AQC0969 | NAN-COL000520

Nanopublication — Computational Image Analysis - AQC0969

by Arnaud Quercy · G7 - Research on Harmony · 2026

CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0969

Computational image analysis [3] of artwork G7 - Research [1] on Harmony (AQC0969) [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 2026-03-05.

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]: 1753x2630 pixels. Analysis date: 2026-03-05.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		ABAAA0	20.6	yellow-green	steel gray
2		E0A245	17.4	yellow-orange	sandybrown
3		BAB9B3	10.9	gray	silver
4		EF822B	10.2	orange	peru
5		C97628	9.8	orange	chocolate
6		7E5A53	9.6	red-orange	dimgray
7		99432A	8.8	red-orange	burnt sienna
8		2F211B	4.6	orange	very dark gray
9		EDE2D2	4.1	yellow-orange	white
10		DEC076	3.8	yellow-orange	burlywood
11		F0DFA2	0.3	yellow	palegoldenrod [Accent]

Color Families:

Family	%
yellow-orange	25.3
orange	24.7
yellow-green	20.6
red-orange	18.4
gray	10.9
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
F0DFA2	yellow	palegoldenrod	32.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.17
Mean Local Roughness	0.021
Roughness Uniformity	0.018
Edge Density	0.087
Mean Gradient Magnitude	0.182
Gradient Variance	0.053
Gradient Smoothness	0.0
Directional Coherence	0.019
Pattern Complexity	0.114
Pattern Repetition	1.0
Detail Frequency Ratio	0.614
Spatial Variation	0.088
Texture Consistency	0.639

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.588
Brightness Variance	0.17
Brightness Uniformity	0.711
Brightness Skewness	-0.877
Brightness Entropy	7.112
Rms Contrast	0.17
Michelson Contrast	1.0
Weber Contrast	0.534
Mean Local Contrast	0.024
Contrast Uniformity	0.128
Dynamic Range	1.0
Effective Dynamic Range	0.533
Shadow Percentage	7.981
Midtone Percentage	51.959
Highlight Percentage	40.06
Shadow Clipping	0.0
Highlight Clipping	0.007
Tonal Balance	0.0
Fine Contrast	0.01
Medium Contrast	0.03
Coarse Contrast	0.047
Multiscale Contrast Ratio	0.218
Edge Contrast	0.182
Contrast Clustering	0.361

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.752
Color Clustering	0.53
Color Transition Smoothness	0.538
Transition Uniformity	0.64
Sharp Transition Ratio	0.1
Transition Directionality	0.019
Mean Saturation	0.438
Saturation Variance	0.108
Low Saturation Ratio	0.405
Medium Saturation Ratio	0.257
High Saturation Ratio	0.338
Saturation Clustering	0.999
Hue Concentration	0.974
Complementary Balance	0.0
Analogous Dominance	1.0
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 (2026). G7 - Research on Harmony — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0969.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2026/03/g7-research-on-harmony_1yoy.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 · G7 dominant chord · piano studies · cycle of fifths · synesthetic explorations · acrylic painting · musical visualization · harmonic translation

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

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