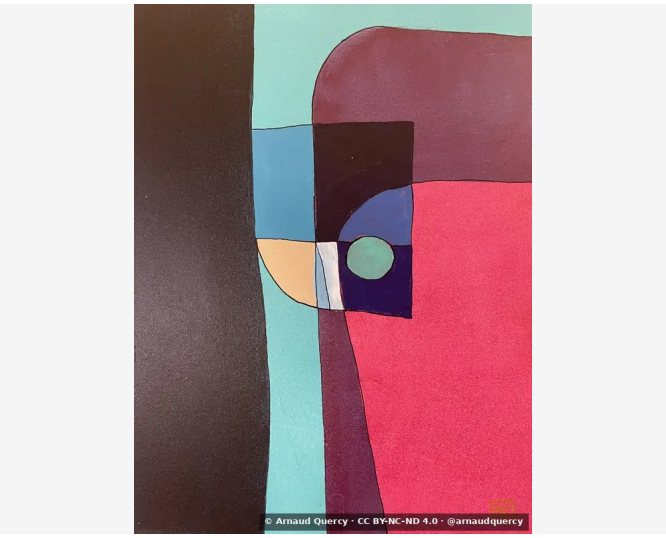
AQC0722 | NAN-COL000232

Nanopublication — Computational Image Analysis - AQC0722

by Arnaud Quercy · Db Major - Research on Harmony - Variation 5 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0722

K-means clustering analysis [3] (10 colors) performed on artwork Db Major [1] - Research on Harmony - Variation 5 (AQC0722) [2] by Arnaud Quercy [2] on 2026-02-04. 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]: 3024x4032 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		4F3632	17.6	red-orange	darkslategray
2		905963	14.9	red	dimgray
3		F45271	13.9	red-orange	indianred
4		9BD3CD	13.1	green	lightsteelblue
5		371E26	11.3	red	very dark gray
6		6B444D	11.0	red	dimgrey
7		DE3657	10.7	red-orange	crimson
8		6FA2B5	4.2	blue	cadetblue
9		E9C2A0	1.8	orange	burlywood
10		565B8F	1.4	violet	dusty mauve
11		12050C	0.3	red-violet	black [Accent]

Color Families:

Family	%
red-orange	42.3
red	37.2
green	13.1
blue	4.2
orange	1.8
violet	1.4
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
12050C	red-violet	black	6.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.192
Mean Local Roughness	0.026
Roughness Uniformity	0.024
Edge Density	0.144
Mean Gradient Magnitude	0.203
Gradient Variance	0.059
Gradient Smoothness	0.0
Directional Coherence	0.015
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.656
Spatial Variation	0.107
Texture Consistency	0.488

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.421
Brightness Variance	0.192
Brightness Uniformity	0.543
Brightness Skewness	0.458
Brightness Entropy	7.365
Rms Contrast	0.192
Michelson Contrast	1.0
Weber Contrast	0.75
Mean Local Contrast	0.028
Contrast Uniformity	0.121
Dynamic Range	1.0
Effective Dynamic Range	0.624
Shadow Percentage	35.94
Midtone Percentage	49.05
Highlight Percentage	15.01
Shadow Clipping	0.004
Highlight Clipping	0.001
Tonal Balance	0.134
Fine Contrast	0.015
Medium Contrast	0.034
Coarse Contrast	0.046
Multiscale Contrast Ratio	0.324
Edge Contrast	0.203
Contrast Clustering	0.512

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.751
Color Clustering	0.53
Color Transition Smoothness	0.488
Transition Uniformity	0.615
Sharp Transition Ratio	0.1
Transition Directionality	0.021
Mean Saturation	0.456
Saturation Variance	0.038
Low Saturation Ratio	0.259
Medium Saturation Ratio	0.593
High Saturation Ratio	0.148
Saturation Clustering	0.999
Hue Concentration	0.597
Complementary Balance	0.177
Analogous Dominance	0.79
Temperature Bias	0.6

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). Db Major - Research on Harmony - Variation 5 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0722.html

[2] Quercy, A. (2024). Db Major - Research on Harmony - Variation 5 - Gallery. https://artquamanima.com/en/artworks/2024/01/db-major-research-on-harmony-variation-5_810.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 · Db Major triad · synesthetic art · geometric abstraction · acrylic painting · musical visualization · harmonic color translation · contemporary synesthesia

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

6765fafeb4f2afdf2ca4cd6d7d93c2a702447ac5840673c12c04c1d5da8c5a3f

Artist Arnaud Quercy
Date 2024
Collection Synesthetic Explorations
Certificate 20241201-0218
Asset code AQC0722
Identifier NAN-COL000232
Version 1
Published 2026-02-03

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/2026/02/AQC0722-computational-image-analysis-aqc0722.pdf