

ANECHOIC NAAD DARKROOM

[In collaboration with Daria Faïn, a proposal for an experiential darkroom addressed to a team of potential partners—Mark Collins and Toru Hasegawa (design firm Proxy), Bobby Johnston (Co Adaptive Architecture), Michael Skinner and Matthew Castellano (Arup), and Sam Miller (Lower Manhattan Cultural Council)—providing initial design, functionality and fabrication criteria with a special emphasis on computation and device culture, 2012]

GREETING

We want to construct a space that offers elemental experiences of darkness and light and silence and sound. We'll provide these experiences by means of *prosody*. Prosody is interrelation. It's the rhythm of our speech and the quality of our silence. It's the pressure of what we say and don't say to each other. Light and sound (as well as their absences) are pulsations and pressures ('frequencies,' if you like, or 'waveforms' if you prefer). Our sensitivity to these energy patterns we call 'prosody.' Prosody is composition of the medium of which we're made, in which we move and interact.

We're committed to *better outcomes* (to borrow a therapeutic expression). An aesthetically pleasing event and living in less fear are not dissociable. Could

a specific use of color make our cities safer? For prosody, artwork, social justice, medicine, architecture, molecular biology, and emptiness are the same practice. Otherwise, how could we ever procure the benefit from the particular mode in which we immerse ourselves at any given moment?

We want to make prosodic knowledge more commonplace by providing people with an opportunity to become aware of prosody's potential benefits. To this end, the Anechoic Naad Darkroom will serve as a place for both somatic and inner practices (a whole interoceptivity). It will function as a care facility, lab, exhibition space, open platform, reading room and school.

Our artworks (whether choreographic, activist, architectural, educational, sonic, ascetic, somatic, energetic or theatrical) are designed to suffice as empirical evidence for the formulation of new knowledge true to the scientific method. We've named our area of research the *Prosodic Body*. Our central focus is the vehicle of the body and the discovery of prosodic approaches that modulate and regulate our biological processes. Just as the new customized medicine uses molecular profiling to match a drug with cell-responsiveness, we might recommend a syllable sequence that releases a specific neurohormone or inhibits histamine. Just as music can synchronize many areas of the brain, prosody can synthesize sensory experience throughout the body. With the practices we develop we can treat ourselves endogenously, non-invasively, profoundly. May prosody be suggestive of treatments for conditions as diverse as learning disability, wealth inequality, mood swings, neoplasm, inaction, over-incarceration, stress-induced disease, seizure and the price of gas.

ABOUT THE DARKROOM

The Darkroom is one component of a larger building called the *Prosody Building*. As such, the darkroom will be built as an autonomous structure with the capability of being disassembled and moved to subsequent locations. As an itinerant structure, it could possibly dock into other sections of the Prosody Building functioning autonomously at their respective sites. (Eventually the darkroom could perhaps attach to the completely assembled Prosody Building with all its subassemblies concentrated at one location.)

The sections are considered subassemblies with lives of their own. The Prosody Building has already been happening for half a dozen years. It manifests partially, temporarily, piecemeal. Every presentation of the Prosodic Body further specifies and further reifies the entire building. We find that it's best to use a place before it's built (as a heuristic for discovering how to build it).

The darkroom will be a public service built amid the bustle and hubbub of lower Manhattan's financial district, standing in sharp contrast (by scale, function, affect, materiality) to its surrounds. It will have the following five (or six) components:

stairs: scattered seating for passersby, small performances and audience capture—basically an exterior bleacher, also usable as an outdoor reading room for archive materials.

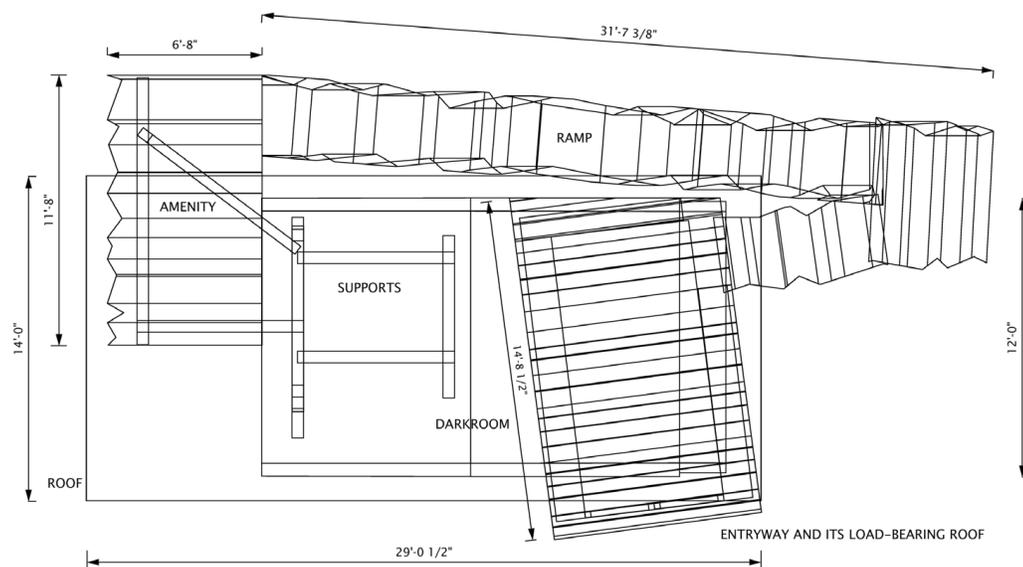
prosody platform: entryway for the darkroom where an attendant will welcome and acclimate those about to spend time in the dark; also serving as database, display, device-center and archive for the Prosodic Body.

corridor/ramp: 180° turn leading to the darkroom, making the necessary transition from light to dark and from dark to light again, gradually along an origami-inspired ramp.

amenity: small area for preparing food; sink and toilet; built out from the end of the corridor immediately before darkroom entry.

anechoic darkroom: main space for carrying out prosodic practices and studies.

roof observatory: budget permitting, linking the meditative space of the darkroom to the uncontrived space of the sky.



