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Throwing Stones at Nothing

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ABSTRACT.

In this essay I attempt to reexperience as much as rethink and rework approaches to sound, walking, and soundwalking. One way I have tried to do this is by developing an account of what I call ‘vertego’, a portmanteau of vertigo and ego, denoting the implicit and densely entangled relations of self and environment, and of listening and walking (held together, and pushed apart, by balance and gravity). Such intimate proximity is accompanied by various theories of the human ego (as if such theories were akin to different environments, topographical maturations and imaginations), which I here consider as a vessel that breaks even as it is being formed. Underlying this process, and in concert with my ongoing reading of the works of microbiologists Lynn Margulis and Dorion Sagan, I try to move away from such polarised terms as cooperation and competition, working instead with a spectral vocabulary of ejection, emergence, and by-product, trying to get closer to a practise of listening that is akin to unlistening (or not locating), in which, in a manner similar to vertego, listening-selves fall apart.

By necessity I have engaged with certain anatomical details, and in mind of such, I have written a brief introduction to the vestibular labyrinth of the human inner ear, which can be found in the weblink at the end of this essay, alongside a short glossary of terms. Anyone who is interested can also find a number of the notes, including those on the auditory labyrinth, that have quietly fed into the metapattern formed around the conjunction of a series of essays in which *Throwing Stones at Nothing* is part.^[1]

INTRODUCTION.

During the research and writing of this essay I fell over numerous times. As a child I fell down the stairs so often that my mother stopped coming to see if I was okay. Most of my childhood memories revolve around falling, an event that has leached into my adult life, the debilitating and mirrored sting I feel whenever I see anyone fall over. It's interesting to think about the ever present threat of falling whilst walking and how over the years it has changed not only what I listen to, but how I listen and what I think I mean by listening.

'Throwing Stones at Nothing' is an essay of fecund speculation, but also of experience, moving away from, as Lynn Margulis and Dorion Sagan put it, a myth of the "completely self-contained individual" (Margulis & Sagan, 2002, pg. 19), in the hope of helping to replace it with a more flexible description. This essay is implicated in the myriad possible levels of emergence and incorporation in which the composite ego, the self, can come apart, de-personalise, resonate, integrate, drift, and reintegrate. In this case, such states are felt and considered through soundwalking, or what I call in relation to my own experience of such a practise, vertego. This is a term that relates to ambiguity of space created by the distention of place (a location you can't tell you're 'in' until you perceive it from a distance), one that I understand to merge, block, scatter and correspond in between possibilities of walking and listening; falling and shaking; rushing and splitting^[iii].

I was born without the superior layer of the semicircular canal in my right ear, a condition called superior semicircular canal dehiscence. The canal is part of the vestibular capacity of the inner labyrinth, I say this in part because I'm still trying to understand what exactly this means both to, and for, me.^[iii] I will continue to try and refine the term vertego as and after this essay unfolds, but for now, is best left as kinetic happening, a kind of shock wherein ego is ejected from ego (a process I have tried to explain throughout this essay in a variety of ways), which has led to open and ongoing questions, such as: What returns to ego? What arrives as identity in the motion of movement so often unaware of its own instability? What might some of the differences be between arrival and departure?^[iv]

According to Margulis and Sagan, "visible organisms have multiple genomes, if somebody

feels like they're falling apart, it's because, on the very level of being, they are falling apart, composed as they are of many different living parts that can be detected and identified." (Margulis & Sagan, 2002, pg.19). Reflecting on both the abovementioned considerations of the motile ego, and what in this instance I would term the bio-philosophy of Margulis and Sagan, I have attempted to relate and amplify the causes and effects of the vertiginous ejection of ego in my dehiscent right ear to both environment and body-mind.

It follows that the various sections of this essay can be read in any order, bar perhaps the introduction and conclusion, there is no set route or trajectory. It follows, though not in a straight line, that this essay is not an attempt to delineate or indeed eradicate boundaries of self, such considerations have arisen in light of the self-reflexive process of soundwalking as vertigo as itself pertaining to something other than the self-contained individual. As an aggregate of such bewildered experience, I will consider vertigo as reflected in studies of by-products, such things that are 'cast away', in the words of psychologist Andrew Peto ^[v], to whom I will, ironically, return.

In sections 6 and 7 this leads to 'Asterion' (the name, among many other things, of the ancient Cretan minotaur), here considered as a complex and drifting mist of symbols based equally on readings of mythological, alchemical and hermetic histories, as much as the inseparable practises of listening and walking, made so by my lived experience of the vestibular and auditory conditions, semicircular canal dehiscence and autophony. By gathering together a mandala of symbols, concepts and metaphors, such as botanical dehiscence, bewilderment, bull, labyrinth, aleph and imagination, this essay ties and unties soundwalking in a way that, I hope, will present some alternative ways to interact with such a practise as a form of auditory and vestibular cohabitation.

1.

