan channel, relation to, 44, 101, 356
faces normally worst in, 223
and hazy backgrounds, 140–141, 345
in red objects, 92, 95
in skies, 114–115
Reds, characteristics of:
LAB formula for, 170
often lack detail, 95–100
rosiness and anger, 58
Reflections, treatment of, 172–174, 286
RGB:
in Color mode is like LAB, 42
difficulty of evaluating color in, 41
grayscale weights of channels in, 76, 263
Luminosity mode in, 98–100
neutrals, formula for, 28, 46, 75
numbering system in, 46
RPP, 392
Rus, Jacob, 55, 110
S curve, *see* Curves

Sand, LAB values for, 57, 311
Schumann, Robert, 339, 341
Scum dot, defined, 84
Selective Color command, 213–215, 402
Shadow (graphic arts):
  CMYK detail advantage in, 124
  defined, 6, 49, 179
  enhancement with Bigger Hammer, 263–266
  identification of, 46
  LAB more subtle than RGB in, 184–187
  recommended values for, 124
Shadow (literal)
  darkening of, 104
  blue cast in, 41, 46, 65
Shadows/Highlights command, *179–192:*
  Amount field in, 184, 186
  Clip setting in, 184–185, 284
  Color Correction field in, 185
  emulation of with other methods, 189–191
  forgoing experimentation with, 214
  in LAB, 186–187
  optimal time to use, 184
  Radius field in, 190
  recommended settings for, 180
  Tonal Width setting in, 184, 186
  when use is debatable, 287
Sharpening and Sharpen action, *407–429:*
  action and USM compared, 412–413, 419
  blurring, relation to, 274–275
  conventional, defined, 418
  evaluation on screen of, 428
  of faces, 410, 412–415, 417, 422, 424, 427–428
  by halo map, 277, 413, 415–419
  Hiraloam Color, 418, 423
  Hiraloam Darken, 410, 422–423, 426–428
  Hiraloam Lighten, 423
  hiraloam, misuse of 24–25
  light halos more offensive in, 408–409, 419
  masks provided by action, 419–423
  noise reduction in, 419
  premature, disadvantages of, 401–402, 419, 422
  and resolution, 418
  subjective nature of, 408, 428
Shostakovich, Dmitri Dmitreyevich, 339
Simultaneous contrast, 65, 88, 142, 146, 232–233, 242, 341; *see also* Human visual system
Skies, *193–215, see also* Darken Sky actions:
  bluest object in image, 198, 302
  Blend If to isolate, 131–132, 206–210
  color relation to rest of image, 205
  gamut problems in, 130
  and haloing, 301–302
  likened to skin, 219
  LAB values for, 39–40, 51, 154
  noise removal in, 204, 208, 210
  red channel role in, 114–115
  replacement of, 196–198, 210
  yellow, influence upon, 319
Skintones, *see* Faces, Fleshtones
Skin Desaturation action, 220, 223–225, 228, 328
Soft Light mode, 263–266
sRGB, 131, 296, 324
Strauss, Levi, 25
Surface Blur filter, 135, 208, 297–301
Three-quartertone, defined, 6, 179, 184
Threshold command, 51
Tomatoes, characteristics of, 176–177, 339–343
Tonal range, defined, 6
Trees, *see* greenery
Unsharp masking (USM), *see* Sharpening and Sharpen action
Vegetation, *see* Greenery
Vibrance command, 154
Villa-Lobos, Heitor, 339
Weber, Gottfried, 347
White point, *see* Highlight
Yellows, characteristics of:
  and blue channel, 85, 115, 363
  and human aging, 235
  LAB formula for, 170
  need to avoid greenness in, 58
Yellowstone National Park, 132–137
Yocum, Frederick, 14, 46, 190, 220, 357–358
Zapf, Hermann, 195