INITIAL CLARIFICATION OF TERMS

anechoic: a condition in which no sound enters from the exterior and no sound arising within the space is reflected.

naad: a Sanskrit word that means ‘sound,’ as well as sound-as-vibration, pulse, pressure, waveform, fundamental or formative frequency, sound current and harmony; with an emphasis on the phonic (i.e., voice, intent, logos, scripture, word signal as maximally meaningful). We use *naad* because we need a word that conveys the full meaning of sound, as the Anechoic Naad Darkroom is a place for experiencing all that sound is (as well as all of silence).

darkroom: the darkroom (Greek *abaton*) was used in Mediterranean sanitariums (*asklepions*) from roughly 1200 BCE to 400 CE for incubation of curative words and dreams. Parmenides wrote in the dark; medieval Irish poets were obliged to remain in the dark for as many as nine days before receiving poetry; Taoist and Tibetan traditions both have darkroom practices; and John Cage’s revelation of the impossibility of silence (hearing the high tone of his nervous system and low tone of blood circulation) in Harvard’s anechoic chamber directly influenced his composition 4’33”. A darkroom is absolutely dark. This removes the world. The anechoic darkroom is synonymous with stillness, non-differentiation, the perineum, totipotent cells, dream-incubation, the pulsating of consciousness, dreamless sleep, emptying and awakening.

prosody: in its broadest sense, prosody is interrelationship. It’s both verbal and nonverbal communication. It’s the impulse with which we express. It expresses the impulse. It is also, of course, the musical elements of poetry composition—cadence, pause, silence, stress, enjambment, meter, measure, beat, rhyme, and so on.

A FEW NOTES REGARDING OUR APPROACH

The membrane between science and art is of course, for us, extremely permeable. Empirical knowledge and contemplative practice go hand in hand. Concepts are experiential. Experiment increases devotion. Data awakens as it de-conditions. Case-studies expand wonder.

There's no substitute for being in the dark. There is no knowing what comes from darkness without being in the dark and having what comes from darkness come. Dark. Staying in the dark. (As with all somatic practices, it's so easy to not actually go through them, to 'think' them through instead.)

The Darkroom will primarily be dedicated to meditative darkroom practice. It will also be used in combination with very specific sound inputs (brainwave, intonation, phoneme, harmonics) and light and color pulsations. Through the use of evoked activity (bio-responses to prosodic stimuli) and the monitoring and interviewing of willing users, we will establish an evidence-based approach for a combinatorial artscience that can be applied aesthetically or therapeutically. Sessions in the darkroom will thus also serve as clinical studies and trials.

Outside practitioners will be consulted as part of the design and development stage of both the building and its programming. They will also be invited to operate the darkroom according to their own needs.

Through collaboration with other researchers, the work will become a distributed effort, with the darkroom as an extension of the research and resources of other practitioners. Reciprocally, we will extend our darkroom studies into other labs and apparatuses. This makes sense particularly with regards to 'testing.' The device-level in the darkroom will obviously be very limited (mapping magnetic fields produced by electrical currents in the brain, for example, is unthinkably expensive—the cost of a magnetoencephalogram machine is more than \$2 million).

We intend to make appreciable contributions to the sciences we're about to engage (or at least rigorous statements defining our prosodic research in relation to these disciplines). This initiative is, in effect, a next genre of interrelation, unfolding fields within fields in the new non-proprietary era of Open Science wherein critical contributions may be made by the uninitiated and attentive.

REDEFINING PROSODY IN RELATION TO SPATIAL COMPUTATION APPLIED TO DARKROOM DESIGN

Prosody is composition of vibration.

Prosody is the rapport between co-arising forms that allows them to co-arise.

Prosody couples force (formative energy) and phenomena—it couples intent and substantiation. Forms form according to prosody, as pattern, cadence, tonal morphogenic pressure, etc.

The Prosodic Body is *passage*—the interrelational means through which we transition, cross, transfer, transpose, morph and share our experiences. In this way, prosody is a platform that supports us throughout change.

“The arising of things and their liberation are not successive but simultaneous.”¹

Prosody is not the simultaneity itself (as this can't be helped), but the priming of the conditions for the freeing up.

In relation to darkroom practice, prosody is the expression of luminosity. It's not the luminosity itself, but all things finding expression from luminosity as source. Prosody is an immediate answer to the 'binding problem' (why do things hold together?) in terms of rhythm, pause, tone, vibe, listening, pronunciation, projection, intent, tempo, repetition, pulse, timbre and so on.

We speak just as we compute: so that the incommunicable may become part of that which we communicate. How can we encode this conundrum in exploratory spatial processes? Perhaps we can procede like a complex system—building up from simple rules until an animate form arises and its behavior, beyond us, like life, can no longer be explained, neither computationally nor poetically. (Perhaps the only system greater-than-us to have ever been fully, materially described is the Sanskrit language, as delineated by the sage-linguist Panini in his *Ashtadhyayi*.)

In relation to computation in particular, prosody may also most usefully be described as encompassing all of semiotics: pragmatics (intention of the speaker), semantics, syntax (formalism used to represent the language) and the nature of the signal itself.

WHICH EXISTING SCIENCES TO DIRECTLY INVOLVE IN PROSODIC TRIALS?

