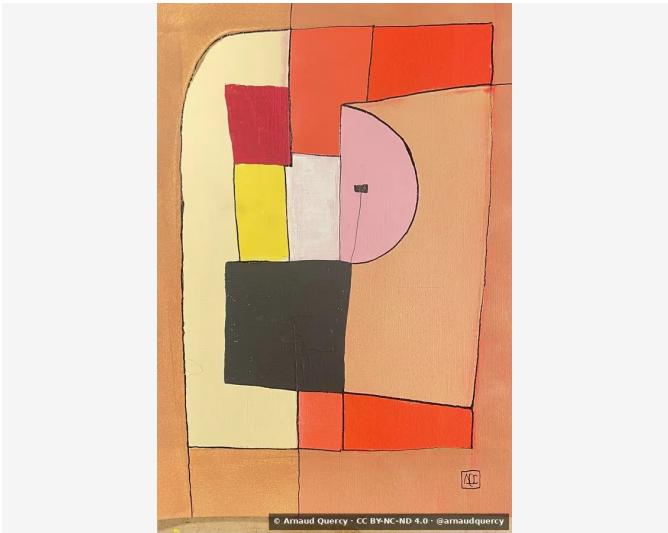


Nanopublication – Pitch-to-Brightness Register Encoding

by Arnaud Quercy · A Minor – Research on Harmony – Variations 13 · 2025



CLAIM 2: PITCH-TO-BRIGHTNESS REGISTER ENCODING

I encode pitch register through brightness variation: within each pitch-class color family, lower octaves appear darker while higher octaves appear brighter, translating vertical pitch space into tonal value.

CONTEXT

The chromesthetic translation system operates on two axes: pitch class determines hue (following the circle of fifths), while register determines value (lightness/darkness). This dual encoding allows a single color family to represent the same pitch class across multiple octaves while preserving register information.

In this composition, the deep crimson and maroon shapes represent C in lower registers, while brighter red-orange rectangles represent C in higher registers. Similarly, the saturated orange ground and paler cream-yellow areas differentiate register positions within the A and E color families. This brightness gradient creates visual depth that corresponds to the vertical span of the keyboard.

The principle "the lower the pitch, the darker in its color band; the higher, the brighter" ensures that voicing choices—how I spread chord tones across registers at the piano—translate directly into value contrasts in the painting.

REFERENCES

[1] Arnaud Quercy (2025). A Minor – Research on Harmony – Variations 13 – Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0929.html>

[2] Quercy, A. (2025). A Minor – Research on Harmony – Variations 13 (AQC0929). Synesthetic Explorations collection.

[3] Quercy, A. (2025). Chromesthetic Methodology Foundation Paper. [URL to be added]

WHERE THIS WORK LIVES

THEMATIC ELEMENTS

- synesthetic art
- color mapping
- A minor chord
- circle of fifths
- piano studies
- acrylic painting
- musical visualization
- contemporary art
- Synesthetic Explorations
- harmonic color theory

EPISTEMIC PROFILE

Claim type	artistic statement
Voice	first person
Epistemic status	empirically grounded
Methodology	chromesthetic mapping
Certainty	high

CHECKSUM (SHA-256)

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