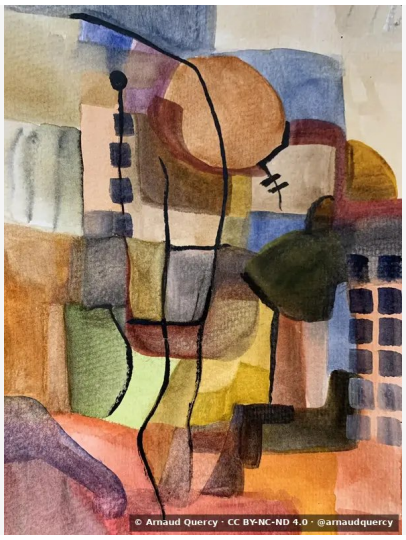
AQC0440 | NAN-COL000464

Nanopublication — Computational Image Analysis - AQC0440

by Arnaud Quercy · F# major - Reflexions 5 · 2022



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0440

K-means clustering analysis [3] (10 colors) performed on artwork F# major - Reflexions [1] 5 (AQC0440) [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]: 1536x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D5C9B2	14.4	yellow-orange	silver
2		CE864A	12.9	orange	peru
3		5E3F30	11.3	orange	dark brown
4		9E8473	10.5	orange	gray
5		BAA791	10.5	yellow-orange	rosybrown
6		241E1A	9.9	gray	very dark gray
7		DDA075	9.0	orange	darksalmon
8		6A5E5F	8.0	red	dimgray
9		9E653D	7.9	orange	burnt sienna
10		73809E	5.7	blue-violet	grayish purple
11		FAB5A2	0.3	red-orange	lightpink [Accent]
12		405595	0.3	violet	dusty mauve [Accent]
13		D3CD80	0.3	yellow	burlywood [Accent]
14		E8F0AB	0.3	yellow-green	palegoldenrod [Accent]

Color Families:

Family	%
orange	51.6
yellow-orange	24.9
gray	9.9
red	8.0
blue-violet	5.7
red-orange	0.3
violet	0.3
yellow	0.3
yellow-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
FAB5A2	red-orange	lightpink	30.5
405595	violet	dusty mauve	39.8
D3CD80	yellow	burlywood	40.0
E8F0AB	yellow-green	palegoldenrod	35.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.206
Mean Local Roughness	0.022
Roughness Uniformity	0.019
Edge Density	0.12
Mean Gradient Magnitude	0.186
Gradient Variance	0.046
Gradient Smoothness	0.0
Directional Coherence	0.016
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.614
Spatial Variation	0.098
Texture Consistency	0.785

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.517
Brightness Variance	0.206
Brightness Uniformity	0.601
Brightness Skewness	-0.456
Brightness Entropy	7.624
Rms Contrast	0.206
Michelson Contrast	1.0
Weber Contrast	0.736
Mean Local Contrast	0.023
Contrast Uniformity	0.188
Dynamic Range	0.996
Effective Dynamic Range	0.678
Shadow Percentage	20.858
Midtone Percentage	52.531
Highlight Percentage	26.612
Shadow Clipping	0.018
Highlight Clipping	0.0
Tonal Balance	0.337
Fine Contrast	0.012
Medium Contrast	0.029
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.186
Contrast Clustering	0.215

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.676
Color Clustering	0.708
Color Transition Smoothness	0.511
Transition Uniformity	0.68
Sharp Transition Ratio	0.1
Transition Directionality	0.019
Mean Saturation	0.385
Saturation Variance	0.045
Low Saturation Ratio	0.404
Medium Saturation Ratio	0.507
High Saturation Ratio	0.09
Saturation Clustering	0.999
Hue Concentration	0.739
Complementary Balance	0.103
Analogous Dominance	0.855
Temperature Bias	0.738

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 (2022). F# major - Reflexions 5 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0440.html

[2] Quercy, A. (2022). F# major - Reflexions 5 - Gallery. https://artquamanima.com/en/artworks/2022/01/f-major-reflexions-5_4zc.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 watercolor · synesthetic art · F# major triad · piano étude visualization · musical color translation · harmonic color mapping · Synesthetic Explorations · contemporary watercolor

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

24775e3f97efadb7de796326af66bfae4649159bbfbc63a454cad87bc87d4e32

Artist	Arnaud Quercy
Date	2022
Collection	Synesthetic Explorations
Certificate	20231231-0026
Asset code	AQC0440
Identifier	NAN-COL000464
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/AQC0440-computational-image-analysis-aqc0440.pdf