Psychoneuroimmunoendocrinology

Often, meditation-oriented practices are analyzed only neurologically. Our emphasis is on elucidation of the entire body. A merely cognitive approach is too limiting and would give us little to build on (the biochemistry of darkness, for example, is largely glandular and hormonal, and acoustic energy influences not only the ear but connective tissue, ganglia, bone and cell membranes and cytoplasm). Absolute darkness shuts down the major cortical centers of the brain and activates the pineal, hypothalamus and pituitary glands (referred to in Taoist practice as the 'crystal palace') as emotional states are enhanced and the dream state manifests as conscious awareness. Enhanced melatonin production quiets the mind. Tryptophan-derived serotonin and DMT increase one's sense of elan as one enters a parasympathetic state. Peptides and the Hypothalamus-Pituitary-Adrenal Axis are as crucial to psychological states as neural transmission. Among the diverse biosciences, psychoneuroimmunoendocrinology [PNIE] at least makes a gesture toward our integrity and multifactorial etiology. PNIE will be essential for us in establishing the correspondences between prosody and our endogenous pharmacy.

Psychoacoustics

The darkroom will be set up to record and produce sound. Users will be introduced to a range of stimuli: brainwave patterns, binaural beats, compositions based on naad, rhythms for entraining and regulating body-wide (not only neural) systems (such as cardiorespiratory synchronization and neurohormonal secretions). We'll work with terms such as bodywave, auditory driving, Biological Sympathetic Oscillation, and frequency-following. We'll use the neural-network model of the brain to establish a broader premise and practice of psychoneuroimmunoendoacoustics.

Contemplative Sciences and Concentration Practices

How are we aware? What tells us that the mind is not the brain? The two are correlated, not equivalent, though we don't understand the nature of the correlation. Oddly and obviously enough, we aren't reducible to physical description.

For thousands of years contemplative traditions have conducted an empirical, incredibly sophisticated, exacting inquiry into the nature of mind and its potential to either cause or relieve suffering.

Extremely helpful terms from Buddhist phenomenology include *skanda* (the insubstantial aggregates we grasp at), *samatha* (calm abiding) and *vipassana* (insight meditation).

In Kashmir Shaivism, matter is an epiphenomenon of consciousness. Of particular relevance to darkroom practice are Shaivic terms such as *spanda* (pulsing consciousness, creative word), *sphuratta* (throbbing radiance) and *turiya* (the medium in which our dreams and waking states arise and subside).

An indispensable term from Dzogchen, *rigpa*, is the dissolving of the dualistic—experienced as intrinsic awareness, openness as the nature of all phenomenal existence, luminosity of the basis, spontaneously present knowledge, uncontrived presence, and/or the unity of clarity and emptiness.

Taoism maintains an utterly detailed and pragmatic inner alchemy, as well as offering forth *Wu Chi*.

Because we are about to, literally, build prosody, we are committed to opening the correspondences between contemplative science and architecture. How can the totality of the design-decisions of an architected space support a concentration practice that would remove the conditioning factors of craving, confusion, incoherence, competition and clinging to life? Can our architectural knowledge be as vast as we are, or is it (once the bottom lines are met) only material, aesthetic, perfunctory or, at best, ecological?

Because *everything* is at stake when we transform material into art and architecture, we only undermine our works by neglecting the great discernments of our introspective traditions.

Photobiology as Color Apothecary

As part of the combinatorial sessions (intermixtures of tone, beat, pause, phoneme, word, and so on), the Anechoic Naad Darkroom will be set up to modify color (using Roscolux gels) and explore the influences of the electromagnetic energy of different colors on the same neuroendocrinological system undergoing subtilization by sound, silence, concentration and darkness.

We will at once be testing the reliability of the performance of photobiology (as color science is a perpetually suspect, fledgling field, after all), starting not with Ghadiali's *Spectro Chromometry Encyclopaedia*, or even the treatises of Avicenna—our likely starting point will be the 5-element theory of the Bon tradition of Tibet. Although light is, after nutrition, the most important environmental input in regulating physiological function, we still don't understand how the electromagnetic energy of color interacts with the pituitary and pineal glands and the hypothalamus. Certainly we can do better than painting bridges blue to discourage their use by the suicidal (rumored to be effective), or supplementing fluorescent classroom lighting with ultraviolet lamps, or painting the locker rooms of visiting football teams 'passive pink' in an effort to debilitate an opponent.

Evolutionary Linguistics (Expanding the Hypothesis Space of Language Composition)

Is language inborn or do we pick it up along the way? If there's one thing we know for sure, it's neither one nor the other. It's not one at the exclusion of the other. (Do we in fact know this?) Can it be as forcefully argued that nativism and empiricism are 'one' (isn't 'nurture' part of 'nature')?

Innatism holds that a newborn is not a blank slate but comes equipped with a biological structure dedicated to language—a language faculty or instinct; a hardwired common grammar; a syntaxed brain/mind; a language organ or genetic apriori knowledge. Under innatism, language development is too richly complex to be derived from the environment. We're able to focus on what we're saying in real-time because the flow of words is effortless (we scarcely think about how speech is happening as it happens). Though we're responsible for what we say, we can hardly claim responsibility for the *ability* to speak.

On the other hand, empiricism holds that language is learned through sensory experience, as convention, reinforcement, social interaction and trial and error.

Prosody poses the same basic question to both innatism and empiricism. What is the least reductive account of the mind (with the behavior of neurons and synapses as perhaps the most reductive explanation of the higher-level phenomena of language and consciousness)?

The basis of the mind is its concentration upon itself coupled with prosodic interaction and expression as the process behind the arising of phenomena. (I offer this hopefully nonreductive simplification as a working definition of mind, for the moment, as befits this context.)

