AQC0613

Nanopublication — Computational Image Analysis - AQC0613

by Arnaud Quercy · Bb minor - Research on Harmony - Variation 1 · 2024

Claim 1: Computational Image Analysis - AQC0613

> K-means clustering analysis [3] (10 colors) performed on artwork Bb minor - Research [1] on Harmony - Variation 1 (AQC0613) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 2636x3515 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		6C2F46	27.3	red	dusty mauve
2		60DCD8	23.9	green	mediumturquoise
3		58C2C2	16.1	blue-green	mediumaquamarine
4		7F4760	11.7	red	dusty mauve
5		CDBFBA	5.0	orange	silver
6		997288	4.6	red-violet	dusty mauve
7		4B2C62	4.0	violet	dusty mauve
8		8BEBEA	3.6	blue-green	skyblue
9		2E1832	1.9	red-violet	very dark purple
10		E8E1E0	1.9	white	gainsboro
11		06121A	0.3	blue	black [Accent]
12		060D17	0.3	blue-violet	black [Accent]

Color Families:

Family	%
red	39.1
green	23.9
blue-green	19.7
red-violet	6.4
orange	5.0
violet	4.0
white	1.9
blue	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
06121A	blue	black	7.3
060D17	blue-violet	black	6.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.221
Mean Local Roughness	0.031
Roughness Uniformity	0.038
Edge Density	0.128
Mean Gradient Magnitude	0.236
Gradient Variance	0.124
Gradient Smoothness	0.0
Directional Coherence	0.031
Pattern Complexity	0.127
Pattern Repetition	1.0
Detail Frequency Ratio	0.661
Spatial Variation	0.182
Texture Consistency	0.391

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.509
Brightness Variance	0.221
Brightness Uniformity	0.566
Brightness Skewness	-0.046
Brightness Entropy	7.182
Rms Contrast	0.221
Michelson Contrast	1.0
Weber Contrast	0.675
Mean Local Contrast	0.032
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.576
Shadow Percentage	36.394
Midtone Percentage	26.279
Highlight Percentage	37.328
Shadow Clipping	0.003
Highlight Clipping	0.018
Tonal Balance	0.0
Fine Contrast	0.018
Medium Contrast	0.04
Coarse Contrast	0.06
Multiscale Contrast Ratio	0.305
Edge Contrast	0.236
Contrast Clustering	0.609

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.754
Color Clustering	0.69

Metric	Value
Color Transition Smoothness	0.403
Transition Uniformity	0.209
Sharp Transition Ratio	0.1
Transition Directionality	0.043
Mean Saturation	0.498
Saturation Variance	0.021
Low Saturation Ratio	0.11
Medium Saturation Ratio	0.879
High Saturation Ratio	0.011
Saturation Clustering	0.999
Hue Concentration	0.238
Complementary Balance	0.004
Analogous Dominance	0.482
Temperature Bias	-0.018

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 minor - Research on Harmony - Variation 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0613.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/bb-minor-research-on-harmony-variation-1_6um.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)

9ca45ef3123701f275b73e026bed6bbb0116d45b62c6d573c5e-b24aba5330407

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