Feeling Landscapes Through Art and Science

Scientific concepts often feel abstract and overwhelming. For example, geological forces act upon the earth over inconceivably long periods of time, but the sum of these changes can threaten our very existence in the here and now. While raw research data can be synthesized through graphs and grids it often lacks emotion and depth. This is why artists have been instrumental in the translation of data using both abstract and representational forms. Since the 1960s artists have been creating art with scientific data and technology permitting audiences not just to see but to feel science.[1] Sarah Nance is one of these artists weaving together science and art to create stunning creative works that alert audiences to changes in the natural world always happening all around them.

Nance's artwork focuses on landscapes, including "archived" landscapes. These include sites such as mountains that were once reefs, or deserts that were once forests. The historical significance of these areas of radical transformation, which are primarily understood only by scientists through fossil records or other recorded data, become more accessible to a broader audience through art.

Nance's practice often parallels the tools and processes that might be more associated with a research lab than an artist's studio. For example, Nance's "Marseille tidal gauge aria" translates tidal gauge data (a scientific instrument that is used to measure the water levels at localized places[2]) from Marseille France into musical notes which are then sung by Nance as an operatic Aria. The height of the water is translated to higher pitches in her vocal range. This creates the effect of the aria rising in tone throughout the work crescendoing into an eerie wail

[1]Anna Souter, "Digital Art Movement Overview and Analysis," ed. Kimberly Nichols and Paisid Aramphongphan, The Art Story, October 3, 2017, https://www.theartstory.org/movement/digital-art/.
[2] NOAA, "What Is a Tidal Gauge?," National Ocean Service Website (National Ocean and Atmospheric Administration, June 16, 2024), https://oceanservice.noaa.gov/facts/tide-gauge.html.

that evokes a sense of profound loss. What is remarkable about this work is the way in which listeners can “feel” the changes by her tone into a turning alarm. Imbuing the data with an emotional weight and urgency that a functional graph of the same data would be unable to convey

Art such as Nance’s is crucial in raising awareness and combatting the climate issues that our world faces today. By transforming dry data into emotionally engaging art she is able to make audiences reckon with what the data actually means for the future.

Bibliography

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