**WATER**

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**Abstract**

I am discussing my early explorations of San Francisco Bay waters, which has proved a base for learning how to respond to and reveal the dynamic character of a place in compelling and accessible ways.

This article results from my presentation at the *Water is in the Air* workshop in June 2012.

I engage with water daily for many practical reasons, and most often, without thinking about it. At other times, I engage with it because I just like it — as a physical substance it connects me with the fundamentals of nature. Coming from an agricultural background, I know how important having access is and the consequences, if it is limited. Water can be a bother, either because there is too much or not enough or, because it has gone places where it can cause damage or inconvenience. At the same time, it is a magical substance whose counter-intuitive properties are endlessly fascinating. As an artist and layperson, my interest lies both with the nature of water and its central occupation of every aspect of our lives. I am interested in its practical value and how it connects with human psychology. What compels us to sit and mindlessly stare into moving water? Why do children nearly always go through a puddle, rather than around? Why does my mouth feel dry whenever I see or hear the word “thirsty”? I am interested in exploring aspects of water that reinforce people’s sense of being human and feeling connected with nature.

My childhood was spent in rural Colorado — at different times, we lived on two ranches. One had irrigation and the other didn’t and I was most happy being on the place with water. After finishing my formal education, I was lucky to have found a position at the Exploratorium, a museum of science, art, and human perception, in San Francisco. The mission of this place is to give people the confidence to learn things about the world on their own, to be good observers and to question what they see. To set the stage for this requires a special kind of learning environment — a place where there is no hierarchy of knowledge — rather, it is a place where everyone is engaged in the joy of learning and the joy of sharing what is learned. This is where I spent my professional life and this is the collaborative environment where I could and still am pursuing my interests and investigations as an artist.

Tidal cycles were a mystery when I first moved to San Francisco. Tide books seemed mysterious too. An Exploratorium colleague and I started messing around with tide data and did experiments on predicting tide levels at precise times at specific places. We were excited by our newly found ability, which subsequently lead to a series of works that were responsive to these changes. Soon, we began to experiment with the wind’s influence on the surface of the water leading to better understandings of the inter-relationship between, wind, water, tides, and fog. Pictured is *Ft. Point Turnaround*, 1979, a chemi-luminescent light sculpture which floated on the surface of the water and was partially held aloft by a helium balloon. The sculpture’s behavior was altered considerably as the tide changed from flood to ebb.

None of what we learned was new information, but for us, it was exciting to have developed, on our own, a sense of the systems that drive the dynamics of bay area weather. As artists, we were able find ways of sharing these findings in visually and experientially compelling ways. The *Ft. Point* installation was one of many done during that time.

In subsequent years, I learned that by putting a pipe into active or turbulent water, the air inside would resonate – creating complex music of great ranges. These experiments, over several years, resulted in the *Wave Organ*, a wave activated sound sculpture located on the northern edge of San Francisco. I worked with acoustic engineers, collaborated with a stonemason to create the setting, and constantly consulted with colleagues at the Exploratorium to make this happen. It is a compelling place, sited on a jetty, in view of the Golden Gate Bridge, which has, over the past 25 years, become a well-loved part of San Francisco’s cultural landscape.

I mentioned earlier that through early experiments with tides and winds I developed a way of thinking about some of the things that give the Bay Area its unique character. The behavior of the *Wave Organ* is certainly affected by these systems too. Weather is a factor as are the tides. In the end, I came to think that the quality of the sound generated by the *Wave Organ* is a result of the spatial relationship between the earth and the moon which causes the tides, and the relationship between earth and sun which gives us seasonal cycles and the weather. Reflecting back now on how the *Wave Organ* came to realization, it seems that some simple and perhaps naive questions has given me much material to work with over the past 40 years.

*Ft. Point Turnaround*, 1979 Peter Richards, Vince Grippi, San Francisco, Californi