On one level, the Anechoic Naad Darkroom will be a space of the simulated emergence of language, with a special concentration on speech impulse. Language arises in mind. Perhaps it arises in the enteric mind. We're connected to its source. Perhaps it can be said that we are its source. There are practices of mind that approach the mind as source. Source of the mind or source of language? Prosody oversees the point of initiation of words. The idea of language as divine gift (as high innatism, as muse-speech, as logos) generally falls outside of serious scientific discussion. On the other hand, contemplative sciences (as referenced above) are rigorously empirical (even as they open introspection and first person experience) and have become investigative tools within neuroscience, cognition, psychology, medicine and many other disciplines. Likewise, we will bring concentration practices to the darkroom and to the emergence of language. Poets will also practice in the darkroom. Broadly speaking, poetry is the originating of language. Poets tend language physiologically, emotionally and mentally, and by doing so, become the raw data and observable phenomena of evolutionary linguistics. Evolution is not a matter of mere neologism. Or is it? Every poetic tradition has had its proper understanding of the interdependent arising of words and world. This data might easily be overlooked by linguistic science—just as a philosopher of mind might dismiss meditation, perhaps without ever having meditated. (The hand of science and the hand of art cutting each other off. Partial truths are their own disproof.)

As such, the Anechoic Naad Darkroom will be framed as an embodied case study in Evolutionary Linguistics.

At this point, we're placing the emergence of language and the development of spatial language in a co-evolutionary relationship as potential design criteria for the Prosody Building, as well.

Naad Science

We're approaching naad (as defined above) as a science that has already integrated many of the disciplines necessary for the full functioning of the darkroom.

NEW SCIENCES PROPOSED BY THE PROSODIC BODY IN RELATION TO THE DARKROOM WORK

First Person Plural Science

When the computationalist doctrine (in the words of Francisco Varela) “failed to account even for the most elementary coping with the world: walking, perceiving objects in a natural setting, imagination,”² cognitive science admitted subjectivity and first person experience as integral to phenomenological examination. This post-objective ethos has produced across-the-board benefits: some doctors now consider the experience of the patient and their interactions with the patient as part of the healing experience; an archeologist can't factually understand an artifact without as deep a dig into the intimate life of the user; and physicists include observation as part of the observed. These are all instances of first person singular science. Does this first person ethos come as good news for all sciences and for society as a whole? What about social science, game theory or ordinary politics and economics in which self-interest is already carrying the day? It's not too early to weigh the consequences of the first-person singular front moving our way from the cognitivist base. How will first person singular science interact with the pedagogical apparatus of market fundamentalism, unbridled self-interest, failing sociality, rampant privatization, dismantling of social protections and the near pathological disdain for public values?

As an isolated phenomenon, the new doctrine of subjectivity—of first-person pursuit—might only serve to reinforce the culture of solipsism. Certainly without a commensurate inquiry into the limitations of autopoiesis and

discrete being, first person singular science (and the cult of individual freedom) are considerably compromised.

The Prosodic Body proposes *First Person Plural Science*—an enactive approach to shared, consequential being. It proposes the development of a panoply of ‘skillful means’ for opening one discipline to another and exposing interconnectivity as real.

Consciousness is explicable neither as a private phenomenal construct nor as a higher-order metarepresentation. First Person Plural Science views consciousness as an interactive, extremely neuroplastic event open to and dependent upon sociocultural influence. ‘We’ are the key to a spontaneously organizing, embodied and broadly shared prosperity.

Prosodopsychoneuroimmunoendocrinology (PPNIE)

PPNIE seeks an applied understanding of the direct correspondences between prosodic stimuli and biochemical and bioelectromagnetic transformations. Methods for establishing such correspondences will be described below.

Open Science

Just as first-person accounts are already an integral part of scientific phenomena, proprietary, copyrighted, and trademarked materials constantly expand our common store of knowledge. With plurality soon to be added to scientific fact (individuality and our indivisibility), information will be less proprietary to specialists, big commerce and academies. Disciplines will have a less restrictive sense of method and contribution. Open Science is also a countervailing force with regard to power concentration, partiality and paucity of means. We’re of course proposing prosody, as presented in this document (as intermediary for myriad disciplines, and as an immateriality/materialization intermediary) as an active instance of Open Science.

INSTRUMENTATION, TRIALS, EXPERIMENTS AND THE PROSODOGRAM

The main purpose of the Anechoic Naad Darkroom will be the assembling of the *Prosodogram*: a diagnostic record that will be developed from qualitative and quantitative testing of the effects of tone, silence, beat, frequency, color, darkness, timbre, and other prosodic phenomena on bioprocesses (muscle tension, blood pressure, melatonin production, respiratory rate, oxygen saturation, pulse, limbic kindling, immunoglobulin, serotonin, magnetic fields, circadian rhythms, etc.).

The Prosodogram will work with personalized prosody profiles and the implementation of our combinatory-stimuli approach. It will, furthermore, interface with results from diverse symptomatological/diagnostic methods to become a tool suitable for use in clinical settings. A Prosodogram software will simultaneously be developed to link prosody, biomarker, case histories and desired outcome.

Obviously the questions of portability, affordability, feasibility, pertinence and noninvasiveness of measuring devices and methods must be taken into consideration.

Teaming up with institutions and labs will be rigorously pursued. We'll pursue new types of testing (as well as new signals and biomarkers to test for)—entrainment tests with mobile computers, behavioral feedback, an intrinsic awareness assay, phonic-photonics, citizen science (e.g., if 5,000 people undergo the same vowel sound, harmonic frequency or color wavelength over a set period of time, what evidence might be gleaned from the exposure?—perhaps the *seti@home* project or the protein-folding, distributed computing project *Foldit* could serve as models).

We'll also draw on interviews, make use of various existing paper and pencil tests like the Phenomenology of Consciousness Inventory [PCI] and POMS assessment [Profile of Mood States], as well as developing our own questionnaires. We'll adapt existing devices to prosodic inquiry (such as spectrograms, mobile brainwave measurement applications and mobile devices that measure other bodily functions (particularly endocrinological activity). We will also develop our own devices and systems.

What are the meaningful biomarkers for darkroom practice and can they be recorded or directed in real-time by devices within our technological and financial reach?

