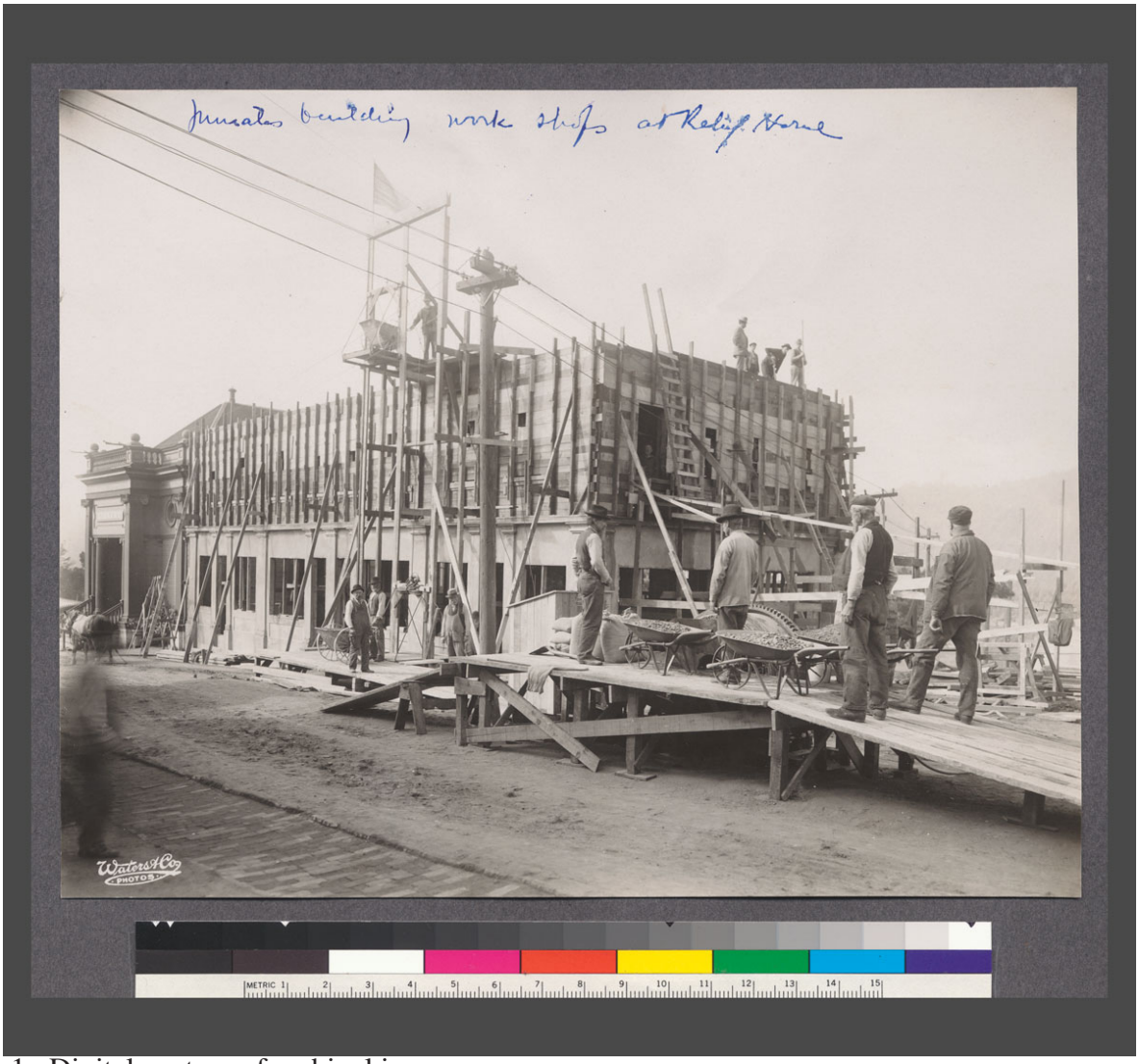
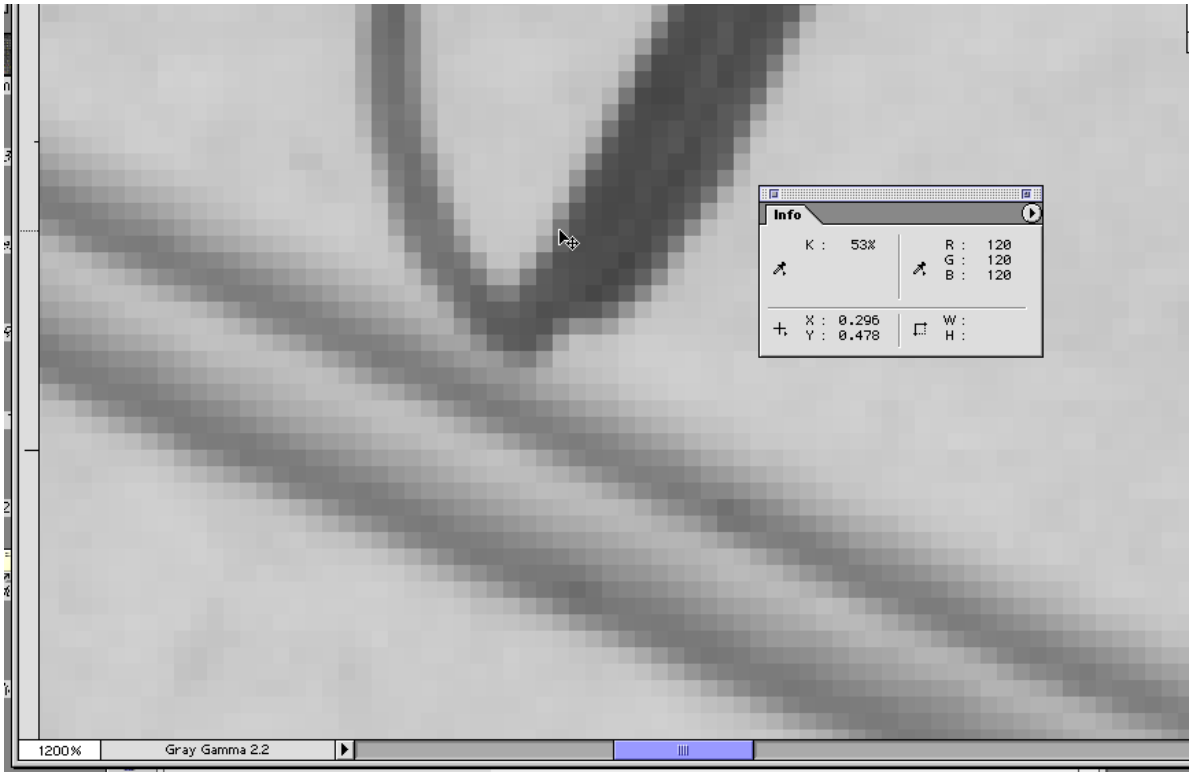
