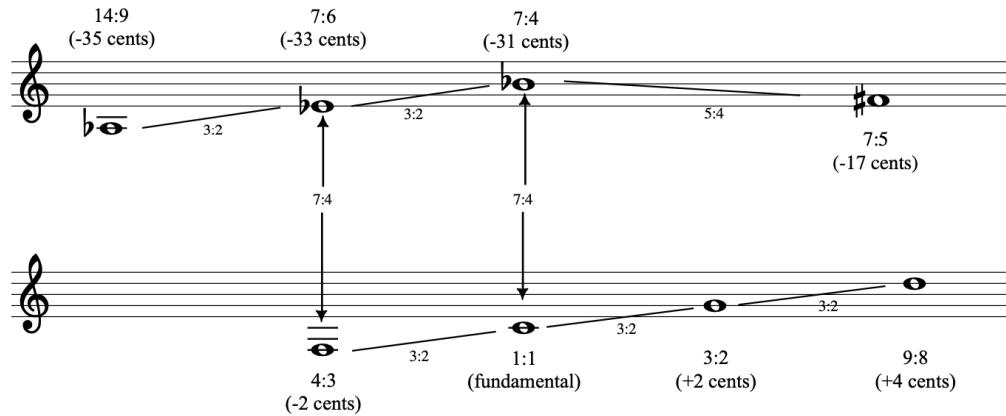


Nooksack Glacier Tuning



The tuning is used for the movements and dreams of the *Nooksack Glacier*, *Crystal Glacier*, *Nooksack Tower*, and the *Nooksack Cirque*.

Each cluster of dreams belongs to the larger web of experience as outlined in the overarching composition:
Drifting Waves of the Caverns Beneath the Sea.

All notes written as +/- cents derivation from EQT.

Derivations from Darbari in the tuning and movements:

The scale (excluding the 7:5) is inspired by the scale commonly used in Raga Darbari. In the Dagarbani of rudraveena, and according to Rajan Parrikar, the komal Ga (flat third degree) is often very flat (*ati-komal*)¹ in this raga, though in just intonation terms, the 7:6 may be too low for Darbari, as the 14:9 (flat sixth degree) may also be. La Monte, Marian, and Jung Hee have said that Pandit Pran Nath has used multiple types of komal Ga in Darbari, depending on the approach. For ragas, a variation of 5-limit is usually preferred. But I chose septimal intervals as an aesthetic choice (hint: *seven dreams*), being one that is in love with septimal intervals and tunings, and, of course, inspired so much by both Michael Harrison and La Monte Young's 7:4 / 3:2 relationship tunings in their piano works. In the composition itself, I occasionally break the rules of the movements of the raga, which has its strong notes on the second and fifth degrees, a fairly straightforward ascending scale, and a complex descending scale (as Pran Nath told my teacher Rose: '*snake-style*'). It also characteristically has very subtle oscillations on the flat sixth and flat thirds, with a gentle approach of the notes (*kan*) from above, touching the komal Ni and shuddh Ma before dropping into the oscillation (*andolan*), and some approaches from below, depending on descent/ascent action. I often avoid the slow oscillation, as this can be tricky to replicate on strings and can disrupt the intonation, though I do attempt to approach notes less subtly from above. Parrikar elaborately describes the subtleties of the raga in his three part series on the Kanada constellation.

The 7:5 is used sparsely and subtly in moments where the movement of the raga is not present, and can act as a separate, non-scale ratio in a chordal cluster. Additionally, as it is disconnected from the scale in its tone material, it is also disconnected by its 5:4 relationship to the 7:4, where the rest of the notes exist as a 3:2 / 7:4 relationship to each other.

¹ Parrikar, R. (2000, December 11). *The Kanada Constellation (Part 1/3)*. Rajan Parrikar Music Archive. <https://www.parrikar.org/hindustani/kanada/>.

The overarching composition is dedicated to Pandit Pran Nath, La Monte Young, and Michael Harrison, for their innovative beauty in sound, and for being an endless source of inspiration.