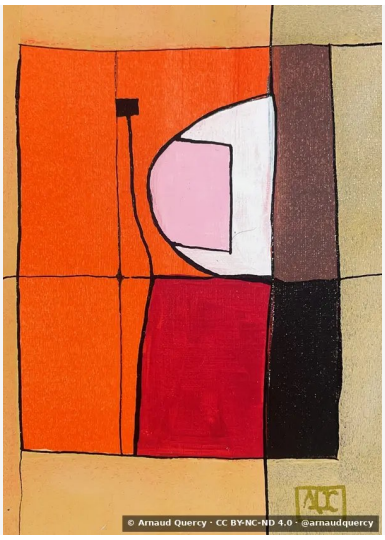
AQC0934 | NAN-COL000024

Nanopublication — Computational Image Analysis - AQC0934

by Arnaud Quercy · F Major - Research on Harmony - Variations 12 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0934

Computational image analysis [3] of artwork F Major [1] - Research on Harmony - Variations 12 (AQC0934) [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]: 1912x2677 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		EF4C08	19.2	orange	orangered
2		E3A963	18.7	orange	sandybrown
3		C9B588	14.2	yellow-orange	tan
4		BB0D22	11.0	red-orange	firebrick
5		231413	10.1	red-orange	black
6		F55C1E	9.5	orange	chocolate
7		6E4744	6.7	red-orange	dark brown
8		EDE8EA	4.2	white	white
9		ECBCCA	4.2	red	pink
10		A07D58	2.3	orange	gray
11		C0CBD9	0.3	blue-violet	lightsteelblue [Accent]
12		BDC8D0	0.3	blue	silver [Accent]

Color Families:

Family	%
orange	49.7
red-orange	27.7
yellow-orange	14.2
white	4.2
red	4.2
blue-violet	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
C0CBD9	blue-violet	lightsteelblue	8.1
BDC8D0	blue	silver	5.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.226
Mean Local Roughness	0.019
Roughness Uniformity	0.019
Edge Density	0.054
Mean Gradient Magnitude	0.15
Gradient Variance	0.052
Gradient Smoothness	0.0
Directional Coherence	0.002
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.612
Spatial Variation	0.114
Texture Consistency	0.672

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.515
Brightness Variance	0.226
Brightness Uniformity	0.561
Brightness Skewness	-0.296
Brightness Entropy	7.333
Rms Contrast	0.226
Michelson Contrast	0.992
Weber Contrast	0.745
Mean Local Contrast	0.02
Contrast Uniformity	0.011
Dynamic Range	0.996
Effective Dynamic Range	0.725
Shadow Percentage	24.598
Midtone Percentage	38.586
Highlight Percentage	36.816
Shadow Clipping	0.0
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.01
Medium Contrast	0.025
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.248
Edge Contrast	0.15
Contrast Clustering	0.328

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.782
Color Clustering	0.616
Color Transition Smoothness	0.622
Transition Uniformity	0.636
Sharp Transition Ratio	0.1
Transition Directionality	0.001
Mean Saturation	0.61
Saturation Variance	0.093
Low Saturation Ratio	0.182
Medium Saturation Ratio	0.397
High Saturation Ratio	0.421
Saturation Clustering	0.999
Hue Concentration	0.951
Complementary Balance	0.0
Analogous Dominance	0.987
Temperature Bias	1.0

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 Major - Research on Harmony - Variations 12 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0934.html

[2] Quercy, A. (2025). F Major - Research on Harmony - Variations 12 - Gallery. https://artquamanima.com/en/artworks/2025/12/f-major-research-on-harmony-variations-12_1hz4.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html

WHERE THIS WORK LIVES

THEMATIC ELEMENTS

chromesthetic mapping · F Major triad · synesthetic art · piano harmony visualization · acrylic color study · musical chord translation · harmonic color relationships · Synesthetic Explorations

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

9b3aec323c85fcd92a6eeb5a6cb612645b486f15db1c0d71bca8360bed8c928e

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