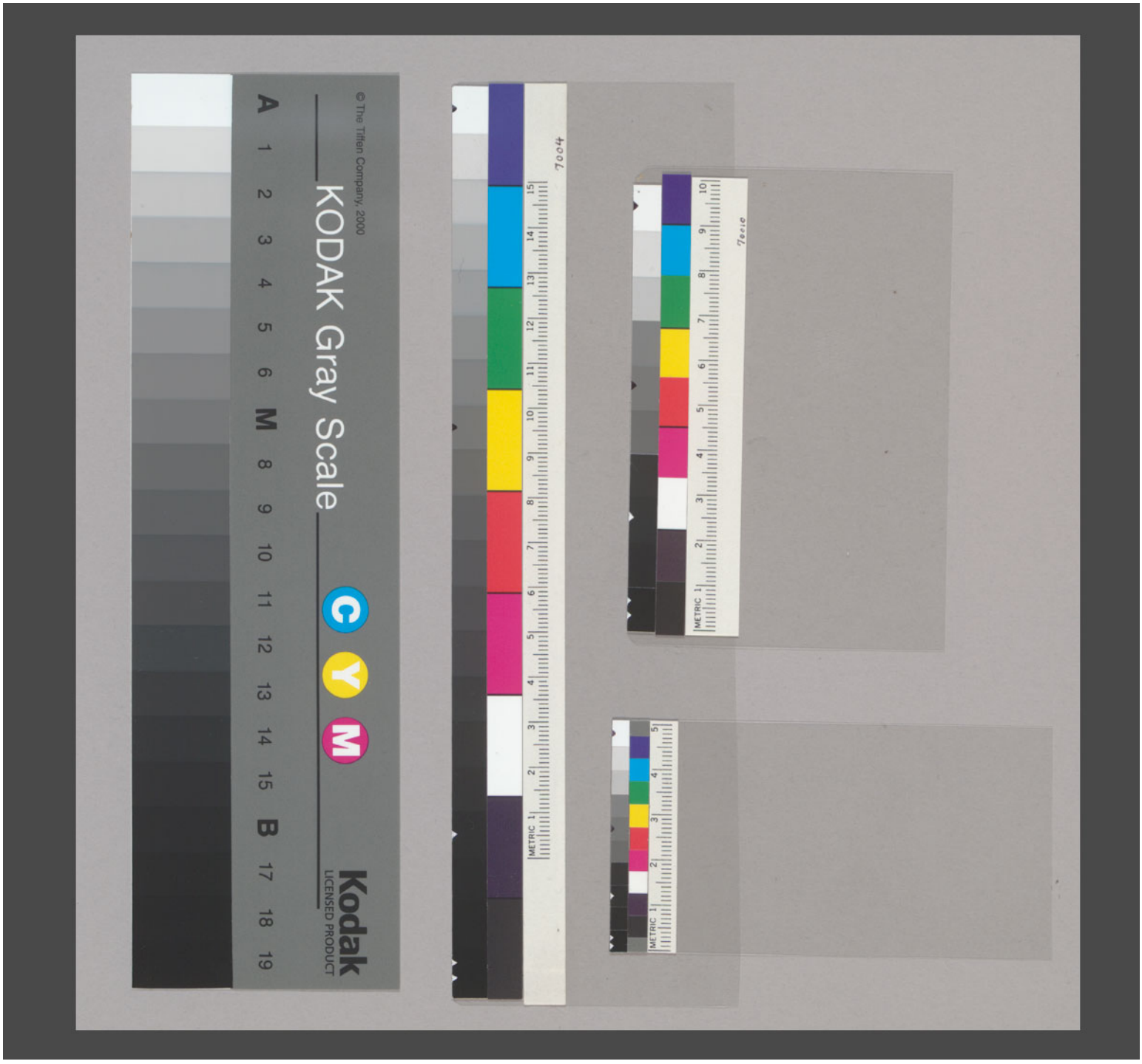


