

# Nanopublication — Computational Image Analysis - AQC0866

by Arnaud Quercy · G Minor - Research on Harmony - Variation 8 · 2025

## Claim 1: Computational Image Analysis - AQC0866

The artwork G Minor [1] - Research on Harmony - Variation 8 (AQC0866) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2025-12-09. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

### 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]: 2264x3019 pixels. Analysis date: 2025-12-09.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	EC9930	22.0	orange	goldenrod
2	8E6FCC	16.1	violet	mediumpurple
3	E47F1A	14.8	orange	chocolate
4	7959B8	11.5	violet	slateblue
5	A585E0	10.3	violet	mediumslateblue
6	F2AF4E	8.5	yellow-orange	sandybrown
7	562866	6.2	red-violet	darkslateblue
8	6B3C8F	5.2	violet	dimgray
9	472C28	3.4	red-orange	darkslategray
10	886059	2.1	red-orange	dimgray
11	A57E8C	0.3	red	dusty mauve [Accent]

### Color Families:

Family	%
violet	43.0
orange	36.9
yellow-orange	8.5
red-violet	6.2
red-orange	5.5
red	0.3

### Accent Colors:

Hex	Family Name	Chroma
A57E8C	red	dusty mauve 17.1

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.145
Mean Local Roughness	0.025

Metric	Value
Roughness Uniformity	0.014
Edge Density	0.167
Mean Gradient Magnitude	0.201
Gradient Variance	0.029
Gradient Smoothness	0.159
Directional Coherence	0.005
Pattern Complexity	0.121
Pattern Repetition	1.0
Detail Frequency Ratio	0.631
Spatial Variation	0.103
Texture Consistency	0.709

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.533
Brightness Variance	0.145
Brightness Uniformity	0.728
Brightness Skewness	-0.807
Brightness Entropy	7.089
Rms Contrast	0.145
Michelson Contrast	0.969
Weber Contrast	0.568
Mean Local Contrast	0.026
Contrast Uniformity	0.458
Dynamic Range	0.98
Effective Dynamic Range	0.482
Shadow Percentage	12.371
Midtone Percentage	71.029
Highlight Percentage	16.599
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.015
Medium Contrast	0.032
Coarse Contrast	0.046
Multiscale Contrast Ratio	0.317
Edge Contrast	0.201
Contrast Clustering	0.291

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.717
Color Clustering	0.31
Color Transition Smoothness	0.49
Transition Uniformity	0.806
Sharp Transition Ratio	0.1

Metric	Value
Transition Directionality	0.001
Mean Saturation	0.63
Saturation Variance	0.034
Low Saturation Ratio	0.022
Medium Saturation Ratio	0.558
High Saturation Ratio	0.42
Saturation Clustering	0.999
Hue Concentration	0.46
Complementary Balance	0.0
Analogous Dominance	0.506
Temperature Bias	0.517

## 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 8 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0866.html>

- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2025/01/g-minor-research-on-harmony-variation-8\\_910.html](https://artquamanima.com/en/artworks/2025/01/g-minor-research-on-harmony-variation-8_910.html)

- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h  
<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)

0df4647b60714e35449a7757d-  
c55870888ba71a74b23b1e069f41b449d48924a

**Artist** Arnaud Quercy

**Date** 2025

**Collection** Synesthetic Explorations

**Certificate** 20250125-0062

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**Version** 1

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