

Nanopublication – Computational Image Analysis – AQC0787

by Arnaud Quercy · G Major – Research on Harmony – Variation 2 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0787

Computational image analysis [3] of artwork G Major [1] – Research on Harmony – Variation 2 (AQC0787) [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 2026-02-04.

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]: 2370x3555 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		242020	20.0	gray	very dark gray
2		D5770F	19.0	orange	chocolate
3		C6985E	12.3	orange	ochre
4		BC977A	10.2	orange	rosybrown
5		CDAB8F	8.9	orange	tan
6		BE3B27	8.2	red-orange	firebrick
7		9E9485	7.4	yellow-orange	gray
8		A78A5F	6.2	yellow-orange	peru
9		98532A	5.3	orange	burnt sienna
10		98871F	2.6	yellow	darkgoldenrod
11		D1BDC1	0.3	red	silver [Accent]

Color Families:

Family	%
orange	55.7
gray	20.0
yellow-orange	13.5
red-orange	8.2
yellow	2.6
red	0.3

Accent Colors:

Hex	Family	Name	Chroma
D1BDC1	red	silver	8.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.193
Mean Local Roughness	0.008
Roughness Uniformity	0.011
Edge Density	0.018
Mean Gradient Magnitude	0.092
Gradient Variance	0.027
Gradient Smoothness	0.0
Directional Coherence	0.033
Pattern Complexity	0.11
Pattern Repetition	1.0
Detail Frequency Ratio	0.562
Spatial Variation	0.158
Texture Consistency	0.471

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.473
Brightness Variance	0.193
Brightness Uniformity	0.592
Brightness Skewness	-0.842
Brightness Entropy	6.872
Rms Contrast	0.193
Michelson Contrast	1.0
Weber Contrast	0.805
Mean Local Contrast	0.011
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.576
Shadow Percentage	20.593
Midtone Percentage	69.71
Highlight Percentage	9.697
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.004
Medium Contrast	0.013
Coarse Contrast	0.029
Multiscale Contrast Ratio	0.144
Edge Contrast	0.092
Contrast Clustering	0.529

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.777
Color Clustering	0.445
Color Transition Smoothness	0.755
Transition Uniformity	0.809
Sharp Transition Ratio	0.1
Transition Directionality	0.05
Mean Saturation	0.49
Saturation Variance	0.103
Low Saturation Ratio	0.294
Medium Saturation Ratio	0.358
High Saturation Ratio	0.348
Saturation Clustering	1.0
Hue Concentration	0.98
Complementary Balance	0.0
Analogous Dominance	0.998
Temperature Bias	0.993

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 (2024). G Major - Research on Harmony - Variation 2 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0787.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/g-major-research-on-harmony-variation-2_8qa.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

piano   tude translation

harmonic color relationships

acrylic wood panel

geometric color forms

Synesthetic Explorations

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

1584474c3338b4ef37c074a0788e659faf53a39e82721273df323fd8d3c2c7f

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