

AQC0568

## Nanopublication — Computational Image Analysis - AQC0568

by Arnaud Quercy · Composition 3 · 2024
















## Claim 1: Computational Image Analysis - AQC0568

K-means clustering analysis [3] (10 colors) performed on artwork Composition [1] 3 (AQC0568) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

## CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 843x1124 pixels. Analysis date: 2026-02-04.

## COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		FEFEFE	49.4	white	white
2		9EB1B9	9.4	blue	steel gray
3		7D929B	8.9	blue	lightslategray
4		C3D1D5	7.1	blue	lightgray
5		5B717E	6.9	blue	dimgray
6		A5704B	4.4	orange	burnt sienna
7		46494E	4.2	gray	grayish purple
8		E59048	4.1	orange	peru
9		E4A775	3.2	orange	darksalmon
10		1A1A20	2.6	gray	very dark gray
11		3F6C9F	0.3	blue-violet	grayish purple [Accent]
12		FFD197	0.3	yellow-orange	navajowhite [Accent]
13		B5F0ED	0.3	green	paleturquoise [Accent]
14		7E4F60	0.3	red	dusty mauve [Accent]
15		96D5D6	0.3	blue-green	skyblue [Accent]

## Color Families:

Family	%
white	49.4
blue	32.2
orange	11.6
gray	6.8
blue-violet	0.3
yellow-orange	0.3
green	0.3
red	0.3
blue-green	0.3

## Accent Colors:

Hex	Family	Name	Chroma
3F6C9F	blue-violet	grayish purple	32.0
FFD197	yellow-orange	navajowhite	36.1
B5F0ED	green	paleturquoise	19.6
7E4F60	red	dusty mauve	22.1
96D5D6	blue-green	skyblue	21.2

## TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.256
Mean Local Roughness	0.04
Roughness Uniformity	0.053
Edge Density	0.185
Mean Gradient Magnitude	0.274
Gradient Variance	0.213
Gradient Smoothness	0.0
Directional Coherence	0.439
Pattern Complexity	0.127
Pattern Repetition	nan
Detail Frequency Ratio	0.674
Spatial Variation	0.142
Texture Consistency	0.807

## BRIGHTNESS &amp; CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.776
Brightness Variance	0.256
Brightness Uniformity	0.67
Brightness Skewness	-0.787
Brightness Entropy	5.107
Rms Contrast	0.256
Michelson Contrast	1.0
Weber Contrast	0.588
Mean Local Contrast	0.039
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.698
Shadow Percentage	5.981
Midtone Percentage	28.568
Highlight Percentage	65.451
Shadow Clipping	0.142
Highlight Clipping	46.017
Tonal Balance	0.0
Fine Contrast	0.026
Medium Contrast	0.048
Coarse Contrast	None
Multiscale Contrast Ratio	1.0

Metric	Value
Edge Contrast	0.274
Contrast Clustering	0.193

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.74
Color Clustering	0.823
Color Transition Smoothness	0.313
Transition Uniformity	0.0
Sharp Transition Ratio	0.1
Transition Directionality	0.439
Mean Saturation	0.144
Saturation Variance	0.042
Low Saturation Ratio	0.815
Medium Saturation Ratio	0.161
High Saturation Ratio	0.024
Saturation Clustering	0.999
Hue Concentration	0.007
Complementary Balance	0.364
Analogous Dominance	0.497
Temperature Bias	0.013

## Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence

and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

## REFERENCES

- [1] Arnaud Quercy (2024). Composition 3 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0568.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/composition-3\\_6d4.html](https://artquamanima.com/en/artworks/2024/01/composition-3_6d4.html)
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

## EPISTEMIC PROFILE

<b>Claim type</b>	computational analysis
<b>Voice</b>	third person
<b>Epistemic status</b>	empirical measurement
<b>Methodology</b>	computational analysis
<b>Certainty</b>	high

## CHECKSUM (SHA-256)

2ce7592b44a8cc6c0b68ee4d4e2d52267f0110f5f0589d-c4218c8ba15cea7718

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Untamed Creations
<b>Certificate</b>	20240311-0064
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