Public opinion of images colorized with the Rainbow Color Method

- 150 members of the public were recruited using Amazon Mechanical Turk
- Each person was presented with three 512 x 512 meter samples of colorized and original panchromatic images for Harrisonburg, VA (1974), Minneapolis, MN (1947), and Washington, DC (1951).
- Samples for each image:
 - A well known landmark
 - Two randomly selected locations
- Asked to compare and assess the colorized and panchromatic samples



Harrisonburg, VA 1974



Image 1

Minneapolis, MN 1947



Image 1

Washington, DC 1951



Which image is easier to understand?

Response	Harrisonburg, VA	Minneapolis, MN	Washington, DC
Image 1 is much easier to understand	70%	73%	66%
Image 1 is somewhat easier to understand	21%	19%	23%
Image 1 and Image 2 are equally understandable	8%	6%	4%
Image 2 is somewhat easier to understand	1%	2%	3%
Image 2 is much easier to understand	1%	⊙%	⊙%

Image 1 = Image colorized using the Rainbow Color Method

Image 2 = Original panchromatic image

Which image could you figure out more quickly?

Response	Harrisonburg, VA	Minneapolis, MN	Washington, DC
I could figure out Image 1 much more quickly than I could figure out Image 2	61%	68%	57%
I could figure out Image 1 somewhat more quickly than I could figure out Image 2	25%	21%	29%
I could figure out both images equally quickly	11%	7%	9%
I could figure out Image 2 somewhat more quickly than I could figure out Image 1	2%	3%	5%
I could figure out Image 2 much more quickly than I could figure out Image 1	1%	1%	0%

Image 1 = Image colorized using the Rainbow Color Method Image 2 = Original panchromatic image

Which image would you prefer to see in an online mapping program such as Google Earth?

Response	Harrisonburg, VA	Minneapolis, MN	Washington, DC
I would much prefer to see Image 1	83%	83%	73%
I would somewhat prefer to see Image 1	11%	12%	21%
I do not have a preference	4%	⊙%	4%
I would somewhat prefer to see Image 2	1%	2%	3%
I would much prefer to see Image 2	1%	1%	0%

Image 1 = Image colorized using the Rainbow Color Method Image 2 = Original panchromatic image

How accurate are the colors in Image 1?

Response	Harrisonburg, VA	Minneapolis, MN	Washington, DC
Very accurate	35%	54%	38%
Fairly accurate	28%	44%	49%
Not very accurate	6%	7%	11%
Not at all accurate	1%	1%	2%
I am not sure	0%	⊙%	0%

Image 1 = Image colorized using the Rainbow Color Method