

On Resonances and Frequency in Fant Wenger's World Making

How do we actually hear sounds? How do we know what pitch is transmitted by waves invisible to the eye, but precisely identified by the rest of our body? The frequency theory states that the pulses travelling up the auditory nerves, carrying the information about sound to the brain to be processed, are received in a certain pulse. This pulse is an exact match to the frequency of the tone emitted, essentially, we receive a transmitted copy of the real tone into our brain, the pulse of the frequency is what matters. Sounds come into the ear as acoustical signals and are later transformed into nerve impulses by the cochlea. In this sense our ears work like telephones, or to be more precise, the telephone is a copy of the ear by mechanical means.

Technical advancements are developed on the work previously done by our ancestors. Their historical foundations support and inspire ours today. In 19th century Germany, Heinrich Rudolf Hertz built much of the foundation that we are working from today. Hertz, a physicist, had the ability to integrate theoretical knowledge with fundamental experimentation. He was the first to prove the existence of electromagnetic waves with precise experiments, done with instruments he engineered himself, to generate and detect waves - radio pulses - across space. His research proved that all forms of electromagnetic radiation are propagated as waves at a finite velocity: the speed of light. In honour of his discoveries Hertz's name is the universal synonym for frequency. The electromagnetic spectrum spans from the longest wavelength to the shortest: radio waves, microwaves, infrared, optical, ultraviolet, x-ray, and gamma-rays; all are measured in Hz.

These waves can produce a certain reaction in specific conditions, in the body, in other machines, what we call resonance (from Latin resonare 'to resound'). In physics, the term denotes the reaction of a system under the influence of periodically changing forces or fields in which the frequency is equal or nearly equal to the natural frequency of the system. In psychology and neurophysiology, the term resonance in its strict physical definition has only been used in acoustic perception research based on the frequency theory described above. However, as an explanatory metaphor for certain processes it can be applied to a variety of phenomena. This is where Fant Wenger's artistic heuristics start from. Looking ahead into planetary futures, artists and other practitioners of arcane sciences interrogate and call upon the voices of futurity from their diverse positions: the spiritual, ancestral, scientific, poetic, technology-based, the non-human, the vegetal and the mineral. Invoking new prefigurative perspectives on what life and agency could look like in the age of climate change and global disruptions, perhaps it is necessary to question the future-to-come rooted in the mud, living in the trees, frozen in the melting glaciers, in the DNA of extinct species, but also in the poetry of planetary communications measured in Hertz.

There seems to be something hidden in the interferences of sound- and light waves, a message perhaps, the secret communications of transcendental spheres, only to be deciphered by a specific form of mad scientist, an artist. The cosmogonic reversal of evolution, and the role of beings therein, invites a radical rethinking of what was called

modern and rational for over four centuries in the West. In the pluriversal explosion we are experiencing today, we can no longer imagine nature being “outside,” outside of us, outside of the polis, outside of thinking — an outside that signifies the non-human, the other, the external. It is time to discover new resonances, creating new systems of near equal frequencies. Various contemporary artists - like Wenger - are asking one relevant question: how can we think and interpret the contemporary conditions in the legacy of science and planetary resonances? How can we alert other humans to fragile conditions, and how can we re-imagine thinking together? The art of thinking poetically is a practice, a skill, a different manner of perceiving. It redefines research as a practice. It evades logic and yet also accompanies it. It is not simply beautiful, but also arises beautifully and honors the natural forces as well as the Western canon and global ideas. Resonance within art appears as imagination, as a possible way of creating world. Artistic speculation in this understanding is a space of gathering and reunion, a global form of learning and engagement. This presents both a moment of common experience and a form of learning, performing, and enacting of communality. Artistic practice as resonance construction engages us at co-building an ethical relation to the worlds we live in.

The sound we imagine hearing in the works of Fant Wenger is strange and alien. It plays a vital part in underscoring the disjointedness of the viewers experience while sharpening our focus and creating a hyper-awareness for the different roles and functions of the applied aesthetics within the work. The noises and fragments we imagine hearing are an underlying condition of our inability to “consume” the work in its entirety. We lack words for this disjunct between time and place created by Wenger. We receive a transmitted copy of the real tone into our brain, but seem to be unable to process it in its full extent. Virginia Woolf tried to describe it, nonetheless. She writes of the incompatibility of space with time and sound in her novel “To the Lighthouse”, where a house takes over the narrative. The dwelling is abandoned by the family, only the old housekeeper occasionally comes by. Woolf’s novel notices that people’s lives move at a faster pace than that of places, our ghosts linger where we once lived: “What people had shed and left—a pair of shoes, a shooting cap, some faded skirts and coats in wardrobes—those alone kept the human shape and in the emptiness indicated how once they were filled and animated; how once hands were busy with hooks and buttons; how once the looking-glass had held a face; had held a world hollowed out in which a figure turned, a hand flashed, the door opened, in came children rushing and tumbling; and went out again. Now, day after day, light turned, like a flower reflected in water, its sharp image on the wall opposite.” Whatever we once touched, created a resonance, vibrations in a time past, still detectable today.

Like the light we see today: as we perceive it in the now, the reaction that caused it, has been happening deep in the past. Centuries of research have shaped our understanding of these phenomena: from scientific systematization and taxonomic classification practices, to optical experiments and frequency applications. The installations and paintings of Wenger however show resonances not only as a resource, infrastructure and service provider, but also as an ecosystem of transtemporal and translocal character. Frequency and resonance are shown as an inherently ambivalent

setting of matter, waves, and knowledge, as a rationalized environment, but also as a place of irrational stories of lingering ghosts.

The interconnectedness of light and sounds, different wavelengths, to be interpreted by different parts of the body, are at the core of Wenger's heuristics. One is almost tempted to formulate an aesthetic "uncertainty relation" at this point, which, in contrast to that of Heisenberg for quantum physics (that is, that two complementary properties of a particle cannot be determined with arbitrary precision at the same time), translates into the mental experience of the world. The best-known example of a pair of such complementary properties in quantum physics is location and momentum. The measurement of the momentum of a particle is necessarily associated with a perturbation of its location, and vice versa. The physical-mathematical scattering that results when we want to measure the particles in the "light wave" can perhaps also be fruitfully applied to aesthetic categories, where the sound created by Wenger's work gets lost in translation, but only to create resonances in a different way. The idea of the Anthropocene – as it manifests itself within these artworks - challenges our notion of "deep time" on several counts. It describes a speculative turn of events wherein we humans catapulted ourselves through technology into a position where we change factors of our environment instead of the other way around. Furthermore, the idea of the Anthropocene proposes a superacceleration of evolutionary history, as the events do not cover millions or trillions of years, but merely a few decades or a few centuries at most. Yet we fail to recognize this consciously. We seem to ignore the daily traces of our cultures, histories, and technologies, the myriad signs and disturbances that can be discovered in tectonics, waters, soil, in animals, humans, and plants alike. The need for resonance has never been more acute.