SOUND TREK

SHORT FILM PROSPECTUS Mary Jane Doherty

ABSTRACT

Nonfiction filmmakers are preoccupied, for the most part, with problems of access, ethics and exposition. Rarely do we have the chance to come to grips with how films work on a deeper formal level, particularly when it comes to sound and its spooky emotional potency.

SOUND TREK does just that, takes the viewer on a journey through sound's neural pathway, by pairing intimate footage from the Boston Children's Chorus with partner films featuring neurologists, poets, web meisters, and experimental musicians - specialists in the mind/body sound conundrum.

...Beauty is the part of efficacy that we cannot explain, but can nevertheless perceive.¹ Dr. Philip Nelson, Department of Physics and Astronomy, University of Pennsylvania

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Science-Art, Waves-Particles, Minnesotans-Texans, Crest-Colgate, Form-Content: I've spent my career hovering in the delicious tension *between* the all important dualities that make us human. One duality, the mind-body pathway of sound, ranks above all others in terms of its ramifications for filmmaking, for storytelling in general.

We process light waves almost entirely cerebrally. The visual signal rips down the optic nerve, a straight shot multi-lane highway to the visual cortex. Sound waves, by comparison, wriggle through tangled, overgrown paths, with a major portion of them traveling directly to our autonomic nervous system: to the hair cells on our limbs, to the linings of our intestines, to our heart muscles - *to areas over which we have no cerebral control*. There's the rub.

For any given sound there's a part of it we cannot ignore, resist, nor rationalize. (Most everyone, for example, no matter how smart, how skeptical, feels a degree of pain upon hearing the sound of fingernails scraping across a blackboard...) The acoustically astute filmmaker controls her audience's emotional response

¹ Letter to the Editor. The New Yorker, (July 21, 2008)

through her sound track making even the most discerning movie-goer swoon with despair or fall in love or shake with rage. Such power. The movie-goer, after all, is not the boss of her own emotions.

And yet we're *not* in thrall to many a movie. Shouldn't we witness more evidence of this power? It turns out the non-cerebral nature of sound is equally difficult for both filmmakers and audiences alike. SOUND TREK explores this conundrum, this mind-body duality, through ten short films arranged in pairs.

Over the course of one year of filming Boston Children's Chorus rehearsals I've accumulated a library of nodal moments, enchanting scenes that convey the emotional heart and soul of choir-singing from the perspectives of the director, the teachers, and the kids themselves: you watch and listen, maybe you smile, maybe you *feel* something but you do not *learn* a thing.

Each choir film has its partner film in which eloquent spokespeople from the arts and sciences share their work - graphics, experiments, poems; these films tell the part of the story that *can* be translated into words and so satisfy our craving to understand with our brains. Each film in the partnership thus radiates the same 'message,' aiming in turns for either the heart or the mind of the audience. Side-by-side, they allow us to appreciate and revel in the difference. The following summarizes five possible short Choir Films

(1) SOUND IS WEIRD

CHOIR WARM UP Before rehearsals, choir singers warm up with odd vocalizations: huffing and braying, lip blubberings and shrieks. I will edit these strange emanations together rhythmically to create a new piece of music in and of itself. We *see* the strange contortions of our singers but we *hear* the human voice, stripped of musicality, as a raw instrument, as an emitter of sound more than music.

PARTNER FILM Why do 8th octave frequencies 'behave' so oddly? Why do people fall asleep during blockbuster Armageddon movies with ragingly loud sound tracks? Jonathan Sterne, psycho-acoustician from McGill University, is known for his work *beyond* reductive brain mapping: he demonstrates how the act of perception itself creates sound. Also, the 'tingle-smiths' from the ASRM (Autonomous Sensory Meridian Response) movement, display their audio collection of hair-raising sound triggers.

(2) WHEN SOUND IS MUSIC

CHOIR AUDITIONS Eight year old Nina whispers a quavery high C, nine year old Audrey belts it out with the vibrato of a plump diva. This montage of youngsters auditioning for the Boston Children's Chorus celebrates the raw human voice as an instrument in and of itself.

PARTNER FILM Timbre, the stacked waves above the tonic, what *color* is that eighth octave after all? Why do we hear 440 Hz as a 'note' but not, say, 479 Hz? The Lorelei Ensemble, nine women vocalists, specialize in the crunchy intervals of Medieval music. And, they've found an extraordinary way to 'explain' the difference between music and noise.

(3) THE PARADOX

CHOIR MATH (1+80=1) People sing in amateur choruses because they love to sing. Few can. This paradox defines many an amateur choir: that it is possible to create a single, *musical* sound from a set of individually crummy ones. In this film we hang out with the kids in the back row, the overlooked ones; they've created their own private world but they too contribute, albeit mysteriously, as much as the eager, forward-leaning kids in the front row.

PARTNER FILM The musicologists from the Sahlgrenska Academy in Sweden demonstrate their experiments on choir metabolics: how the nervous systems among choir members align, how heart rates pump in synch.

(4) A WORDLESS SERMON²

CHOIR FLOW Composer, Sivan Eldar, conspires with chorus director, Anthony Trecek-King (Dr. TK.) Then the children sing. We watch the three-way flow of 'information' between Sivan, Dr. TK and the kids themselves as each perceives aural and visual signals. What is lost, what is gained throughout these transactions? How, for example, does Dr. TK *instruct* so efficiently through his gesturing hands without saying a single word?

PARTNER FILM James Fitzgerald, FBI specialist in forensic linguistics, studies the physical mechanisms *surrounding* word delivery and non-verbal communication. Author Garrison Fewell's shares his collection of musicians' metaphors for the non-verbal essence of music.

² Peter Schjeldahl, "The Dutch Touch: A Visiting Vermeer at the Met," The New Yorker, Sept 21, 2009

(5) A CELEBRATION

CHOIR SONG We follow the journey of one song, "Unclouded Day," from its first rehearsal to its final rendition as performed in multiple venues. The entire song flows as a single unit yet each section comes from a different stage of development; we witness how the first awkward passages transform miraculously into *music*, as the chorus systematically internalizes the song.

PARTNER FILM Yo Yo Ma explains *agogics*: "A surprise is only a surprise when you know it departs from something."³ Poets Rosanna Warren and Maggie Dietz take on *dynamic shifts* and *rhythm*. All three musical principles operate within the constraints of a locked timeline and together they account for the secret behind music's and film's emotional tug.

IN SUM

Daniel Levitin and Oliver Sacks brought the mysteries of sound and music to the lay world. Scientists at McGill University lead the research world in terms of sheer volume and scope. There are scads of feel-good films about the transformative, emotional power of choir singing. But my focus on guts, on limbic sound processing, aims for filmmakers and storytellers in particular - those of us who grapple in *time-based media*. In this sense my project treads special territory. Most filmmakers get it to some degree; we've all had our slap-on-the-forehead moment when we recognize how sound shoves the film along. But few of us know why⁴, *both* scientifically and aesthetically. This is what I bring to the table; this is what I plan to share.

³ Pam Belluck, "To Tug Hearts, Music First Must Tickle the Neurons," The New York Times, April 18, 2011

⁴ Based on professional cross-talk and, more specifically, on the response to my seven guest lectures on the topic.