

# Nanopublication — Computational Image Analysis - AQC0686

by Arnaud Quercy · Ab Octaves - Reflexions 20 · 2024

## Claim 1: Computational Image Analysis - AQC0686

Analysis record [3]: Ab Octaves [1] - Reflexions 20 (AQC0686) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 2026-02-04.

### 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]: 2534x3379 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D6D2C7	19.5	yellow	lightgray
2	DBDDDB	16.5	white	gainsboro
3	919496	12.1	gray	lightslategray
4	7D8287	12.1	gray	grayish purple
5	C2C0B7	11.0	yellow	silver
6	ACA9A3	8.5	gray	steel gray
7	C4D1D2	8.2	white	lightgrey
8	646D76	6.0	blue-violet	grayish purple
9	3E4E5E	3.7	blue-violet	grayish purple
10	2D2E30	2.4	gray	very dark gray
11	836350	0.3	orange	dimgray [Accent]
12	96C6D1	0.3	blue-green	lightsteelblue [Accent]
13	93BEBC	0.3	green	steel gray [Accent]

#### Color Families:

Family	%
gray	35.0
yellow	30.5
white	24.8
blue-violet	9.7
orange	0.3
blue-green	0.3
green	0.3

#### Accent Colors:

Hex	Family	Name	Chroma
836350	orange	dimgray	18.9
96C6D1	blue-green	lightsteelblue	17.0
93BEBC	green	steel gray	15.5

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.181
Mean Local Roughness	0.02
Roughness Uniformity	0.02
Edge Density	0.108
Mean Gradient Magnitude	0.16
Gradient Variance	0.048
Gradient Smoothness	0.0
Directional Coherence	0.013
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.619
Spatial Variation	0.124
Texture Consistency	0.651

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.682
Brightness Variance	0.181
Brightness Uniformity	0.735
Brightness Skewness	-0.911
Brightness Entropy	7.055
Rms Contrast	0.181
Michelson Contrast	1.0
Weber Contrast	0.489
Mean Local Contrast	0.021
Contrast Uniformity	0.005
Dynamic Range	1.0
Effective Dynamic Range	0.553
Shadow Percentage	5.243
Midtone Percentage	35.07
Highlight Percentage	59.686
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.011
Medium Contrast	0.026
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.277
Edge Contrast	0.16
Contrast Clustering	0.349

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.695
Color Clustering	0.939

Metric	Value
Color Transition Smoothness	0.596
Transition Uniformity	0.679
Sharp Transition Ratio	0.1
Transition Directionality	0.019
Mean Saturation	0.094
Saturation Variance	0.009
Low Saturation Ratio	0.958
Medium Saturation Ratio	0.041
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.557
Complementary Balance	0.217
Analogous Dominance	0.781
Temperature Bias	-0.563

## 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 20 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0686.html>
- [2] Quercy, A. (2024). Ab Octaves - Reflexions 20 - Gallery. [https://artquamanima.com/en/artworks/2024/01/ab-octaves-reflexions-20\\_7n0.html](https://artquamanima.com/en/artworks/2024/01/ab-octaves-reflexions-20_7n0.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

**Claim type** computational analysis

**Voice** third person

**Epistemic status** empirical measurement

**Methodology** computational analysis

**Certainty** high

## CHECKSUM (SHA-256)

4aa8f2b6be70dae9f98be0f1b509d40b4a52e11b91763600d419d5b74229cb-c6

**Artist** Arnaud Quercy

**Date** 2024

**Collection** Synesthetic Explorations

**Certificate** 20240718-0182

**Asset code** AQC0686

**Version** 1

**Published** 2026-02-03

© 2026 Multimodal Institute

Published by: Art Quam Anima Publishing New York LLC — [publishing.artquamanima.com](https://publishing.artquamanima.com)

Date of publication: 2026-04-20

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/02/AQC0686-computational-image-analysis-aqc0686.pdf>

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