

Nanopublication – Computational Image Analysis –
AQC0864

by Arnaud Quercy · G Minor – Research on Harmony – Variation 10 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0864

Computational image analysis [3] of artwork G Minor [1] – Research on Harmony – Variation 10 (AQC0864) [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 2025-12-09.

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]: 2245x2993 pixels. Analysis date: 2025-12-09.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E26308	21.2	orange	chocolate
2		EB923B	20.1	orange	peru
3		E88529	13.4	orange	goldenrod
4		B76344	12.4	orange	indianred
5		F09D4F	10.4	orange	sandybrown
6		C77553	8.8	orange	coral
7		A64F31	6.0	orange	burnt sienna
8		4F311F	3.1	orange	dark brown
9		795454	3.1	red-orange	dimgray
10		F1C78C	1.4	yellow-orange	burlywood
11		766081	0.3	red-violet	dusty mauve [Accent]
12		725B7F	0.3	violet	dusty mauve [Accent]

Color Families:

Family	%
orange	95.5
red-orange	3.1
yellow-orange	1.4
red-violet	0.3
violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
766081	red-violet	dusty mauve	21.9
725B7F	violet	dusty mauve	23.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.111
Mean Local Roughness	0.01
Roughness Uniformity	0.011
Edge Density	0.033
Mean Gradient Magnitude	0.096
Gradient Variance	0.015
Gradient Smoothness	0.0
Directional Coherence	0.021
Pattern Complexity	0.112
Pattern Repetition	1.0
Detail Frequency Ratio	0.599
Spatial Variation	0.057
Texture Consistency	0.699

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.547
Brightness Variance	0.111
Brightness Uniformity	0.797
Brightness Skewness	-0.683
Brightness Entropy	6.646
Rms Contrast	0.111
Michelson Contrast	0.93
Weber Contrast	0.371
Mean Local Contrast	0.012
Contrast Uniformity	0.052
Dynamic Range	0.941
Effective Dynamic Range	0.325
Shadow Percentage	3.99
Midtone Percentage	85.325
Highlight Percentage	10.685
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.005
Medium Contrast	0.015
Coarse Contrast	0.025
Multiscale Contrast Ratio	0.211
Edge Contrast	0.096
Contrast Clustering	0.301

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.755
Color Clustering	0.373
Color Transition Smoothness	0.754
Transition Uniformity	0.898
Sharp Transition Ratio	0.1
Transition Directionality	0.029
Mean Saturation	0.74
Saturation Variance	0.026
Low Saturation Ratio	0.015
Medium Saturation Ratio	0.371
High Saturation Ratio	0.614
Saturation Clustering	1.0
Hue Concentration	0.988
Complementary Balance	0.0
Analogous Dominance	0.996
Temperature Bias	0.998

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 Minor - Research on Harmony - Variation 10 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0864.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/g-minor-research-on-harmony-variation-10_9k8.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 minor harmony

synesthetic explorations

watercolor translation

musical visualization

geometric color forms

harmonic intervals

orange dominance

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

4d10245531430607765080ee8abc59c2bec651abcf6c4667412c8728779a4c9

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