Are there vital signs we've yet to detect? If suffering and disease come from dissonance in tissue and interrelationship, how can the dissonance be remedied by prosody (by breathing, by thoughtform, by tone, by phonic focus) with full assistance from its prosodic building?

These studies can, in turn, be used to determine how architecture can assist the body in regulating itself, far beyond the hedonic requirements of convenience and comfort.

THE DARKROOM COULD ALSO BE CALLED THE BREATH BUILDING

Can a building assist breathing? If so, would it be by means of its materiality, its lighting, its ventilation system, sense of proportion, proprioceptivity, its transitioning from one space to another or the care with which it was designed and built? It would do so through its attention to prosody. Each emotion and each awareness is a specific breathing pattern. Because prosody is the creation of breathing patterns, it can be used to correct breathing disorders (it is not imprecise to approach hypertension, asthma or anger as breathing disorders).

To give one example: RSA (respiratory sinus arrhythmia, also known as cardiorespiratory synchronization) is the condition in which the heart beats more forcefully on the inhalation cycle (as it is about to send the newly oxygenated blood throughout the body) than during exhalation when the heart may allow itself to rest and recover in preparation for the next great surge. This heart-lung coordination is our most efficient, most replenishing breathing pattern. Although this pattern is our birthright, due to decreased physical activity, the onset of stress and accumulated environmental insults, it is generally lost by the time we're adolescents. So, more specifically, the Darkroom will be the birthright building, the RSA building, a place for recovering our optimal breathing rhythms.

A distributed computing system is essentially a way of breathing together.

THE PROSODY PLATFORM

By ‘platform’ we mean a place, both virtual and built, where workers from prosody-related fields can gather and co-develop the common area of prosody while furthering their proper interests. It’s a call and an accommodation—a distributed participatory program for peer contribution, exchange and operation (and is essentially amorphous otherwise).

How can the Prosody Platform be built into an architecture that includes the darkroom, stairs, corridor and possibly a roof observatory?

This project has a nested effect: the database is built into its computer architecture and the computer is built into its space (the platform/entryway), while the entryway is of course integral to the immediate architecture (the Anechoic Naad Darkroom) which is part of the eventual Prosody Building, itself none other than the embodied, enactive, full-scale and fully extended expression of the peer-created data system. That’s the overall picture.

The Prosody Platform proposition is as follows: everyone determining the nature of a field, the nature of which is its determination by everyone (prosody is most explicitly our expressivity, our interrelation and our intentionality). We’ve scarcely begun to extend the expressive, organic (vocal and gestural) terms of prosody to our computations. Building a brain or a robot that avoids an obstacle in its path is just a baby step.

Consider this approach a cross-amateurism, as we each become nonspecialists one step outside our confines. Call it *eachothersourcing*. You are results I can’t obtain for myself, as I am the same for you, in return. We help each other out.

Is it possible to organize the amorphous area of prosody? Can we even call it an ‘area’? Does it congeal like blood or jello; does it have flavors or tenors or timbres or discernible learning objects; does it move in veins; does it resonate sympathetically within itself? Are these metaphors intrinsic to its formation or extraneous and misleading? Will it be the first lifeform whose formation has been constrained purely by its own dictates? Must it be a model of consciousness, a simulation or instance of life-origination, merely a complex adaptation, a stigmery (at least) or just an absolutely messy mass-collaboration? The only possible structure of the entirety of prosody (the being it is none other than) is its constant creation, modification and destruction at the ‘hands’ of its autonomous human and computer agents (in

addition to the conceivably related works of those researchers uninvolved and working unrelatedly). Can we design every bit of that? Even a cloud is too formal.

On a more practical level, a few parameters can be assumed: the Prosody Platform must be open access (though probably not open content as we're not trying to efface work or erase faces, but create interrelationship); it must allow editing and interlinking; it must be archival as well as current (hosting works in progress, open research, and interactive real-time and asynchronous information exchange); with at least a modicum of logarithmic sorting and storing. (Obviously the digital platform will have to develop concurrently with the design and operation of the darkroom.)

The Prosodic Body requires not only a level of engagement that works toward social good, it also asks that its practices generate evolutionary strategies, computations and artwork-based algorithms that might influence our germline in ways that enhance not only our chances for survival but our shot at living in peace and widespread prosperity (before the failure to do so eliminates all chances for living any condition whatsoever).

FURTHER REFLECTIONS FOR GENERATING PROSODIC FORMS

Is it possible to turn prosodic modes and tropes into computation and design criteria? Can prosodic terms be developed into algorithms beyond the rule-based writing of poems? Can explicitly prosodic forms be generated? Are there prosody-based genetic algorithms that would allow us to contribute solution suggestions to the evolutionary process? How do embodiment and consciousness-practices interface with knowledge that can be sought with software? Can we interface nonphenomenological states (innate awareness, selflessness, spirit, nonduality) and spatial modeling?

The Prosodic Body, as a research area, is cross-platform in the sense that it seeks out, invites, hosts, deciphers, absorbs and serves other fields, whether they are cross-disciplinary or not. Prosody is, by definition, that which makes an initial gesture toward others. By learning other idioms, prosody allows others to keep and further the deep specificities of their proper areas of research. Vocabularies are most useful to prosody when they remain unadulterated. Native, idiomatic and unaffected languages have the best chance of cross-fecundizing prosody. On the other hand, prosody writes

versions of itself that can be supported by other systems (versions that could actually become the language of the other systems). It runs counter to what is commonly, comically referred to as “disciplinary separation anxiety” (i.e., not only sticking to one’s own field but convincing oneself such adherence is the only way meaningful work can be done). Plain speech, for prosody, is allowing others to speak freely. Prosody does not have its own language (it’s what languages are made of). Prosody is fluency. Prosody is responding-from-flow. It places us in the luminous. All its routes are sub-routines of luminous flow.

