

Nanopublication — Computational Image Analysis - AQC0679

by Arnaud Quercy · Ab Octaves - Reflexions 14 · 2024

Claim 1: Computational Image Analysis - AQC0679

K-means clustering analysis [3] (10 colors) performed on artwork Ab Octaves [1] - Reflexions 14 (AQC0679) [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]: 2422x3633 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	C1BDB2	23.6	yellow	silver
2	CEC9BC	20.7	yellow-orange	lightgray
3	C3C4C1	15.7	white	lightgrey
4	B6B0A7	12.6	yellow-orange	steel gray
5	CCCFCF	12.6	white	thistle
6	866590	3.7	red-violet	dusty mauve
7	35353F	3.0	violet	dusty mauve
8	9B87A4	2.8	red-violet	steel gray
9	764778	2.6	red-violet	dusty mauve
10	5C5484	2.6	violet	dusty mauve
11	796552	0.3	orange	dimgray [Accent]
12	494E5E	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
yellow-orange	33.4
white	28.3
yellow	23.6
red-violet	9.2
violet	5.5
orange	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
796552	orange	dimgray	14.9
494E5E	blue-violet	grayish purple	10.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.143
Mean Local Roughness	0.009
Roughness Uniformity	0.013
Edge Density	0.02
Mean Gradient Magnitude	0.077
Gradient Variance	0.019
Gradient Smoothness	0.0
Directional Coherence	0.046
Pattern Complexity	0.116
Pattern Repetition	1.0
Detail Frequency Ratio	0.607
Spatial Variation	0.112
Texture Consistency	0.394

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.708
Brightness Variance	0.143
Brightness Uniformity	0.798
Brightness Skewness	-2.162
Brightness Entropy	6.128
Rms Contrast	0.143
Michelson Contrast	1.0
Weber Contrast	0.437
Mean Local Contrast	0.01
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.463
Shadow Percentage	3.998
Midtone Percentage	11.645
Highlight Percentage	84.358
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.005
Medium Contrast	0.013
Coarse Contrast	0.021
Multiscale Contrast Ratio	0.247
Edge Contrast	0.077
Contrast Clustering	0.606

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.756
Color Clustering	0.83

Metric	Value
Color Transition Smoothness	0.804
Transition Uniformity	0.87
Sharp Transition Ratio	0.1
Transition Directionality	0.063
Mean Saturation	0.098
Saturation Variance	0.009
Low Saturation Ratio	0.927
Medium Saturation Ratio	0.073
High Saturation Ratio	0.0
Saturation Clustering	1.0
Hue Concentration	0.893
Complementary Balance	0.007
Analogous Dominance	0.975
Temperature Bias	0.128

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). Ab Octaves - Reflexions 14 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0679.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/ab-octaves-reflexions-14_7ka.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <https://multimodal.institute/en/publications/2025/10/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

EPISTEMIC PROFILE

Claim type computational analysis

Voice third person

Epistemic status empirical measurement

Methodology computational analysis

Certainty high

CHECKSUM (SHA-256)

9574acda31433f5458b3da16cca2f224af914e2ccea1c43eb6c6bd-f96e23c59a

Artist Arnaud Quercy

Date 2024

Collection Synesthetic Explorations

Certificate 20240718-0175

Asset code AQC0679

Version 1

Published 2026-03-25

© 2026 Multimodal Institute

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-03-27

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/03/AQC0679-computational-image-analysis-aqc0679.pdf>

Content available under Creative Commons Attribution-NonCommercial 4.0 License (CC BY-NC 4.0)