AQC0511

Nanopublication — Computational Image Analysis - AQC0511

by Arnaud Quercy · The Cat Of Istanbul - Variations 3 · 2024

Claim 1: Computational Image Analysis - AQC0511

> Computational image analysis [3] of artwork The [1] Cat Of Istanbul - Variations 3 (AQC0511) [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]: 1364x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D2BF9D	12.8	yellow-orange	tan
2		7E5F40	12.5	orange	burnt sienna
3		543F2A	11.2	orange	dark brown
4		947E64	10.9	yellow-orange	gray
5		8F4111	10.7	orange	russet
6		E6D6BB	10.1	yellow-orange	wheat
7		C9A36C	9.1	yellow-orange	ochre
8		23170E	8.9	orange	black
9		A89C91	8.1	orange	rosybrown
10		CA7C3C	5.7	orange	peru
11		FDF9EE	0.3	yellow	white [Accent]
12		8F96B9	0.3	blue-violet	steel gray [Accent]

Color Families:

Family	%
orange	57.1
yellow-orange	42.9
yellow	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
FDF9EE	yellow	white	6.1
8F96B9	blue-violet	steel gray	19.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.228
Mean Local Roughness	0.036
Roughness Uniformity	0.019
Edge Density	0.247
Mean Gradient Magnitude	0.285
Gradient Variance	0.059
Gradient Smoothness	0.145
Directional Coherence	0.007
Pattern Complexity	0.123
Pattern Repetition	1.0
Detail Frequency Ratio	0.63
Spatial Variation	0.122
Texture Consistency	0.84

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.504
Brightness Variance	0.228
Brightness Uniformity	0.548
Brightness Skewness	-0.134
Brightness Entropy	7.769
Rms Contrast	0.228
Michelson Contrast	1.0
Weber Contrast	0.752
Mean Local Contrast	0.037
Contrast Uniformity	0.488
Dynamic Range	1.0
Effective Dynamic Range	0.737
Shadow Percentage	26.044
Midtone Percentage	44.735
Highlight Percentage	29.221
Shadow Clipping	0.03
Highlight Clipping	0.0
Tonal Balance	0.498
Fine Contrast	0.021
Medium Contrast	0.046
Coarse Contrast	0.064
Multiscale Contrast Ratio	0.332
Edge Contrast	0.285
Contrast Clustering	0.16

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.667
Color Clustering	0.687
Color Transition Smoothness	0.264
Transition Uniformity	0.587
Sharp Transition Ratio	0.1

Metric	Value
Transition Directionality	0.006
Mean Saturation	0.439
Saturation Variance	0.068
Low Saturation Ratio	0.373
Medium Saturation Ratio	0.436
High Saturation Ratio	0.191
Saturation Clustering	0.997
Hue Concentration	0.981
Complementary Balance	0.005
Analogous Dominance	0.995
Temperature Bias	0.99

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). The Cat Of Istanbul - Variations 3 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0511.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/the-cat-of-istanbul-variations-3_5qy.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 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)

3bac8e3a9cba4a038757410baebcfdb3f1d5afd490f8ad78533d492604326f-b7

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