

Nanopublication — Computational Image Analysis - AQC0895

by Arnaud Quercy · F Minor - Research on Harmony - Variations 20 · 2025













Claim 1: Computational Image Analysis - AQC0895

Computational image analysis [3] of artwork F Minor [1] - Research on Harmony - Variations 20 (AQC0895) [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 2025-12-11.

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]: 1908x2862 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		CC896C 17.2	orange	darksalmon
2		6B83A0 16.9	blue-violet	grayish purple
3		56443C 14.8	orange	dark brown
4		81A3BE 12.7	blue	steel gray
5		72615A 9.8	orange	dimgray
6		F24906 9.1	orange	orangered
7		EBB697 6.7	orange	burlywood
8		371F19 5.3	red-orange	very dark gray
9		BB4A33 4.6	red-orange	burnt sienna
10		EDE2C2 3.0	yellow-orange	wheat
11		B19095 0.3	red	rosybrown [Accent]
12		9F8695 0.3	red-violet	dusty mauve [Accent]

Color Families:

Family	%
orange	57.6
blue-violet	16.9
blue	12.7
red-orange	9.9
yellow-orange	3.0
red	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
B19095	red	rosybrown	13.2
9F8695	red-violet	dusty mauve	13.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.173
Mean Local Roughness	0.035
Roughness Uniformity	0.027
Edge Density	0.213
Mean Gradient Magnitude	0.291
Gradient Variance	0.091
Gradient Smoothness	0.0
Directional Coherence	0.013
Pattern Complexity	0.121
Pattern Repetition	1.0
Detail Frequency Ratio	0.65
Spatial Variation	0.118
Texture Consistency	0.844

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.494
Brightness Variance	0.173
Brightness Uniformity	0.649
Brightness Skewness	-0.011
Brightness Entropy	7.439
Rms Contrast	0.173
Michelson Contrast	1.0
Weber Contrast	0.628
Mean Local Contrast	0.04
Contrast Uniformity	0.292
Dynamic Range	1.0
Effective Dynamic Range	0.584
Shadow Percentage	18.666
Midtone Percentage	68.346
Highlight Percentage	12.989
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.12
Fine Contrast	0.019
Medium Contrast	0.049
Coarse Contrast	0.07
Multiscale Contrast Ratio	0.271
Edge Contrast	0.291
Contrast Clustering	0.156

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.749
Color Clustering	0.338

Metric	Value
Color Transition Smoothness	0.248
Transition Uniformity	0.375
Sharp Transition Ratio	0.1
Transition Directionality	0.012
Mean Saturation	0.426
Saturation Variance	0.056
Low Saturation Ratio	0.325
Medium Saturation Ratio	0.534
High Saturation Ratio	0.14
Saturation Clustering	0.998
Hue Concentration	0.389
Complementary Balance	0.234
Analogous Dominance	0.687
Temperature Bias	0.381

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 (2025). F Minor - Research on Harmony - Variations 20 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0895.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/f-minor-research-on-harmony-variations-20_i8j.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)

a7e9db2e74a9d8907a3b-
f456120b1d62c3cb7f834b47f81c9345525b82d67e5e

Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20251123-0114
Asset code	AQC0895
Version	1
Published	2026-04-09

© 2026 Multimodal Institute

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

Date of publication: 2026-04-09

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/02/AQC0895-computational-image-analysis-aqc0895.pdf>

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