

Nanopublication — Computational Image Analysis - AQC0902

by Arnaud Quercy · Db Major - Research on Harmony - Variations 13 · 2025

Claim 1: Computational Image Analysis - AQC0902

Analysis record [3]: Db Major [1] - Research on Harmony - Variations 13 (AQC0902) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 2025-12-11.

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]: 2111x2111 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		70CFE2	17.5	blue-green	skyblue
2		675E52	15.9	yellow-orange	dimgray
3		6488BA	13.6	blue-violet	grayish purple
4		797165	13.6	yellow-orange	dimgray
5		7D96C0	11.4	blue-violet	lightslategray
6		CB9881	8.8	orange	rosybrown
7		61AEDF	8.2	blue	cornflowerblue
8		F3E7C8	4.9	yellow-orange	bisque
9		9BAED1	4.3	blue-violet	lightsteelblue
10		2A3034	1.7	gray	darkslategray
11		2F1611	0.3	red-orange	very dark gray [Accent]
12		CFBBBB	0.3	red	silver [Accent]
13		95B0A7	0.3	green	steel gray [Accent]

Color Families:

Family	%
yellow-orange	34.4
blue-violet	29.4
blue-green	17.5
orange	8.8
blue	8.2
gray	1.7
red-orange	0.3
red	0.3
green	0.3

Accent Colors:

Hex	Family	Name	Chroma
2F1611	red-orange	very dark gray	14.2
CFBBBB	red	silver	8.1

Hex	Family	Name	Chroma
95B0A7	green	steel gray	11.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.15
Mean Local Roughness	0.022
Roughness Uniformity	0.022
Edge Density	0.108
Mean Gradient Magnitude	0.178
Gradient Variance	0.055
Gradient Smoothness	0.0
Directional Coherence	0.008
Pattern Complexity	0.127
Pattern Repetition	1.0
Detail Frequency Ratio	0.642
Spatial Variation	0.105
Texture Consistency	0.58

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.567
Brightness Variance	0.15
Brightness Uniformity	0.736
Brightness Skewness	0.073
Brightness Entropy	7.101
Rms Contrast	0.15
Michelson Contrast	1.0
Weber Contrast	0.476
Mean Local Contrast	0.024
Contrast Uniformity	0.047
Dynamic Range	1.0
Effective Dynamic Range	0.471
Shadow Percentage	2.997
Midtone Percentage	69.874
Highlight Percentage	27.129
Shadow Clipping	0.001
Highlight Clipping	0.002
Tonal Balance	0.0
Fine Contrast	0.011
Medium Contrast	0.03
Coarse Contrast	0.043
Multiscale Contrast Ratio	0.264
Edge Contrast	0.178
Contrast Clustering	0.42

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.747
Color Clustering	0.682
Color Transition Smoothness	0.543
Transition Uniformity	0.626
Sharp Transition Ratio	0.1
Transition Directionality	0.011
Mean Saturation	0.351
Saturation Variance	0.024
Low Saturation Ratio	0.424
Medium Saturation Ratio	0.574
High Saturation Ratio	0.002
Saturation Clustering	0.999
Hue Concentration	0.368
Complementary Balance	0.309
Analogous Dominance	0.69
Temperature Bias	-0.381

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 Major - Research on Harmony - Variations 13 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0902.html>
- [2] Quercy, A. (2025). Db Major - Research on Harmony - Variations 13 - Gallery. https://artquamanima.com/en/artworks/2025/11/db-major-research-on-harmony-variations-13_ib2.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 <https://multimodal.institute/en/publications/2025/10/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)

55e7d103886ec583c177fae3a452f9ad50e01b-b25c8d86600717d450722e4143

Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20251123-0099
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