

# Nanopublication — Computational Image Analysis - AQC0856

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













## Claim 1: Computational Image Analysis - AQC0856

Computational image analysis [3] of artwork Db Minor [1] - Research on Harmony - Variation 8 (AQC0856) [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]: 2219x2959 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		C2C7CB 19.7	white	silver
2		EBCE91 15.9	yellow-orange	khaki
3		D4D5D3 14.4	white	lightgray
4		AEB8BF 12.3	blue	steel gray
5		93ABA3 10.4	green	steel gray
6		78A28C 7.8	yellow-green	lightslategray
7		B7BF8E 6.9	yellow-green	tan
8		5E8461 5.0	yellow-green	dimgray
9		31342D 4.1	gray	darkslategray
10		D4B058 3.5	yellow-orange	ochre
11		5D5B47 0.3	yellow	dark brown [Accent]
12		C28A63 0.3	orange	peru [Accent]

#### Color Families:

Family	%
white	34.1
yellow-green	19.7
yellow-orange	19.4
blue	12.3
green	10.4
gray	4.1
yellow	0.3
orange	0.3

#### Accent Colors:

Hex	Family Name	Chroma
5D5B47	yellow	dark brown 12.4
C28A63	orange	peru 33.6

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.148
Mean Local Roughness	0.012
Roughness Uniformity	0.016
Edge Density	0.032
Mean Gradient Magnitude	0.11
Gradient Variance	0.032
Gradient Smoothness	0.0
Directional Coherence	0.023
Pattern Complexity	0.117
Pattern Repetition	1.0
Detail Frequency Ratio	0.598
Spatial Variation	0.071
Texture Consistency	0.609

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.709
Brightness Variance	0.148
Brightness Uniformity	0.792
Brightness Skewness	-1.923
Brightness Entropy	6.753
Rms Contrast	0.148
Michelson Contrast	1.0
Weber Contrast	0.357
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.431
Shadow Percentage	4.172
Midtone Percentage	22.373
Highlight Percentage	73.455
Shadow Clipping	0.002
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.017
Coarse Contrast	0.031
Multiscale Contrast Ratio	0.21
Edge Contrast	0.11
Contrast Clustering	0.391

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.756
Color Clustering	0.595

Metric	Value
Color Transition Smoothness	0.722
Transition Uniformity	0.782
Sharp Transition Ratio	0.1
Transition Directionality	0.029
Mean Saturation	0.197
Saturation Variance	0.025
Low Saturation Ratio	0.713
Medium Saturation Ratio	0.286
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.622
Complementary Balance	0.04
Analogous Dominance	0.645
Temperature Bias	0.165

## 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). Db Minor - Research on Harmony - Variation 8 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0856.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2025/01/db-minor-research-on-harmony-variation-8\\_9h4.html](https://artquamanima.com/en/artworks/2025/01/db-minor-research-on-harmony-variation-8_9h4.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)

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**Artist** Arnaud Quercy

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