Prosody is perhaps *the* Open Science. It’s unbounded and non-self-reinforcing. It’s plenary—not another assembly of a field with relevance only to itself as it desperately lunges outward in an effort to avoid inbreeding depression. (How shall the very design of a building enact the communicability of Open Science? How can it countervail aggressive privatization and asociality and still be a recognizable entity?)

To borrow a computational metaphor: prosody is a platform that accepts all softwares for its own enrichment as it enables them to interface with each other. For prosody there is only one language (all language) and computation (as demonstrated by its vocabulary of script, code, program, etc.) is but one aspect of total communicability.

In turn, prosody as a knowledge or application can run in any system. Prosody is itself both platform-polyglottal and platform-naïve. As language, gesture, expression and intention, prosody can create its own urgency in any situation.

When prosodically crossing over, is there an advanced functionality to gain or give; a particularly salutary service or simplicity to arrive at?

Prosody is *already* native to other disciplines (otherwise the claim of its cross-platform ability would be trite, a mere exercise or stretch). To note the nearest example: prosody greatly informs poetry and music. It also bears on any language area (phonology, phonemics, semiotics, etc.); any field involved in patterning or pulsation (psychoacoustics, cymatics, astrophysics, particle physics); any field involved in the indivisibility of subjectivity, observation and the observed; as well as any expressivity (arts, oratory, publicity). Prosody is the inseparability of spheres. It’s a standard other systems may run on and by doing so become standards in their own right for other systems (technically

referred to as ‘cross-hosting’). It allows each participant to continue to speak her or his own tongue. It’s a glossarial panglotism. Above all, it’s an intense and extensively resonant listening.

The outcome of prosody as algorithm is materialization-as-interchange—not a ‘poem’ or individualized poetics or ‘voice’ consistent with the privatization of absolutely everything under the sun (such solipsism at the exclusion of other species and forms and even at the exclusion of other subjectivities, is about as promising as our continued use of fossil fuel). The outcome of prosody as algorithm is the realization of our interwovenness.

If correspondences and overlapping forms of analysis and generative morphologies can be discovered for prosody and computation, both fields will be given a vantage point from which to access further fields and take advantage of advances independent of each other. They will enable each other to distribute themselves broadly and beneficially.

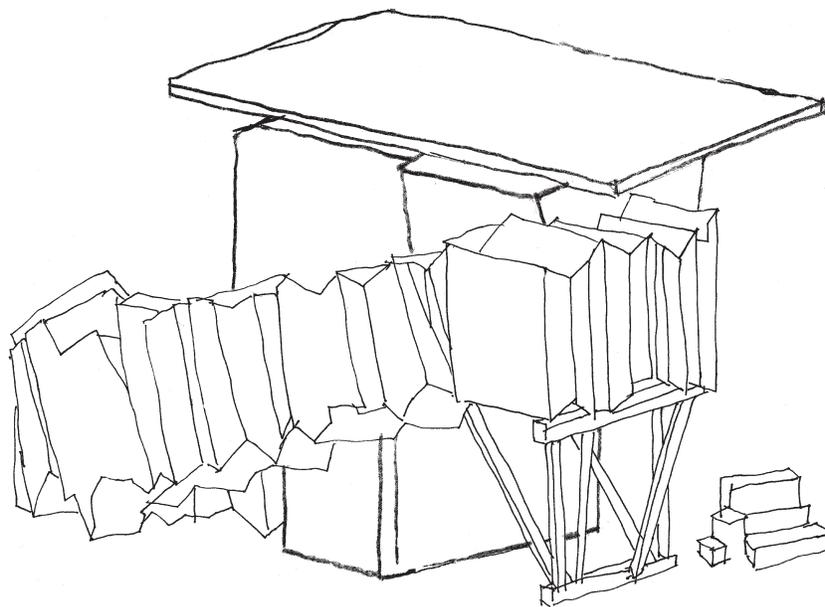
The experiences that will be undergone in the darkroom (the empirical observations, the qualitative and quantitative accounts and the input from various disciplines) will amount to a de facto database for the Prosodic Body. How this database will organize itself (whether alphabetically, by field, content clump, author, overlapping terms, chronologically, topically) is yet to be designed and will certainly require a mix of software agents and hands-on triage. Ordering of material is itself an integral part of the content and exploration of prosody (not just an extraneous, after-the-fact operation). The Prosodic Body is not an already well-defined, circumscribed area. It’s always an initial instancing of itself, with the instantaneous recognition of itself as absolutely integral to what it is. In this way, prosody as a spontaneous, self-organizing discipline can serve as a model for other areas and scales, whether molecular, societal, cosmic or economic. By definition, the Prosodic Body can’t merely be another decrepit website, personal blog or incommensurable academy, nor can it be the matter of another lone author having sat down to write a book, or editor having put together a collection of the essays of many authors. It’s not a reading room, library or rigidly monolithic building. This open nature (whose core is everywhere) necessarily informs the development of the Prosody Building. It may be a building scattered in one place or concentrated across several sites. It will be guided by disparate intentions; agile, adaptive, able to straddle; eccentric, activist and service-oriented; a place with each of its parts in immediate contact with each other; with its users reacting regeneratively, minute by minute, to any potential outmodedness, impending obsolescence or senescence.

Prosodic design can't be the product of a purely object-oriented programming language—just as a poem is not the filling out of a pre-determined beat pattern, but a process of the unpredictable interplay of compositional elements, contents, connotations and emotions.

Prosody can also be made available as an application of proactive, predictive attributes, capable of carrying out tasks for other practices. As an open source, prosody can, reciprocally, incorporate functions and components from disciplines far from its phonic basis.

