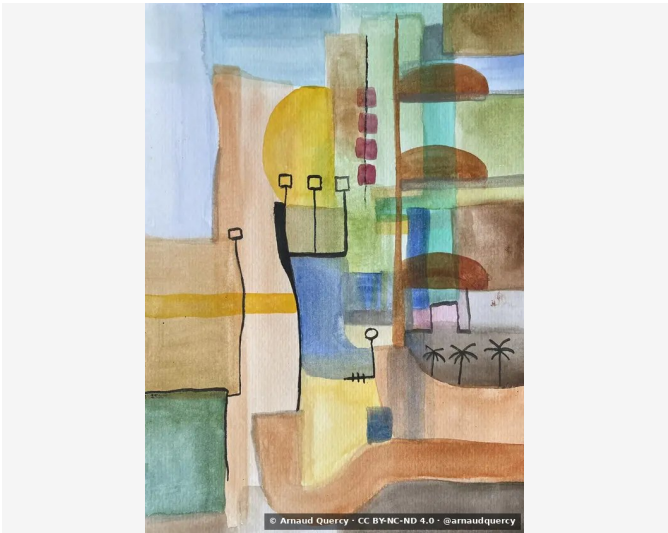


Nanopublication – Computational Image Analysis –  
AQC0450

by Arnaud Quercy · The Sunshine State · 2023



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0450

K-means clustering (10 colors) performed on artwork The Sunshine State (AQC0450) <sup>[1]</sup> by Arnaud Quercy <sup>[2]</sup> on 2025-10-03, according to IDS-CMP-2025 <sup>[3]</sup>. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

CONTEXT

Analysis performed according to IDS-CMP-2025 <sup>[3]</sup> includes four metric categories: (a) Color distribution via k-means (10 colors), (b) Texture analysis using Haralick features, (c) Brightness and contrast measurements, (d) Spatial pattern characterization. Source image: 1464x2048 pixels. Analysis date: 2025-10-03.

A) COLOR ANALYSIS

| Rank | Color | Hex    | %    | Family        | Name                    |
|------|-------|--------|------|---------------|-------------------------|
| 1    |       | C8AE84 | 17.9 | yellow-orange | tan                     |
| 2    |       | D6CBAE | 14.9 | yellow-orange | silver                  |
| 3    |       | C2D2E2 | 13.2 | blue-violet   | lightblue               |
| 4    |       | 9A9A81 | 10.5 | yellow        | gray                    |
| 5    |       | 7C7B6A | 10.1 | yellow        | grey                    |
| 6    |       | 90B7BD | 10.0 | blue-green    | steel gray              |
| 7    |       | C1984E | 9.3  | yellow-orange | peru                    |
| 8    |       | 755D41 | 7.8  | orange        | dark brown              |
| 9    |       | 6286AB | 3.6  | blue-violet   | grayish purple          |
| 10   |       | 39362F | 2.7  | yellow-orange | darkslategray           |
| 11   |       | 3D6C89 | 0.3  | blue          | grayish purple [Accent] |
| 12   |       | 659A61 | 0.3  | yellow-green  | gray [Accent]           |
| 13   |       | BA98AF | 0.3  | red-violet    | steel gray [Accent]     |
| 14   |       | 93495C | 0.3  | red           | burnt sienna [Accent]   |
| 15   |       | 64AC96 | 0.3  | green         | cadetblue [Accent]      |

Color Families:

| Family        | %    |
|---------------|------|
| yellow-orange | 44.8 |
| yellow        | 20.7 |
| blue-violet   | 16.8 |
| blue-green    | 10.0 |
| orange        | 7.8  |
| blue          | 0.3  |
| yellow-green  | 0.3  |
| red-violet    | 0.3  |
| red           | 0.3  |
| green         | 0.3  |

Accent Colors:

| Hex    | Family       | Name           | Chroma |
|--------|--------------|----------------|--------|
| 3D6C89 | blue         | grayish purple | 22.1   |
| 659A61 | yellow-green | gray           | 37.6   |
| BA98AF | red-violet   | steel gray     | 17.5   |
| 93495C | red          | burnt sienna   | 33.1   |
| 64AC96 | green        | cadetblue      | 28.3   |

