

Nanopublication – Computational Image Analysis –
AQC0841

by Arnaud Quercy · G Major – Research on Harmony – Variation 8 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0841

K-means clustering analysis [3] (10 colors) performed on artwork G Major [1] – Research on Harmony – Variation 8 (AQC0841) [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]: 2379x3172 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		B4C68B	20.5	yellow-green	tan
2		C4D49F	19.3	yellow-green	silver
3		A3B47A	15.9	yellow-green	darkseagreen
4		8E9F67	11.3	yellow-green	gray
5		D7E2B7	10.2	yellow-green	palegoldenrod
6		9C691D	6.4	orange	burnt sienna
7		768651	6.2	yellow-green	dimgray
8		BA8B30	5.1	yellow-orange	peru
9		444538	2.6	yellow-green	darkslategray
10		25271A	2.5	yellow-green	very dark gray
11		FAF5D9	0.3	yellow	beige [Accent]
12		F8C6B7	0.3	red-orange	lightpink [Accent]

Color Families:

Family	%
yellow-green	88.5
orange	6.4
yellow-orange	5.1
yellow	0.3
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
FAF5D9	yellow	beige	14.3
F8C6B7	red-orange	lightpink	21.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.163
Mean Local Roughness	0.031
Roughness Uniformity	0.02
Edge Density	0.209
Mean Gradient Magnitude	0.256
Gradient Variance	0.058
Gradient Smoothness	0.056
Directional Coherence	0.006
Pattern Complexity	0.121
Pattern Repetition	1.0
Detail Frequency Ratio	0.623
Spatial Variation	0.089
Texture Consistency	0.619

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.659
Brightness Variance	0.163
Brightness Uniformity	0.752
Brightness Skewness	-1.122
Brightness Entropy	7.206
Rms Contrast	0.163
Michelson Contrast	1.0
Weber Contrast	0.458
Mean Local Contrast	0.033
Contrast Uniformity	0.402
Dynamic Range	1.0
Effective Dynamic Range	0.525
Shadow Percentage	4.948
Midtone Percentage	37.469
Highlight Percentage	57.583
Shadow Clipping	0.002
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.019
Medium Contrast	0.041
Coarse Contrast	0.063
Multiscale Contrast Ratio	0.296
Edge Contrast	0.256
Contrast Clustering	0.381

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.71
Color Clustering	0.517
Color Transition Smoothness	0.374
Transition Uniformity	0.63
Sharp Transition Ratio	0.1
Transition Directionality	0.007
Mean Saturation	0.347
Saturation Variance	0.034
Low Saturation Ratio	0.491
Medium Saturation Ratio	0.415
High Saturation Ratio	0.094
Saturation Clustering	0.999
Hue Concentration	0.962
Complementary Balance	0.0
Analogous Dominance	0.999
Temperature Bias	0.153

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). G Major - Research on Harmony - Variation 8 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0841.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/g-major-research-on-harmony-variation-8_9ba.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

G Major triad

synesthetic art

musical color translation

harmonic visualization

watercolor study

spread voicing

yellow-green tones

Synesthetic Explorations

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

7284c64b707b75df62c8c30bd20db938fbf769939bb6b5ab998c61026ff8028c

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