

Nanopublication – Computational Image Analysis –
AQC0896

by Arnaud Quercy · G Major – Research on Harmony – Variations 11 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0896

Computational image analysis [3] of artwork G Major [1] – Research on Harmony – Variations 11 (AQC0896) [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]: 1838x2757 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E69C5C	22.1	orange	sandybrown
2		EBA969	19.7	orange	darksalmon
3		ED7F31	19.6	orange	peru
4		BB9F28	14.0	yellow-orange	goldenrod
5		CBA935	12.1	yellow-orange	ochre
6		EB7009	6.8	orange	chocolate
7		C4BC5D	2.2	yellow	ochre
8		64462C	1.2	orange	dark brown
9		3B200D	1.2	orange	very dark orange
10		DFD8C9	1.1	yellow-orange	lightgray
11		842A11	0.3	red-orange	russet [Accent]
12		F3F3E3	0.3	yellow-green	white [Accent]

Color Families:

Family	%
orange	70.6
yellow-orange	27.2
yellow	2.2
red-orange	0.3
yellow-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
842A11	red-orange	russet	51.6
F3F3E3	yellow-green	white	8.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.09
Mean Local Roughness	0.013
Roughness Uniformity	0.017
Edge Density	0.024
Mean Gradient Magnitude	0.105
Gradient Variance	0.035
Gradient Smoothness	0.0
Directional Coherence	0.038
Pattern Complexity	0.115
Pattern Repetition	1.0
Detail Frequency Ratio	0.62
Spatial Variation	0.047
Texture Consistency	0.537

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.637
Brightness Variance	0.09
Brightness Uniformity	0.858
Brightness Skewness	-2.5
Brightness Entropy	6.066
Rms Contrast	0.09
Michelson Contrast	1.0
Weber Contrast	0.224
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	0.996
Effective Dynamic Range	0.196
Shadow Percentage	2.145
Midtone Percentage	54.646
Highlight Percentage	43.209
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.007
Medium Contrast	0.018
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.105
Contrast Clustering	0.463

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.775
Color Clustering	0.21
Color Transition Smoothness	0.734
Transition Uniformity	0.761
Sharp Transition Ratio	0.1
Transition Directionality	0.055
Mean Saturation	0.689
Saturation Variance	0.021
Low Saturation Ratio	0.012
Medium Saturation Ratio	0.463
High Saturation Ratio	0.524
Saturation Clustering	0.999
Hue Concentration	0.984
Complementary Balance	0.0
Analogous Dominance	1.0
Temperature Bias	0.99

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 - Variations 11 - Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0896.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/g-major-research-on-harmony-variations-11_i8w.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 explorations

acrylic on paper

harmonic relationships

musical visualization

color correspondence

spread voicing

contemporary synesthesia

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

7758af8b34f18e838d321f46e01c97566fc088f794ed03122f4ca979712f67e2

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