1. Digital capture of archival image



2. Close-up of upper left corner, showing channel value for pixel under curser (120).



3. Kodak Q-13 Grayscale target, and “streamlined” versions for capture with original documents.

Making a One-Piece Grayscale Target for Digital Capture

Summary of method used at UC Berkeley Library to produce a single target for inclusion in digital captures, including a grayscale ramp and color patches, and a centimeter scale

Materials:

- Kodak Q-13 Color Separation Guide and Gray Scale (CAT 152 7654)
- Sheet mylar, 2 or 3 mil, for substrate
- 3M #415 double-sided adhesive tape
- Centimeter rule (laser-print from scan of ruler)
- Drafting tape or removable Scotch tape
- 8.5x11paper or card stock

Tools

- paper cutter
- Exacto knife, #16 blade
- Ultra fine point Sharpie

Procedure

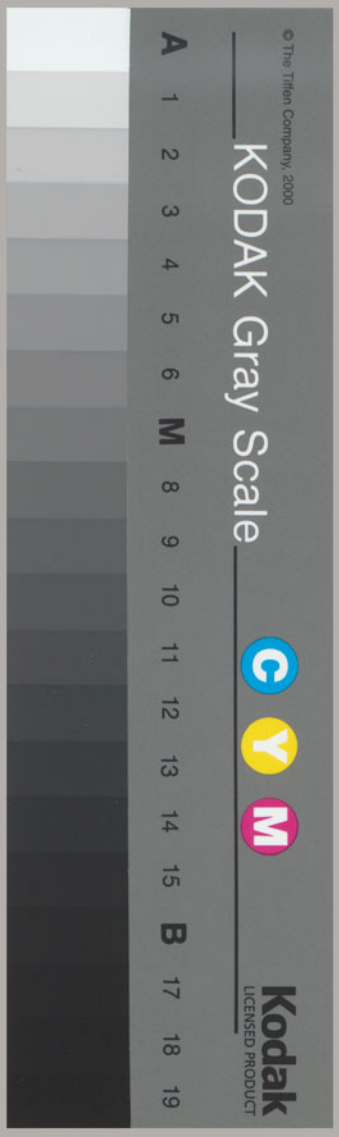
Start with a slightly oversize piece of mylar as the substrate (and handle) for the target. Tape the grayscale to a piece of cardstock or paper to make it easier to handle and align in the papercutter. The grayscale surface is susceptible to scratching and fingerprinting, so handle accordingly. Cut a strip from the grayscale, 8 or 9 mm wide (or to taste). Cut a piece of #415 tape slightly shorter than the strip, and adhere it to the back of the strip. Remove the backing paper from the tape, and carefully position the strip along one edge of the mylar. Repeat with color patches and centimeter scale. Use Sharpie to mark “a” and”“M” patches, use Exacto knife to mark “B” and #19 patches (by scraping off pigment with tip of blade). Add identifying number, and trim any excess mylar.

Variation

For use with small originals, a four-inch long variation can be created by including only a subset of the patches of the original Q-13. We like to use these patches: A,1, 2; 6, M, 8; 15, B, 17; 19. Starting with the Q-13 grayscale, first cut out and discard the unused patches, and reassemble the shortened scale using removeable tape on the non-target part of the front. Attach the #415 tape to the back before cutting the strip. Using similar methods, even smaller versions can be made.

-Dan Johnston, 8-2-02

patch number	density	reflectance	RGB values	
			γ 2.2	γ 1.8
(white pt)	0	1.000	255	255
0 (A)	0.05	0.891	242	239
1	0.15	0.708	218	210
2	0.25	0.562	196	185
3	0.35	0.447	177	163
4	0.45	0.355	159	143
5	0.55	0.282	143	126
6	0.65	0.224	129	111
7 (M)	0.75	0.178	116	98
8	0.85	0.141	105	86
9	0.95	0.112	94	76
10	1.05	0.089	85	67
11	1.15	0.071	77	59
12	1.25	0.056	69	52
13	1.35	0.045	62	45
14	1.45	0.035	56	40
15	1.55	0.028	50	35
16 (B)	1.65	0.022	45	31
17	1.75	0.018	41	27
18	1.85	0.014	37	24
19	1.95	0.011	33	21
(black pt)	∞	0.000	0	0



4. Reflectance values for the patches of the grayscale target, and calculated channel values for gamma 1.8 and gamma 2.2