

Nanopublication – Computational Image Analysis – AQC0617

by Arnaud Quercy · Promenade aux jardins du Luxembourg – Variation 3 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0617

Computational image analysis [3] of artwork Promenade [1] aux jardins du Luxembourg – Variation 3 (AQC0617) [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]: 2029x2705 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E2D5C7	25.5	yellow-orange	lightgray
2		C0C2BB	12.1	gray	silver
3		E1BE92	11.7	yellow-orange	burlywood
4		A1ABA7	10.3	gray	steel gray
5		B79770	8.8	yellow-orange	rosybrown
6		738C95	8.6	blue	lightslategray
7		566A72	7.4	blue	dimgray
8		897C42	5.7	yellow	olivedrab
9		464C35	5.3	yellow-green	darkslategray
10		140F0C	4.6	black	black
11		BE5B34	0.3	orange	burnt sienna [Accent]
12		83BAC4	0.3	blue-green	mediumaquamarine [Accent]
13		223848	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
yellow-orange	46.1
gray	22.4
blue	15.9
yellow	5.7
yellow-green	5.3
black	4.6
orange	0.3
blue-green	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
BE5B34	orange	burnt sienna	54.5
83BAC4	blue-green	mediumaquamarine	18.6
223848	blue-violet	grayish purple	13.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.213
Mean Local Roughness	0.029
Roughness Uniformity	0.026
Edge Density	0.159
Mean Gradient Magnitude	0.24
Gradient Variance	0.096
Gradient Smoothness	0.0
Directional Coherence	0.012
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.615
Spatial Variation	0.092
Texture Consistency	0.808

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.64
Brightness Variance	0.213
Brightness Uniformity	0.667
Brightness Skewness	-1.081
Brightness Entropy	7.382
Rms Contrast	0.213
Michelson Contrast	1.0
Weber Contrast	0.606
Mean Local Contrast	0.032
Contrast Uniformity	0.151
Dynamic Range	1.0
Effective Dynamic Range	0.671
Shadow Percentage	9.699
Midtone Percentage	34.269
Highlight Percentage	56.032
Shadow Clipping	0.074
Highlight Clipping	0.0
Tonal Balance	0.034
Fine Contrast	0.016
Medium Contrast	0.04
Coarse Contrast	0.061
Multiscale Contrast Ratio	0.256
Edge Contrast	0.24
Contrast Clustering	0.192

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.686
Color Clustering	0.828
Color Transition Smoothness	0.389
Transition Uniformity	0.328
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.246
Saturation Variance	0.037
Low Saturation Ratio	0.657
Medium Saturation Ratio	0.311
High Saturation Ratio	0.031
Saturation Clustering	0.997
Hue Concentration	0.458
Complementary Balance	0.207
Analogous Dominance	0.704
Temperature Bias	0.345

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). Promenade aux jardins du Luxembourg - Variation 3 - Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0617.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/promenade-aux-jardins-du-luxembourg-variation-3_6w6.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>

WHERE THIS WORK LIVES

THEMATIC ELEMENTS

abstract watercolor

geometric forms

Luxembourg Gardens

yellow-orange tones

blue-gray structures

City of Lights collection

architectural abstraction

garden interpretation

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

0d04b5800ea1df6f049bb5a9a8ed9c527574a6a62f96f5e3cf0acb2bb9b2e733

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Artist

Arnaud Quercy

Date

2024

Collection

City of Lights, Shadows of Thoughts

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1

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