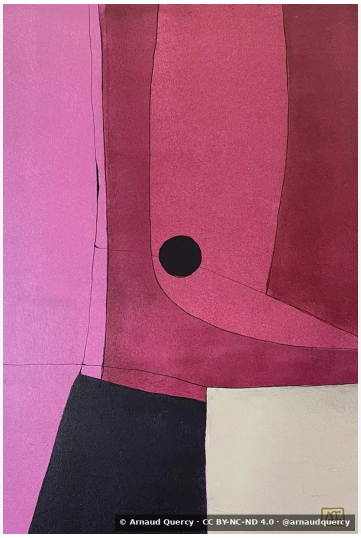
AQC0793 | NAN-COL000161

Nanopublication — Computational Image Analysis - AQC0793

by Arnaud Quercy · F Octaves - Reflexions 27 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0793

K-means clustering analysis [3] (10 colors) performed on artwork F Octaves [1] - Reflexions 27 (AQC0793) [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]: 2595x3892 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		B14464	15.1	red	indianred
2		D376B1	14.1	red-violet	palevioletred
3		7E2A3B	12.6	red	brown
4		943750	12.0	red	burnt sienna
5		C55575	11.1	red	lightcoral
6		DD85C3	9.9	red-violet	orchid
7		201B26	9.3	violet	very dark gray
8		D3CABC	6.6	yellow-orange	silver
9		C4BAAD	5.2	yellow-orange	steel gray
10		312E3B	4.1	violet	dusty mauve
11		3B000D	0.3	red-orange	very dark red [Accent]

Color Families:

Family	%
red	50.8
red-violet	24.1
violet	13.4
yellow-orange	11.8
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
3B000D	red-orange	very dark red	29.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.198
Mean Local Roughness	0.015
Roughness Uniformity	0.012
Edge Density	0.062
Mean Gradient Magnitude	0.141
Gradient Variance	0.022
Gradient Smoothness	0.0
Directional Coherence	0.008
Pattern Complexity	0.111
Pattern Repetition	1.0
Detail Frequency Ratio	0.601
Spatial Variation	0.149
Texture Consistency	0.302

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.45
Brightness Variance	0.198
Brightness Uniformity	0.561
Brightness Skewness	0.045
Brightness Entropy	7.407
Rms Contrast	0.198
Michelson Contrast	1.0
Weber Contrast	0.775
Mean Local Contrast	0.018
Contrast Uniformity	0.225
Dynamic Range	1.0
Effective Dynamic Range	0.663
Shadow Percentage	30.698
Midtone Percentage	54.656
Highlight Percentage	14.646
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.156
Fine Contrast	0.007
Medium Contrast	0.022
Coarse Contrast	0.036
Multiscale Contrast Ratio	0.189
Edge Contrast	0.141
Contrast Clustering	0.698

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.774
Color Clustering	0.67
Color Transition Smoothness	0.647
Transition Uniformity	0.858
Sharp Transition Ratio	0.1
Transition Directionality	0.012
Mean Saturation	0.467
Saturation Variance	0.037
Low Saturation Ratio	0.219
Medium Saturation Ratio	0.728
High Saturation Ratio	0.053
Saturation Clustering	1.0
Hue Concentration	0.875
Complementary Balance	0.001
Analogous Dominance	0.884
Temperature Bias	0.878

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 Octaves - Reflexions 27 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0793.html

[2] Quercy, A. (2024). F Octaves - Reflexions 27 - Gallery. https://artquamanima.com/en/artworks/2024/01/f-octaves-reflexions-27_8sm.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 octave chord · geometric abstraction · synesthetic art · musical intervals · acrylic on wood panel · red-violet tones · Synesthetic Explorations · compact format · sound visualization

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

adfe228faf86f9528eabf326316f48ec82b380261ccc65dd1ab1df0a07504ded

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20241201-0290
Asset code	AQC0793
Identifier	NAN-COL000161
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/AQC0793-computational-image-analysis-aqc0793.pdf