With its relevance ever-renewing and broadly distributed across many agents, contributors, trials and device-types, the Prosody Platform becomes an instance of commoning—of public utility. It's a wide area network, with promptly published, semi-proprietary feeds (rather like the human genome public consortium, before the privateering took over). Of course a software platform with mobile or democratic applications doesn't, in itself, give rise to a new social space. It's not simply a matter of how it's applied or what it's applied to. The Prosody Platform, from its inception, must coextensively, as part of its own development, manifest the world it calls for. If not, it can only be a retrofit tool for status quo, appropriated even before it leaves the 'drawing board.'

Scaling up: the architecture of the Prosody Building will conform to the human (and material) behaviors and the formative prosodic terms that bring the building to life.



NEW SPACE: COMPUTATION IN RELATION TO DARKROOM PRACTICE

What kind of space would allow someone to stabilize while absorbed in the absolutely unfamiliar, as the senses fall away, as ‘the world’ falls away? What stabilizes? What stabilizes when the body no longer serves as place marker? What stabilizes what? What design approach comes to mind for a space defined as (and whose function is to produce) emptiness? How conceive an uncontrived space? How represent a nonrepresentational room?

Prosody is emergency technology called upon when faced with confusion and loss of intrinsic awareness—when there is no situation whatsoever, we fall back on (fall into) the intermediary role of prosody.

How can the material context of the darkroom facilitate an unsituated awareness (an awareness that depends on nothing, that can and must happen anywhere, no matter what)? If there is an awareness that opens because there is no context other than darkness and emptiness (and if this is the objective of the darkroom), this non-context must somehow be built, and its materiality must be extraordinarily specific as it can’t be made of any parts of the world we habitually see, build with and ignore in order to focus and function ordinarily. It’s not a black box. In fact it deprives us of very little (when compared with the inner immensity it uniquely provides). It’s an abundance.

Prosody is our situatedness in shift. Mind’s empirical approach to itself.

When procedurally moving into the dark, what can computation detect? What can it detect when all our distributed activities and selves fall away? Of course things like blood pressure and electrolyte balance can be monitored—but can we measure the dissolution of the elements we’re made of, the dying down of stimuli, the charge of the interior imaging that spontaneously arises when the pinoline kicks in? Can we make an exact science out of endogenous (i.e., not ingested) compounds intentionally synthesized within? Does the pineal gland have a nonchemical life of its own? Do certain hormones go unnamed simply because we haven’t observed the coincidences that produce them? How much of our distress can’t be remedied simply because prosodic science has not yet been delineated and broadly applied?

Prosody underpins us within. Inwardness itself is our underpinning.

In any event, prosody is an endogenous body technology interfacing with exogenous formative forces as unity of consciousness. Add the science of epigenetics (the beneficial determining of gene expression by exterior influences) and we have an entire prosodic practice.

Subjectivity is situatedness in the shattered.

The darkroom doesn't set up a hedonic stability and well-being. It's not a relaxation pad. Concomitantly (with regard to dissonance and distress) it settles on source not symptom. It doesn't separate practice from experiment or empirical mind from illumination. Knowledge is not a distraction. Chemicals correspond with contemplation—both vibrate and inform.

The only organic model I'm offering to spatial computation for sensing its way in the dark is an *empty heart*. The heart functions optimally when it is empty. When it is unobstructed it serves the body most vitally, as the rest of the body nourishes the heart in return. The heart's sovereignty is self-emptiness. "A space where there can be nothing. Never anything."³ Where foot can't be set.

What does computation have to do with infinite light (what does architecture have to do with its own non-location)? How does 'shape' relate to the inconceivable when its relevance depends on the inconceivable? (Perhaps any stupa or astrophysicist could offer an answer.) Can thoughtform be *surfaced* (built, clad) as it arises and continues to morph?

Can computing detect the swollenness, the very emptiness that wells up in things—the *shunyata*, the void—or are we, as prosodists, averse to the rich and exacting vocabulary of contemplative traditions as though they threaten us or encroach on our territory?

Draw a form for emptiness (in that all form is empty, doubly challenging). Emptiness is certainly not a huge, hollow, nondescript space. It is rather a shape that *accommodates* emptiness. Emptiness is emptiness at any scale. How shall we place computation and emptiness in a reciprocal, mutually beneficial relationship?

Given that the darkroom is a totipotent space (like a stem cell, like the nondifferentiation we arise from and return to), how might a version-prolific program approach the designing of such a space-of-all-possible-combinations? How design potential itself? How develop a non-developmental

space? The Anechoic Naad Darkroom must be generative of far more possibilities than its actualization could ever exhaust. In its very materiality and with each limitation, the darkroom space must multiply the functions of prosody (giving off myriad patterns and possibilities for others to use in formulating their own expressions). The Prosodic Body produces artworks by opening onto uncreated and uncontrived space. (This is what the darkroom is.) Is there a parallel procedure in computation?

How can we even think about the spatializing of our uncontrived state? The darkroom will be radically original simply by following out its constraints. At the same time, as commonality, it will be entirely unecentric (universal). Picture a building that doesn't grasp after an identity. Then, don't picture it. A building that has no experience of objectivity (or subjectivity for that matter) would not be designed in an object-oriented or form-driven fashion. In fact it runs counter to driving at anything at all. What might non-representational spatial computing produce?

INTERRELATING SPATIAL COMPUTATION AND PROSODY

As a fundamental operational structure that includes hardware components, architecture is 'like' computer architecture. But beyond the obvious analogy, how can the element of space accommodate the prosodic body?

The purpose of the Anechoic Naad Darkroom is to provide a nonrepresentational (actually an *unrepresentable*) space. How might the full implication of this requirement test the typically representational aim of computational architecture?

