

Quiet Climate Communication: Entry through Beauty and Poetry

Francesca Samsel, Benjamin Keisling, Gregory Abram
The University of Texas at Austin

Abstract—Here we present a portfolio of works—and a companion video—examining collaborations that combine poetry, scientific visualization, and contextual framing to engage climate data, climate change, and specific climate models. Across these projects, visualization provides both a factual foundation and an entry point through visual beauty, while poetry contributes factual grounding, perspective, or both. Together, these modalities create multiple inroads into climate science that may bypass entrenched cognitive and emotional defenses.

Index Terms—Article submission, IEEE, IEEEtran, journal, LATEX, paper, template, typesetting.

I. INTRODUCTION

Here we present collaborations between Samsel, a visualization practitioner and artist, two poets—Jane Hirshfield and Michael G. Smith—and several scientists, including Benjamin Keisling. This portfolio illustrates poetry’s capacity to provide entry points into complex and often disturbing science. Our guiding hypothesis, which has been explored and evaluated by many, [1, 2, 3, 4] is that meaningful, affective engagement can arise from this synthesis.

This portfolio is not an evaluated body of work; rather, it documents exploratory examples that shed light on the potential of verbal and visual poetry with observed and modeled climate science.

Scientific visualizations are often described as “pretty” or “beautiful,” sometimes dismissively, as if aesthetic value undermines rigor. Jane Hirshfield reframes this assumption: “Beauty is not a luxury; it is a way of paying attention.”

It is human to be attracted to beauty. It is an attentional mechanism—inviting viewers into complex data landscapes and sustaining engagement long enough for understanding, reflection, and emotional resonance to emerge.

These works emerged through fluid, iterative exchanges among scientists, poets, and Samsel. Hirshfield brought existing poems into the collaboration, motivated by curiosity about how visual context and data-driven imagery might extend poetic meaning. Her poem *Let Them Not Say*, proved especially resonant when paired with wildfire simulation data developed by Rod Linn’s Wildfire Model at Los Alamos National Laboratory (LANL).

Let Them Not Say was originally presented in The Art of HPC exhibition at International Conference for High Performance Computing, Networking, Storage, and Analysis (SC25)

as a video, available here: <https://vimeo.com/1129924529>. This project presented the opportunity to apply hand-crafted glyphs and expressive line work to large-scale scientific data derives from the Sculpting Vis Collaboration, addressing the theme of beauty.

Keisling, a glaciologist and ice-sheet modeler, had an established collaboration with Samsel when they encountered work that seemed to require a poetic voice. While neither claimed the title of poet, they adopted a poetic sensibility to offer glimpses into the science behind *Between Melt and Memory* <https://vimeo.com/1158924609>.

Michael G. Smith collaborated with Samsel on a series of works for Climate Prisms, a museum exhibition at the Bradbury Museum of Science. This exhibition follows the Arctic field studies of three scientists—Cathy Wilson, Brent Newman, and Joel Rowland—all from LANL, as they investigate mechanisms driving rapid Arctic change.

Samsel’s work illustrates a contextual framing for abstract and scientific visuals. Incorporated into her work are many avenues of entry including but not limited to: scientific illustration; scientific visualization (in collaboration with Abram); poetry; site photographs; and abstracted analogies. The object is to create enough narrative and affective grounding to invite entry, but not so much that the viewer’s own meaning-making is foreclosed.

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REFERENCES

- [1] Jane Hirshfield, <https://www.poetryfoundation.org/poets/jane-hirshfield>, <https://poetsforscience.org/>.
- [2] Corbett, Julia B, and Brett Clark, ‘The Arts and Humanities in Climate Change Engagement’ (24 May 2017), in Hans von Storch (ed.), Oxford Research Encyclopedia of Climate Science (New York, NY, 2016, <https://doi.org/10.1093/acrefore/9780190228620.013.392>).
- [3] Illingworth, S., *How poetry can help to personalise climate change*, Geoscience Communication, Vol. 3, 2020, 10.5194/gc-3-35-2020.
- [4] M. Engel, J., *The uses of poetry to effect positive climate-change policy*, Ecological Integrity, Law and Governance, p 207-214, Routledge, 2028, <https://doi.org/10.4324/9781351185479-21>.

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