AQC0433

Nanopublication — Computational Image Analysis - AQC0433

by Arnaud Quercy · Sir John Falstaff · 2022

Claim 1: Computational Image Analysis - AQC0433

> The artwork Sir [1] John Falstaff (AQC0433) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

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		DDB299	18.2	orange	tan
2		C99B82	17.6	orange	rosybrown
3		B68467	14.3	orange	peru
4		A36A47	11.2	orange	burnt sienna
5		ECCAB5	10.7	orange	wheat
6		874D2E	9.1	orange	burnt sienna
7		1F1510	5.7	red-orange	black
8		582F21	5.2	orange	russet
9		7E7C73	4.1	yellow	gray
10		495253	3.9	gray	darkslategray
11		193648	0.3	blue-violet	grayish purple [Accent]
12		C18D38	0.3	yellow-orange	peru [Accent]
13		19394B	0.3	blue	grayish purple [Accent]
14		91A6A8	0.3	blue-green	steel gray [Accent]

Color Families:

Family	%
orange	86.3
red-orange	5.7
yellow	4.1
gray	3.9
blue-violet	0.3
yellow-orange	0.3
blue	0.3
blue-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
193648	blue-violet	grayish purple	15.5
C18D38	yellow-orange	peru	52.2
19394B	blue	grayish purple	15.8
91A6A8	blue-green	steel gray	8.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.207
Mean Local Roughness	0.057
Roughness Uniformity	0.039
Edge Density	0.301
Mean Gradient Magnitude	0.428
Gradient Variance	0.161
Gradient Smoothness	0.063
Directional Coherence	0.002
Pattern Complexity	0.12
Pattern Repetition	1.0
Detail Frequency Ratio	0.669
Spatial Variation	0.087
Texture Consistency	0.776

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.553
Brightness Variance	0.207
Brightness Uniformity	0.626
Brightness Skewness	-0.645
Brightness Entropy	7.608
Rms Contrast	0.207
Michelson Contrast	1.0
Weber Contrast	0.683
Mean Local Contrast	0.057
Contrast Uniformity	0.34
Dynamic Range	1.0
Effective Dynamic Range	0.694
Shadow Percentage	15.685
Midtone Percentage	48.381
Highlight Percentage	35.934
Shadow Clipping	0.032
Highlight Clipping	0.0
Tonal Balance	0.303
Fine Contrast	0.033
Medium Contrast	0.071
Coarse Contrast	0.092
Multiscale Contrast Ratio	0.359
Edge Contrast	0.428
Contrast Clustering	0.224

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.669
Color Clustering	0.745
Color Transition Smoothness	0.0
Transition Uniformity	0.0
Sharp Transition Ratio	0.1
Transition Directionality	0.002
Mean Saturation	0.409
Saturation Variance	0.036
Low Saturation Ratio	0.291
Medium Saturation Ratio	0.621
High Saturation Ratio	0.089
Saturation Clustering	0.994
Hue Concentration	0.929
Complementary Balance	0.031
Analogous Dominance	0.967
Temperature Bias	0.934

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 (2022). Sir John Falstaff — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0433.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2022/01/sir-john-falstaff_4wm.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)

`defa2aa6e82af73eae7650d37bf6856513d3cb43e035893539ecf4c55ac91e-f7`

Artist	Arnaud Quercy
Date	2022
Collection	Spells and Magic
Certificate	20231231-0019
Asset code	AQC0433
Version	1
Published	2026-04-09

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-04-09

Persistent URI: https://multimodal.institute/en/nanopubs/2026/02/AQC0433-computational-image-analysis-aqc0433.pdf