

Nanopublication — Computational Image Analysis - AQC0567

by Arnaud Quercy · Bird, Jam Blues - July- 1952 · 2024

Claim 1: Computational Image Analysis - AQC0567

Computational image analysis [3] of artwork Bird [1], Jam Blues - July- 1952 (AQC0567) [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]: 1536x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	C1C2BF	25.6	gray	silver
2	B0B3B0	23.4	gray	steel gray
3	D2D2CE	16.8	white	lightgray
4	9EA09E	16.2	gray	steel gray
5	82817B	3.7	gray	gray
6	5E5C4F	3.4	yellow	dimgray
7	363A38	3.4	gray	darkslategray
8	B19253	2.9	yellow-orange	peru
9	947635	2.5	yellow-orange	burnt sienna
10	181711	2.0	black	black
11	193256	0.3	blue-violet	grayish purple [Accent]
12	395B73	0.3	blue	grayish purple [Accent]
13	845817	0.3	orange	russet [Accent]
14	B9BC87	0.3	yellow-green	tan [Accent]

Color Families:

Family	%
gray	72.3
white	16.8
yellow-orange	5.4
yellow	3.4
black	2.0
blue-violet	0.3
blue	0.3
orange	0.3
yellow-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
193256	blue-violet	grayish purple	25.3
395B73	blue	grayish purple	18.7
845817	orange	russet	43.7
B9BC87	yellow-green	tan	28.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.163
Mean Local Roughness	0.016
Roughness Uniformity	0.014
Edge Density	0.083
Mean Gradient Magnitude	0.156
Gradient Variance	0.023
Gradient Smoothness	0.023
Directional Coherence	0.012
Pattern Complexity	0.113
Pattern Repetition	1.0
Detail Frequency Ratio	0.603
Spatial Variation	0.083
Texture Consistency	0.552

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.668
Brightness Variance	0.163
Brightness Uniformity	0.756
Brightness Skewness	-1.773
Brightness Entropy	6.955
Rms Contrast	0.163
Michelson Contrast	1.0
Weber Contrast	0.447
Mean Local Contrast	0.018
Contrast Uniformity	0.268
Dynamic Range	1.0
Effective Dynamic Range	0.557
Shadow Percentage	6.424
Midtone Percentage	28.032
Highlight Percentage	65.544
Shadow Clipping	0.024
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.023
Coarse Contrast	0.039
Multiscale Contrast Ratio	0.217
Edge Contrast	0.156

Metric	Value
Contrast Clustering	0.448

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.722
Color Clustering	0.8
Color Transition Smoothness	0.608
Transition Uniformity	0.843
Sharp Transition Ratio	0.1
Transition Directionality	0.015
Mean Saturation	0.092
Saturation Variance	0.027
Low Saturation Ratio	0.906
Medium Saturation Ratio	0.08
High Saturation Ratio	0.014
Saturation Clustering	0.999
Hue Concentration	0.727
Complementary Balance	0.111
Analogous Dominance	0.856
Temperature Bias	0.668

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). Bird, Jam Blues - July- 1952 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0567.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/bird-jam-blues-july-1952_6cq.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)

05c196c7751d8d4fabe5fb0ceb0dba3f25f9e057c8d1b57892b-ba7265a60b015

Artist	Arnaud Quercy
Date	2024
Collection	Untamed Creations
Certificate	20240311-0063
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