

Nanopublication — Computational Image Analysis - AQC0804

by Arnaud Quercy · Bb Octaves - Reflexions 30 · 2024

Claim 1: Computational Image Analysis - AQC0804

Computational image analysis [3] of artwork Bb Octaves [1] - Reflexions 30 (AQC0804) [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]: 2384x3576 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	92929E	16.1	violet	lightslategray
2	A4A1A5	15.4	gray	steel gray
3	C6C4B8	15.3	yellow	silver
4	C0C6CB	13.7	white	lightgray
5	848493	12.6	violet	dusty mauve
6	B6B6B3	10.9	gray	steel gray
7	796582	5.1	red-violet	dusty mauve
8	5B555E	4.3	red-violet	dusty mauve
9	5E7A80	3.6	blue-green	blue gray
10	36363B	2.9	gray	dusty mauve

Color Families:

Family	%
gray	29.2
violet	28.8
yellow	15.3
white	13.7
red-violet	9.5
blue-green	3.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.143
Mean Local Roughness	0.01
Roughness Uniformity	0.011
Edge Density	0.03
Mean Gradient Magnitude	0.089
Gradient Variance	0.018
Gradient Smoothness	0.0

Metric	Value
Directional Coherence	0.061
Pattern Complexity	0.119
Pattern Repetition	1.0
Detail Frequency Ratio	0.601
Spatial Variation	0.101
Texture Consistency	0.46

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.62
Brightness Variance	0.143
Brightness Uniformity	0.77
Brightness Skewness	-0.851
Brightness Entropy	6.863
Rms Contrast	0.143
Michelson Contrast	1.0
Weber Contrast	0.455
Mean Local Contrast	0.011
Contrast Uniformity	0.0
Dynamic Range	0.945
Effective Dynamic Range	0.443
Shadow Percentage	4.459
Midtone Percentage	53.452
Highlight Percentage	42.088
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.014
Coarse Contrast	0.024
Multiscale Contrast Ratio	0.235
Edge Contrast	0.089
Contrast Clustering	0.54

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.749
Color Clustering	0.915
Color Transition Smoothness	0.77
Transition Uniformity	0.874
Sharp Transition Ratio	0.1
Transition Directionality	0.076
Mean Saturation	0.101
Saturation Variance	0.006
Low Saturation Ratio	0.968
Medium Saturation Ratio	0.032

Metric	Value
High Saturation Ratio	0.0
Saturation Clustering	1.0
Hue Concentration	0.708
Complementary Balance	0.001
Analogous Dominance	0.625
Temperature Bias	-0.377

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). Bb Octaves - Reflexions 30 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0804.html>

[2] Quercy, A. (2024). Bb Octaves - Reflexions 30 - Gallery. https://artquamanima.com/en/artworks/2024/01/bb-octaves-reflexions-30_8ww.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)

9c0c4c7a651911be1f7807ec741f60be59d182aa421d5d45c7a511ce-b784af34

Artist Arnaud Quercy

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