

Nanopublication — Computational Image Analysis - AQC0842

by Arnaud Quercy · G# Diminished - Research on Harmony · 2025

Claim 1: Computational Image Analysis - AQC0842

Computational image analysis [3] of artwork G# Diminished [1] - Research on Harmony (AQC0842) [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]: 2434x3245 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D5DBAE	15.8	yellow-green	palegoldenrod
2	BBC0CE	15.8	blue-violet	silver
3	9B9C96	14.2	gray	steel gray
4	C9CDD8	14.1	blue-violet	lightgray
5	C7D097	13.8	yellow-green	tan
6	B1B1A6	11.7	yellow	steel gray
7	838584	6.7	gray	gray
8	9BA8CF	5.0	blue-violet	lightsteelblue
9	2C2E29	1.6	gray	very dark gray
10	B37A19	1.4	yellow-orange	darkgoldenrod
11	7182C1	0.3	violet	dusty mauve [Accent]

Color Families:

Family	%
blue-violet	34.9
yellow-green	29.5
gray	22.5
yellow	11.7
yellow-orange	1.4
violet	0.3

Accent Colors:

Hex	Family Name	Chroma
7182C1	violet	dusty mauve 36.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.121
Mean Local Roughness	0.014

Metric	Value
Roughness Uniformity	0.018
Edge Density	0.049
Mean Gradient Magnitude	0.126
Gradient Variance	0.036
Gradient Smoothness	0.0
Directional Coherence	0.019
Pattern Complexity	0.11
Pattern Repetition	1.0
Detail Frequency Ratio	0.615
Spatial Variation	0.08
Texture Consistency	0.584

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.719
Brightness Variance	0.121
Brightness Uniformity	0.831
Brightness Skewness	-1.795
Brightness Entropy	6.594
Rms Contrast	0.121
Michelson Contrast	1.0
Weber Contrast	0.316
Mean Local Contrast	0.016
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.333
Shadow Percentage	1.538
Midtone Percentage	26.539
Highlight Percentage	71.923
Shadow Clipping	0.006
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.008
Medium Contrast	0.02
Coarse Contrast	0.034
Multiscale Contrast Ratio	0.223
Edge Contrast	0.126
Contrast Clustering	0.416

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.737
Color Clustering	0.335
Color Transition Smoothness	0.685
Transition Uniformity	0.756
Sharp Transition Ratio	0.1

Metric	Value
Transition Directionality	0.024
Mean Saturation	0.144
Saturation Variance	0.017
Low Saturation Ratio	0.913
Medium Saturation Ratio	0.073
High Saturation Ratio	0.014
Saturation Clustering	1.0
Hue Concentration	0.671
Complementary Balance	0.028
Analogous Dominance	0.832
Temperature Bias	-0.084

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 (2025). *G# Diminished - Research on Harmony* — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0842.html>

- [2] Quercy, A. (2025). *Untitled - Gallery*. https://artquamanima.com/en/artworks/2025/01/g-diminished-research-on-harmony_9bo.html

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

5248c0da74e363d07f6add14214529a8031b0820fab83bd0e36b26-dec1a5a4a7

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