

Nanopublication — Computational Image Analysis - AQC0726

by Arnaud Quercy · Db Minor - Research on Harmony - Variation 5 · 2024
















Claim 1: Computational Image Analysis - AQC0726

The artwork Db Minor [1] - Research on Harmony - Variation 5 (AQC0726) [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]: 3024x4032 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	 D1B496	18.4	orange	tan
2	 363F5A	17.5	blue-violet	grayish purple
3	 66A4AE	12.8	blue-green	cadetblue
4	 E6CB94	10.6	yellow-orange	burlywood
5	 2F292C	10.4	gray	very dark gray
6	 C9B075	8.8	yellow-orange	ochre
7	 E2DBD0	7.6	yellow-orange	gainsboro
8	 C9C7C1	6.9	white	silver
9	 B29720	3.8	yellow-orange	darkgoldenrod
10	 425F8A	3.0	blue-violet	grayish purple
11	 2C1109	0.3	red-orange	very dark red [Accent]
12	 09161C	0.3	blue	black [Accent]
13	 8D9D49	0.3	yellow-green	olivedrab [Accent]
14	 C48699	0.3	red	rosybrown [Accent]
15	 0D143A	0.3	violet	very dark purple [Accent]

Color Families:

Family	%
yellow-orange	30.9
blue-violet	20.5
orange	18.4
blue-green	12.8
gray	10.4
white	6.9
red-orange	0.3
blue	0.3
yellow-green	0.3

Family	%
red	0.3
violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
2C1109	red-orange	very dark red	15.8
09161C	blue	black	7.3
8D9D49	yellow-green	olivedrab	45.2
C48699	red	rosybrown	27.0
0D143A	violet	very dark purple	28.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.243
Mean Local Roughness	0.021
Roughness Uniformity	0.021
Edge Density	0.1
Mean Gradient Magnitude	0.166
Gradient Variance	0.051
Gradient Smoothness	0.0
Directional Coherence	0.016
Pattern Complexity	0.121
Pattern Repetition	1.0
Detail Frequency Ratio	0.636
Spatial Variation	0.182
Texture Consistency	0.507

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.57
Brightness Variance	0.243
Brightness Uniformity	0.574
Brightness Skewness	-0.536
Brightness Entropy	7.258
Rms Contrast	0.243
Michelson Contrast	1.0
Weber Contrast	0.744
Mean Local Contrast	0.023
Contrast Uniformity	0.028
Dynamic Range	1.0
Effective Dynamic Range	0.686
Shadow Percentage	28.913
Midtone Percentage	20.688
Highlight Percentage	50.399
Shadow Clipping	0.004
Highlight Clipping	0.01
Tonal Balance	0.0

Metric	Value
Fine Contrast	0.011
Medium Contrast	0.028
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.278
Edge Contrast	0.166
Contrast Clustering	0.493

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.752
Color Clustering	0.697
Color Transition Smoothness	0.577
Transition Uniformity	0.657
Sharp Transition Ratio	0.1
Transition Directionality	0.02
Mean Saturation	0.327
Saturation Variance	0.034
Low Saturation Ratio	0.453
Medium Saturation Ratio	0.51
High Saturation Ratio	0.037
Saturation Clustering	0.999
Hue Concentration	0.167
Complementary Balance	0.269
Analogous Dominance	0.56
Temperature Bias	0.158

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). Db Minor - Research on Harmony - Variation 5 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0726.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/db-minor-research-on-harmony-variation-5_82k.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)

c0c32b65899b5a5d0eaa83322ff7f0cc6c12633b38195458904d-ba1b55f46716

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
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