

# Nanopublication — Computational Image Analysis - AQC0796

by Arnaud Quercy · Ab Sus4 - Reflexions 29 · 2024

## Claim 1: Computational Image Analysis - AQC0796

Computational image analysis [3] of artwork Ab Sus4 - Reflexions [1] 29 (AQC0796) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 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]: 4032x3024 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	DBD5C7	17.7	yellow-orange	lightgray
2	C4C0B9	12.8	gray	silver
3	9A9392	11.5	gray	rosybrown
4	463F3E	10.9	gray	darkslategray
5	B6A7A0	10.3	orange	steel gray
6	7C8BA8	8.8	blue-violet	grayish purple
7	9BADB1	8.0	blue-green	steel gray
8	625867	8.0	red-violet	dusty mauve
9	827784	6.9	red-violet	dusty mauve
10	636F8F	5.1	blue-violet	grayish purple
11	212433	0.3	violet	very dark gray [Accent]
12	F4EFE2	0.3	yellow	white [Accent]

### Color Families:

Family	%
gray	35.1
yellow-orange	17.7
red-violet	14.9
blue-violet	13.9
orange	10.3
blue-green	8.0
violet	0.3
yellow	0.3

### Accent Colors:

Hex	Family Name	Chroma
212433	violet	very dark gray 11.4
F4EFE2	yellow	white 7.1

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.187
Mean Local Roughness	0.021
Roughness Uniformity	0.017
Edge Density	0.096
Mean Gradient Magnitude	0.152
Gradient Variance	0.035
Gradient Smoothness	0.0
Directional Coherence	0.021
Pattern Complexity	0.13
Pattern Repetition	1.0
Detail Frequency Ratio	0.619
Spatial Variation	0.09
Texture Consistency	0.695

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.596
Brightness Variance	0.187
Brightness Uniformity	0.686
Brightness Skewness	-0.395
Brightness Entropy	7.414
Rms Contrast	0.187
Michelson Contrast	1.0
Weber Contrast	0.642
Mean Local Contrast	0.021
Contrast Uniformity	0.185
Dynamic Range	1.0
Effective Dynamic Range	0.588
Shadow Percentage	12.402
Midtone Percentage	47.289
Highlight Percentage	40.309
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.18
Fine Contrast	0.014
Medium Contrast	0.026
Coarse Contrast	0.038
Multiscale Contrast Ratio	0.361
Edge Contrast	0.152
Contrast Clustering	0.305

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.7
Color Clustering	0.899

Metric	Value
Color Transition Smoothness	0.613
Transition Uniformity	0.769
Sharp Transition Ratio	0.1
Transition Directionality	0.023
Mean Saturation	0.158
Saturation Variance	0.008
Low Saturation Ratio	0.912
Medium Saturation Ratio	0.088
High Saturation Ratio	0.0
Saturation Clustering	1.0
Hue Concentration	0.52
Complementary Balance	0.105
Analogous Dominance	0.608
Temperature Bias	-0.273

## 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 Sus4 - Reflexions 29 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0796.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/ab-sus4-reflexions-29\\_8ts.html](https://artquamanima.com/en/artworks/2024/01/ab-sus4-reflexions-29_8ts.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

<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)

a0addb3a5cc23cfbb5490a654f663913aa383c4129c5da6e24fe2212b-c01c4e9

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20241201-0293
<b>Asset code</b>	AQC0796
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