

# Nanopublication — Computational Image Analysis - AQC0596

by Arnaud Quercy · F minor - Research on Harmony - Variation 2 · 2024

## Claim 1: Computational Image Analysis - AQC0596

The artwork F minor - Research [1] on Harmony - Variation 2 (AQC0596) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

### 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]: 2560x3413 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D8D6D0	32.4	white	lightgray
2	E4E2D9	29.6	yellow	gainsboro
3	24384F	11.8	blue-violet	grayish purple
4	C8CACB	10.2	white	lightgray
5	23141A	6.5	red	black
6	475970	3.1	blue-violet	grayish purple
7	469ED3	2.2	blue	cornflowerblue
8	AA5E28	2.0	orange	burnt sienna
9	CB8856	1.2	orange	peru
10	7E8DA1	1.1	blue-violet	grayish purple
11	69524C	0.3	red-orange	dimgray [Accent]

### Color Families:

Family	%
white	42.6
yellow	29.6
blue-violet	15.9
red	6.5
orange	3.1
blue	2.2
red-orange	0.3

### Accent Colors:

Hex	Family	Name	Chroma
69524C	red-orange	dimgray	11.4

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.277

Metric	Value
Mean Local Roughness	0.02
Roughness Uniformity	0.033
Edge Density	0.068
Mean Gradient Magnitude	0.144
Gradient Variance	0.085
Gradient Smoothness	0.0
Directional Coherence	0.134
Pattern Complexity	0.12
Pattern Repetition	1.0
Detail Frequency Ratio	0.667
Spatial Variation	0.22
Texture Consistency	0.238

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.691
Brightness Variance	0.277
Brightness Uniformity	0.599
Brightness Skewness	-1.2
Brightness Entropy	6.509
Rms Contrast	0.277
Michelson Contrast	1.0
Weber Contrast	0.789
Mean Local Contrast	0.02
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.776
Shadow Percentage	19.797
Midtone Percentage	7.725
Highlight Percentage	72.479
Shadow Clipping	0.01
Highlight Clipping	0.085
Tonal Balance	0.0
Fine Contrast	0.012
Medium Contrast	0.026
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.144
Contrast Clustering	0.762

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.797
Color Clustering	0.789
Color Transition Smoothness	0.626
Transition Uniformity	0.417

Metric	Value
Sharp Transition Ratio	0.1
Transition Directionality	0.148
Mean Saturation	0.182
Saturation Variance	0.052
Low Saturation Ratio	0.744
Medium Saturation Ratio	0.23
High Saturation Ratio	0.026
Saturation Clustering	0.998
Hue Concentration	0.469
Complementary Balance	0.117
Analogous Dominance	0.664
Temperature Bias	-0.325

## 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). F minor - Research on Harmony - Variation 2 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0596.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/f-minor-research-on-harmony-variation-2\\_600.html](https://artquamanima.com/en/artworks/2024/01/f-minor-research-on-harmony-variation-2_600.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)

43b66f14f3ea54a6511b97e26c4dfcef70fa45bbd8472678d965bf-b303009cb1

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