

# Nanopublication — Computational Image Analysis - AQC0744

by Arnaud Quercy · B Major - Research on Harmony - Variation 3 · 2024













## Claim 1: Computational Image Analysis - AQC0744

The artwork B Major [1] - Research on Harmony - Variation 3 (AQC0744) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. 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]: 2911x3881 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		3B454B	23.9 blue	darkslategray
2		9F82D0	18.0 violet	mediumpurple
3		DEDACF	15.0 yellow	gainsboro
4		262C36	13.1 blue-violet	very dark gray
5		765C9D	11.6 violet	blue gray
6		4A786D	5.7 green	dimgray
7		B4E699	5.5 yellow-green	palegreen
8		B2B9C4	3.1 blue-violet	silver
9		A6AA4F	2.3 yellow	ochre
10		72CD88	1.9 yellow-green	darkseagreen
11		B9DDE5	0.3 blue-green	powderblue [Accent]
12		978638	0.3 yellow-orange	olivedrab [Accent]

#### Color Families:

Family	%
violet	29.5
blue	23.9
yellow	17.4
blue-violet	16.1
yellow-green	7.4
green	5.7
blue-green	0.3
yellow-orange	0.3

#### Accent Colors:

Hex	Family	Name	Chroma
B9DDE5	blue-green	powderblue	12.8
978638	yellow-orange	olivedrab	43.1

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.241
Mean Local Roughness	0.016
Roughness Uniformity	0.016
Edge Density	0.068
Mean Gradient Magnitude	0.156
Gradient Variance	0.045
Gradient Smoothness	0.0
Directional Coherence	0.014
Pattern Complexity	0.111
Pattern Repetition	1.0
Detail Frequency Ratio	0.59
Spatial Variation	0.144
Texture Consistency	0.644

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.486
Brightness Variance	0.241
Brightness Uniformity	0.504
Brightness Skewness	0.268
Brightness Entropy	7.539
Rms Contrast	0.241
Michelson Contrast	1.0
Weber Contrast	0.764
Mean Local Contrast	0.02
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.706
Shadow Percentage	36.214
Midtone Percentage	38.692
Highlight Percentage	25.094
Shadow Clipping	0.004
Highlight Clipping	0.004
Tonal Balance	0.214
Fine Contrast	0.007
Medium Contrast	0.024
Coarse Contrast	0.043
Multiscale Contrast Ratio	0.173
Edge Contrast	0.156
Contrast Clustering	0.356

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.735
Color Clustering	0.807

Metric	Value
Color Transition Smoothness	0.581
Transition Uniformity	0.68
Sharp Transition Ratio	0.1
Transition Directionality	0.017
Mean Saturation	0.289
Saturation Variance	0.021
Low Saturation Ratio	0.49
Medium Saturation Ratio	0.505
High Saturation Ratio	0.005
Saturation Clustering	0.999
Hue Concentration	0.607
Complementary Balance	0.019
Analogous Dominance	0.708
Temperature Bias	-0.46

## 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). B Major - Research on Harmony - Variation 3 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0744.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/b-major-research-on-harmony-variation-3\\_89k.html](https://artquamanima.com/en/artworks/2024/01/b-major-research-on-harmony-variation-3_89k.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)

d5fe712c64c49775522b5710c81342941215c7b4e5-dac10f790c65e6c550ea12

**Artist** Arnaud Quercy

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