AQC0965 | NAN-COL000516

Nanopublication — Computational Image Analysis - AQC0965

by Arnaud Quercy · Eb minor M7 - Research on Harmony · 2026

CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0965

K-means clustering analysis [3] (10 colors) performed on artwork Eb minor M7 - Research [1] on Harmony (AQC0965) [2] by Arnaud Quercy [2] on 2026-03-05. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 2046x2046 pixels. Analysis date: 2026-03-05.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		498C4A	15.2	yellow-green	seagreen
2		896AA0	15.2	violet	dusty mauve
3		99ADE6	14.3	blue-violet	lightsteelblue
4		735489	13.1	violet	dusty mauve
5		B8B8B8	11.2	gray	silver
6		4A534F	8.3	gray	darkslategray
7		D9C4E2	7.9	red-violet	thistle
8		BEBC88	7.2	yellow	tan
9		EDE7D3	4.4	yellow	antiquewhite
10		2A2E30	3.2	gray	very dark gray
11		082119	0.3	green	very dark gray [Accent]
12		887766	0.3	orange	gray [Accent]
13		978976	0.3	yellow-orange	gray [Accent]
14		627F7F	0.3	blue-green	blue gray [Accent]
15		6C8D96	0.3	blue	lightslategray [Accent]

Color Families:

Family	%
violet	28.3
gray	22.7
yellow-green	15.2
blue-violet	14.3
yellow	11.6
red-violet	7.9
green	0.3
orange	0.3
yellow-orange	0.3
blue-green	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
082119	green	very dark gray	12.4
887766	orange	gray	12.6
978976	yellow-orange	gray	12.2
627F7F	blue-green	blue gray	10.4
6C8D96	blue	lightslategray	12.7

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.188
Mean Local Roughness	0.025
Roughness Uniformity	0.021
Edge Density	0.106
Mean Gradient Magnitude	0.195
Gradient Variance	0.059
Gradient Smoothness	0.0
Directional Coherence	0.001
Pattern Complexity	0.126
Pattern Repetition	1.0
Detail Frequency Ratio	0.632
Spatial Variation	0.111
Texture Consistency	0.652

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.557
Brightness Variance	0.188
Brightness Uniformity	0.663
Brightness Skewness	0.039
Brightness Entropy	7.267
Rms Contrast	0.188
Michelson Contrast	0.977
Weber Contrast	0.569
Mean Local Contrast	0.027
Contrast Uniformity	0.171
Dynamic Range	0.988
Effective Dynamic Range	0.576
Shadow Percentage	9.259
Midtone Percentage	51.059
Highlight Percentage	39.682
Shadow Clipping	0.0
Highlight Clipping	0.009
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.033
Coarse Contrast	0.046
Multiscale Contrast Ratio	0.276
Edge Contrast	0.195
Contrast Clustering	0.348

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.736
Color Clustering	0.786
Color Transition Smoothness	0.5
Transition Uniformity	0.599
Sharp Transition Ratio	0.1
Transition Directionality	0.0
Mean Saturation	0.285
Saturation Variance	0.024
Low Saturation Ratio	0.408
Medium Saturation Ratio	0.592
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.342
Complementary Balance	0.045
Analogous Dominance	0.636
Temperature Bias	-0.373

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 (2026). Eb minor M7 - Research on Harmony — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0965.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2026/03/eb-minor-m7-research-on-harmony_1yne.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

synesthetic mapping · Eb minor M7 chord · harmonic visualization · cycle of fifth mapping · piano studies · geometric abstraction · violet yellow-green palette · contemporary acrylic painting

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

fcad408fad91c356e2688bdc89a5c6aa733520ff70c4fdefa6b6e49326bef530

Artist	Arnaud Quercy
Date	2026
Collection	Synesthetic Explorations
Certificate	20260305-0017
Asset code	AQC0965
Identifier	NAN-COL000516
Version	1
Published	2026-03-05

ISSN: [pending — Library of Congress]

Published by Art Quam Anima Publishing New York,
an imprint of AQA PUBLISHING LLC

c/o Northwest Registered Agent, 418 Broadway Ste N
Albany, NY 12207, USA
+1 917-764-5470

publishing.artquamanima.com

Last updated: 2026-06-03

Persistent URI: https://multimodal.institute/en/nanopubs/2026/03/AQC0965-computational-image-analysis-aqc0965.pdf