AQC0641

Nanopublication — Computational Image Analysis - AQC0641

by Arnaud Quercy · G minor - Research on Harmony - Variation 2 · 2024

Claim 1: Computational Image Analysis - AQC0641

> Computational image analysis [3] of artwork G minor - Research [1] on Harmony - Variation 2 (AQC0641) [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]: 1682x2523 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		EC8814	39.3	orange	darkorange
2		302E49	17.9	violet	dusty mauve
3		9B5B17	8.6	orange	burnt sienna
4		F3962C	8.5	orange	goldenrod
5		734429	7.3	orange	russet
6		44425D	6.1	violet	dusty mauve
7		17171A	5.3	black	black
8		A8703C	4.8	orange	burnt sienna
9		6E6C7C	1.7	violet	dusty mauve
10		D2C6C4	0.6	red-orange	silver
11		D8E1E9	0.3	blue	gainsboro [Accent]
12		B89976	0.3	yellow-orange	rosybrown [Accent]
13		582C37	0.3	red	darkslategray [Accent]

Color Families:

Family	%
orange	68.4
violet	25.7
black	5.3
red-orange	0.6
blue	0.3
yellow-orange	0.3
red	0.3

Accent Colors:

Hex	Family	Name	Chroma
D8E1E9	blue	gainsboro	5.4
B89976	yellow-orange	rosybrown	23.8
582C37	red	darkslategray	22.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.191
Mean Local Roughness	0.024
Roughness Uniformity	0.032
Edge Density	0.096
Mean Gradient Magnitude	0.191
Gradient Variance	0.092
Gradient Smoothness	0.0
Directional Coherence	0.018
Pattern Complexity	0.123
Pattern Repetition	1.0
Detail Frequency Ratio	0.653
Spatial Variation	0.16
Texture Consistency	0.28

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.442
Brightness Variance	0.191
Brightness Uniformity	0.568
Brightness Skewness	-0.388
Brightness Entropy	6.83
Rms Contrast	0.191
Michelson Contrast	1.0
Weber Contrast	0.708
Mean Local Contrast	0.026
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.51
Shadow Percentage	33.6
Midtone Percentage	63.6
Highlight Percentage	2.8
Shadow Clipping	0.041
Highlight Clipping	0.011
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.033
Coarse Contrast	0.051
Multiscale Contrast Ratio	0.26
Edge Contrast	0.191
Contrast Clustering	0.72

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.746
Color Clustering	0.612
Color Transition Smoothness	0.49
Transition Uniformity	0.353
Sharp Transition Ratio	0.1
Transition Directionality	0.021
Mean Saturation	0.694
Saturation Variance	0.066
Low Saturation Ratio	0.079
Medium Saturation Ratio	0.322
High Saturation Ratio	0.599
Saturation Clustering	0.997
Hue Concentration	0.508
Complementary Balance	0.034
Analogous Dominance	0.722
Temperature Bias	0.636

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 minor - Research on Harmony - Variation 2 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0641.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/g-minor-research-on-harmony-variation-2_75i.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

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

32d06c04ccedde55d3a6a9517e2488b6f8c77331ef27c4cccae-a9afe29489d52

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