

Nanopublication – Computational Image Analysis –
AQC0853

by Arnaud Quercy · D Major – Research on Harmony – Variation 13 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0853

The artwork D Major [1] – Research on Harmony – Variation 13 (AQC0853) [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]: 2226x2968 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E2C5A5	18.2	yellow-orange	burlywood
2		DDBA8F	16.9	yellow-orange	tan
3		D7DCDB	15.8	white	gainsboro
4		D0CDC4	14.0	yellow-orange	lightgray
5		C8BCA8	10.5	yellow-orange	silver
6		BBA78C	7.3	yellow-orange	rosybrown
7		508482	6.2	green	blue gray
8		729C8C	4.8	green	lightslategray
9		323737	3.7	gray	darkslategray
10		AB8864	2.6	orange	peru
11		7F5E70	0.3	red-violet	dusty mauve [Accent]
12		396A55	0.3	yellow-green	darkslategray [Accent]
13		5A98AE	0.3	blue	cadetblue [Accent]

Color Families:

Family	%
yellow-orange	66.9
white	15.8
green	11.1
gray	3.7
orange	2.6
red-violet	0.3
yellow-green	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
7F5E70	red-violet	dusty mauve	17.7
396A55	yellow-green	darkslategray	23.1
5A98AE	blue	cadetblue	22.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.148
Mean Local Roughness	0.013
Roughness Uniformity	0.015
Edge Density	0.041
Mean Gradient Magnitude	0.113
Gradient Variance	0.028
Gradient Smoothness	0.0
Directional Coherence	0.013
Pattern Complexity	0.115
Pattern Repetition	1.0
Detail Frequency Ratio	0.599
Spatial Variation	0.079
Texture Consistency	0.632

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.725
Brightness Variance	0.148
Brightness Uniformity	0.795
Brightness Skewness	-1.947
Brightness Entropy	6.63
Rms Contrast	0.148
Michelson Contrast	1.0
Weber Contrast	0.41
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.435
Shadow Percentage	3.594
Midtone Percentage	16.783
Highlight Percentage	79.622
Shadow Clipping	0.0
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.007
Medium Contrast	0.018
Coarse Contrast	0.031
Multiscale Contrast Ratio	0.218
Edge Contrast	0.113
Contrast Clustering	0.368

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.747
Color Clustering	0.672
Color Transition Smoothness	0.716
Transition Uniformity	0.814
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.218
Saturation Variance	0.019
Low Saturation Ratio	0.68
Medium Saturation Ratio	0.319
High Saturation Ratio	0.0
Saturation Clustering	1.0
Hue Concentration	0.675
Complementary Balance	0.013
Analogous Dominance	0.799
Temperature Bias	0.599

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). D Major - Research on Harmony - Variation 13 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0853.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/d-major-research-on-harmony-variation-13_9fy.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

chromesthetic mapping

D Major chord

synesthetic art

watercolor harmony

musical color translation

yellow-orange dominance

harmonic intervals

Synesthetic Explorations

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

2b1a6e65598566f16655cd31e44982ef64707b681404f74e539496c8a9d90388

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