B) TEXTURE ANALYSIS

| Metric                  | Value |
|-------------------------|-------|
| Global Roughness        | 0.156 |
| Mean Local Roughness    | 0.019 |
| Roughness Uniformity    | 0.021 |
| Edge Density            | 0.07  |
| Mean Gradient Magnitude | 0.144 |
| Gradient Variance       | 0.045 |
| Gradient Smoothness     | 0.0   |
| Directional Coherence   | 0.013 |
| Pattern Complexity      | 0.111 |
| Pattern Repetition      | 1.0   |
| Detail Frequency Ratio  | 0.627 |
| Spatial Variation       | 0.071 |
| Texture Consistency     | 0.733 |

C) BRIGHTNESS & CONTRAST ANALYSIS

| Metric                    | Value  |
|---------------------------|--------|
| Mean Brightness           | 0.641  |
| Brightness Variance       | 0.156  |
| Brightness Uniformity     | 0.756  |
| Brightness Skewness       | -0.763 |
| Brightness Entropy        | 7.208  |
| Rms Contrast              | 0.156  |
| Michelson Contrast        | 1.0    |
| Weber Contrast            | 0.49   |
| Mean Local Contrast       | 0.019  |
| Contrast Uniformity       | 0.0    |
| Dynamic Range             | 1.0    |
| Effective Dynamic Range   | 0.498  |
| Shadow Percentage         | 3.996  |
| Midtone Percentage        | 45.162 |
| Highlight Percentage      | 50.842 |
| Shadow Clipping           | 0.0    |
| Highlight Clipping        | 0.0    |
| Tonal Balance             | 0.0    |
| Fine Contrast             | 0.011  |
| Medium Contrast           | 0.024  |
| Coarse Contrast           | 0.037  |
| Multiscale Contrast Ratio | 0.288  |
| Edge Contrast             | 0.144  |
| Contrast Clustering       | 0.267  |

D) SPATIAL DISTRIBUTION ANALYSIS

| Metric                      | Value |
|-----------------------------|-------|
| Spatial Coherence           | 0.665 |
| Color Clustering            | 0.605 |
| Color Transition Smoothness | 0.63  |
| Transition Uniformity       | 0.697 |
| Sharp Transition Ratio      | 0.1   |
| Transition Directionality   | 0.016 |
| Mean Saturation             | 0.294 |
| Saturation Variance         | 0.027 |
| Low Saturation Ratio        | 0.571 |
| Medium Saturation Ratio     | 0.408 |
| High Saturation Ratio       | 0.021 |
| Saturation Clustering       | 0.999 |
| Hue Concentration           | 0.527 |
| Complementary Balance       | 0.158 |
| Analogous Dominance         | 0.731 |
| Temperature Bias            | 0.406 |

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 Ideamorphic Studies' computational imaging systems.

REFERENCES

[1] Quercy, A. (2023). The Sunshine State - Catalogue Raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0450.html>

[2] Quercy, A. (2025). ORCID <https://orcid.org/0009-0000-2662-7790>

[3] Quercy, A. (2026). Computational Image Analysis Standard. <https://ideamorphism.org/en/measurements/2025/09/ids-cmp-2025-computational-image-analysis-standard-5dq9.html>

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

78090bdae281c064620ad97cd5521300988e2fb25554bcbe954f2b93a417edcd

Licensed under Creative Commons Attribution 4.0 International (CC BY 4.0)

|             |                 |
|-------------|-----------------|
| Artist      | Arnaud Quercy   |
| Date        | 2023            |
| Collection  | American Voyage |
| Certificate | 20231231-0036   |
| Asset code  | AQC0450         |
| Identifier  | NAN-COL000458   |
| Version     | 1               |
| Published   | 2025-10-03      |

ISSN: applied for – U.S. ISSN Center, Library of Congress

© 2026 Ideamorphic Studies

Published by Art Quam Anima Publishing New York,  
an assumed name of AQA Publishing LLC

c/o Northwest Registered Agent, 418 Broadway Ste N  
Albany, NY 12207, USA  
+1 917-764-5470

NY DOS ID 7624376 · Assumed Name ID 7658709

[publishing.artquamanima.com](https://publishing.artquamanima.com)

Last updated: 2026-09-15

Persistent URI: <https://ideamorphism.org/en/nanopubs/2025/10/AQC0450-computational-image-analysis-aqc0450.pdf>