

Nanopublication – Computational Image Analysis –
AQC0924

by Arnaud Quercy · C Major – Research on Harmony – Variations 17 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0924

Computational image analysis [3] of artwork C Major [1] - Research on Harmony - Variations 17 (AQC0924) [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 2025-12-11.

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]: 1821x2731 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E8AD86	37.6	orange	burlywood
2		ECB5C0	22.8	red	lightpink
3		EA4E39	12.2	red-orange	tomato
4		ECD7C8	8.7	orange	bisque
5		524947	7.0	gray	darkslategray
6		D03945	3.2	red-orange	crimson
7		F2EBE4	2.8	white	white
8		EC9119	2.0	orange	goldenrod
9		441C1A	1.9	red-orange	very dark red
10		E3B75C	1.8	yellow-orange	sandybrown

Color Families:

Family	%
orange	48.3
red	22.8
red-orange	17.3
gray	7.0
white	2.8
yellow-orange	1.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.178
Mean Local Roughness	0.009
Roughness Uniformity	0.022
Edge Density	0.01
Mean Gradient Magnitude	0.069
Gradient Variance	0.061
Gradient Smoothness	0.0
Directional Coherence	0.188
Pattern Complexity	0.11
Pattern Repetition	1.0
Detail Frequency Ratio	0.601
Spatial Variation	0.107
Texture Consistency	0.625

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.677
Brightness Variance	0.178
Brightness Uniformity	0.737
Brightness Skewness	-1.221
Brightness Entropy	6.59
Rms Contrast	0.178
Michelson Contrast	0.992
Weber Contrast	0.523
Mean Local Contrast	0.01
Contrast Uniformity	0.0
Dynamic Range	0.996
Effective Dynamic Range	0.592
Shadow Percentage	8.467
Midtone Percentage	18.21
Highlight Percentage	73.323
Shadow Clipping	0.0
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.004
Medium Contrast	0.013
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.069
Contrast Clustering	0.375

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.776
Color Clustering	0.29
Color Transition Smoothness	0.813
Transition Uniformity	0.588
Sharp Transition Ratio	0.1
Transition Directionality	0.212
Mean Saturation	0.393
Saturation Variance	0.049
Low Saturation Ratio	0.41
Medium Saturation Ratio	0.447
High Saturation Ratio	0.143
Saturation Clustering	0.999
Hue Concentration	0.961
Complementary Balance	0.0
Analogous Dominance	0.997
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). C Major - Research on Harmony - Variations 17 - Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0924.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/c-major-research-on-harmony-variations-17_iin.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

C Major triad

synesthetic explorations

acrylic painting

musical visualization

spread voicing

harmonic translation

contemporary art

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

9088dc85351b3d1f5117c68c750a1af8000585cb88d5f1996494e60b88e3ac19

Licensed under Creative Commons Attribution 4.0 International (CC BY 4.0)

Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20251123-0088
Asset code	AQC0924
Identifier	NAN-COL000041
Version	1
Published	2026-02-03

ISSN: [pending – Library of Congress]

© 2026 Multimodal Institute

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/AQC0924-computational-image-analysis-aqc0924.pdf>