What does prosody have to do with a polygon, or points and lines and surfaces? Prosody, i.e., pattern, repetition, pagination, punctuation, line-length, enjambment and (perhaps more promisingly) parataxis, heterophony, epenthesis, catalexis, polyptoton, notarikon, isochrony, symploce, technopaegnia, lay, melisma, stichic, lojong, morpheme, nazama, nada-brahman, clause, stressed-pause, stress clash, parallelism, epiphora, flourish, or anadiplosis, to name but a few under-utilized prosodic terms. It's like asking what prosody has to do with quantity. It has count-coherence whether one proceeds by counting specific features or not. Prosody and computation are both complexly adaptive, aggregative, layered, apophenic, ruled and run by a sense of connectivity across a surface, whether that of the page or

computer graphic on its screen. (As I've already indicated, computation and prosody share 'language.')

Can a building be contoured by creating iso-curves from a specific tone, timbre or waveform? Can we form a phonoarchitectural phenotypology or a vocomorphoarchitectology? For example, can an architectural volume accord with a brainwave pattern: better yet, could it follow the combined waveforms of the epsilon (sub 0.5Hz) and lambda (as high as 200Hz) states associated with deepest insight and greatest synthesis of sensory information, respectively? Would this architectural instance of form-following-waveform indeed facilitate the anticipated mental state (thereby taking architectural acoustics into a new set of possibilities)? If so, 0.5 + 200Hz could be a consummate formal constraint for the Naad Darkroom.

Can an architectural volume be generated from a 3D surface spectrograph of a vocal cadence? Would a venerated lama agree to chant Om Mani Padme Hum to provide the resonant frequency of the darkroom space? How does intention inscribe waveform?

Can a building be brought forth from the acoustic signatures of the phonemes (just as the Indic cosmos is generated from the sound signatures of the 50 letters of the Sanskrit alphabet—the so-called phonemic emanation, or phonic cosmogenesis), from the speech sounds we produce, just as our bodies have formed around these sounds in order that we produce them, an architecture adhering to prosodic imperatives?

Perhaps the darkroom should simulate the reverberative mid-brain area of the hypothalamus, pituitary and pineal glands, and the nasal sinuses enclosed in their bony cavities.

What volume would be conducive to the secretion of melatonin by the pineal gland as the thalamus shuts down our sensory receptors (as this is indeed what darkness does)? Can pure darkness be chemically doubled by architecture? Is the brain really designed to block and inhibit awareness? Chemically, consciousness comes from an inhibitory process (harmine, harmaline and pinoline inhibiting the enzymatic actions of monamine oxidase and tryptamine N-methyltransferase, allowing for the synthesis of 5-MeO-DMT and DMT). The Anechoic Naad Darkroom would make the brain work *otherwise*. (The alleged frequency of the process of heightened consciousness is 8Hz—could this be the resonant frequency of the building?)

To undergo, chemically, the process of dying—design that! If we know how we're dying we know how to die—we know how to die *better*, or, more fully, stably.

Additionally, prosodic terms (such as those listed above) could be used as behaviors in an agent-based design process, with the prosodic term 'in effect' carrying out its comportment in coordination with other agents, building up to an intercommunicative whole.

How might an architecturally prosodic parameter behave as it brings forth the Prosody Building's intended presence in the world? The Anechoic Naad Darkroom can't be a representation of itself. Nor can it be the computational process that generates it. If it's alive, like prosody, it's greater than its process. It would re-coordinate itself with each act, not re-experience what it knows about itself. That's its first rule: inseparability from *all it's not*—as it is especially not a body, as all bodies are terminal from the instant mitosis takes off.

Finally, how might a fabrication process be integral to a form that follows prosody?

MISCELLANEOUS DESIGN, MATERIALS AND CONSTRUCTION PARAMETERS

Further, more detailed structural considerations await and hinge upon computer-generated prosody-forms.

As a possible, corresponding construction method: joineries of a complexity that can only be drawn by computer and only cut by hand—an interdependent mix of extremes of computation and manual skill.

Overall, there is a material preference for mineral. (Think *cave up in the air*).

The Prosody Platform Entryway will house an attendant, the database and a small archive/display area (approximately 90 square feet). This is the control center. The Entryway leads to the origami corridor that accesses the darkroom. (Wheelchair access is mandatory, as the corridor rises the length of the darkroom.) The main purpose of the corridor is to ease the transition from light to darkness and darkness to light. The end of the corridor (the area

just before the door to the darkroom) opens out into a small food-preparation area, sink and toilet (waterless composting system), while remaining spatially separate from the darkroom.

The darkroom itself is a raised structure allowing a 12-foot clearance at street level. It will be partially, integrally, supported by the entryway/corridor/stair structures. It will have a capacity of 15 people (roughly 250 square feet). It will be made of two identical end-to-end trapezoids with one trapezoid inverted in relation to the other (emphasizing weight carried upward and weight conducted downward). The exterior walls of the darkroom will be clad with 5-inch diameter pine posts positioned vertically.

A floor grating will be built over the top of anechoic floor panels. (Alternatively, shopmade earth tiles may be placed over the grid system spanning the floor.)

To date, two panels for the darkroom's interior walls have been researched: the hemi-anechoic Supersoft Compact Panel made by Eckel Industries and Eckel's EMW Perforated Metallic Wedge. This hemi-anechoic panel would avoid the conventional, extremely deep and daunting wedge shape. The metal wedge, on the other hand, is protective and prevents contact with polyurethane foam.

The ventilation system will be designed to maintain uniform temperature and twelve air changes per hour.

The electric service (from solar setup) will arrive by pipe sleeves that pass through the envelope.

Rain runoff from the roof will be a prominent detail (e.g., an exaggerated gutter or overhang).

A roof that rolls back to open the interior space to full sun or night sky?

Notes

- 1) Tulku Thondup, *Peaceful Death, Joyful Rebirth: A Tibetan Buddhist Guidebook* (Boston: Shambhala, 2005) 161.
- 2) Francisco Varela, letter to the Cosmos Web Forum, <http://www.enolagaia.com/UMUArchive/Varela.html>.
- 3) Daria Faïn, in conversation.