Due to my dehiscence, over the last ten years I've found it increasingly difficult to take part in any group soundwalks. Being in a situation whereupon I stop and listen with others in relation to whatever is happening at that moment (if someone suddenly says, 'look up!', or during a silent group soundwalk, people all look up at a certain spot, or I have to try and keep in step with others as we both walk and listen) has become an increasingly

precarious, difficult, and sometimes embarrassing, venture. [\[vi\]](#)

For me, soundwalking could be defined as walking and listening in cooperation. If such acts don't cooperate, due, in this instance, to dehiscence, for me it then becomes a matter of finding ways to help them, and by extension myself, to do so, or looking again at what I had thought was competition, which we might here call struggle, to see if it can be otherwise. This in turn has led to a reevaluation of such things, not as superficial dichotomisations, but as part of a generatively alchemical coincidence and reciprocity of opposites.

There are myriad ways of holding such multiplicitous processes as competition and cooperation together, holding them to the extent that neither one dominates the other, but simply moves and continues to move, to correspond, creating and suffusing their relations whilst also remaining mindful of what may emerge. The Roman poet Lucretius, and his understanding of what he termed simulacra, seems a good point in which to briefly enter and then leave. For Lucretius, the simulacrum (which I understand to be the energy, the heated breath of the world that rises and falls, departs and returns, prone to all sorts of pareidolia) concealed the shock and motion through which it was produced, lending credence to sensible and perceptual stability, and yet it could also stimulate perceptual, if not sensible, inference, enabling a register in which the world is held together whilst coming apart. Going into this essay, the presence of Lucretian simulacra will be implicit, joining and separating cooperation and competition, in order to see what else might emerge, but also to pay attention to what I'd missed, and what was already there.

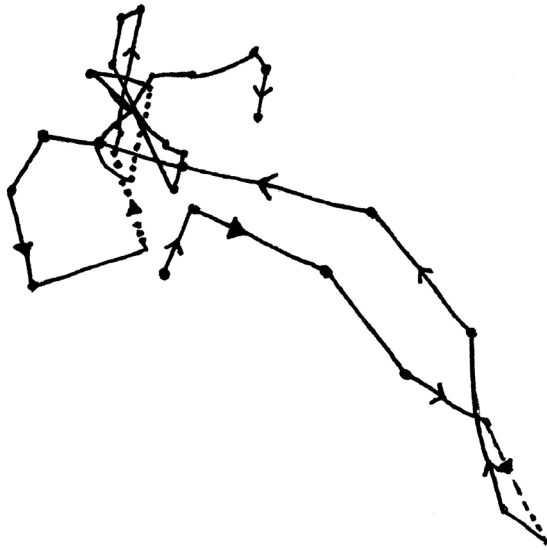
This has led to the development of a vocabulary premised on flux and permeation, on the self-contained and wildly spooling individual, on energy as matter and matter as energy. A vocabulary that walks with language (as a language that walks). It follows that walking is not here premised on a hierarchy of tacit expectations of ability, with regard to gait, posture, tone... but to assemblage and slow movement; to such things as are thought to reside in (perhaps I should also say return to) the vestibular labyrinth of the inner ear, a place that certain psychologists believe coevolved with both the emergence, development and drift of the superego in infants (Peto 1970, p. 401), which, once again, I will return to.

Pertaining to the self-contained nature of an individual, Margulis and Sagan ask; “when the committee” (here they are referring to the notion that organisms are walking assemblages) “gets sick, is simply a single animal getting sick, or is ‘illness’ more a rearrangement of the members?” (Margulis & Sagan, 2002, pg. 19). For me this is question is one way of trying to understand the unshakeable feelings and images I receive during periods of vertigo. The only place into which I can withdraw during such periods of vertiginous disturbance is a movement in place (a walk) in which I have to try to not try to listen. This is often reflected in the fact that when I’m overly conscious of the rhythm of my walking, an imbalance emerges through the very effort of awareness. Does such a disturbance shake up the whole of me, or part of me? If it is the former, or can be, what then happens to my ability to listen? Let alone to walk. And indeed, if it is the whole of me that is shaken up, that comes apart, does it follow that listening and walking are also rearranged?

I am aware of (perhaps even impishly enjoying) both playing with and leading on the irony that in order to write about my selves falling apart and casting away, I also have to write about myself as if I were not, as if I were indeed, a self-contained self. This is a still-shaking of self that can indeed be very painful, but it can also present other ways to think about processes of individuation, about relations among living parts, ratios of change, the curious eventuality of being able to listen with another degree of clarity (far from solely aural), as I am being shaken up. The cultivation of the notion and experience of vertigo lends itself to an ontology akin to an alchemical chord wherein such terms as destabilise and stabilise, in reference to the locations of the ever-shifting boundaries of self, also seem to become tired in their use.

2.

In Charles Darwin’s *The Power of Movement in Plants*, published in 1880, at least a third of the pages are taken up with drawings denoting the circumnutation of seedlings. These drawings, which I believe were made by Darwin, remind me very much of spikes of vertigo, my quavering ability to walk when listening (this refers to my entire body) anywhere but front-centre (otherwise known as the Sagittal plane).



Circumnutation is a heliacal organ movement widespread among plants and is influenced by light, touch, temperature, sound, chemicals, and of course, gravity. Curiously, sessility, in relation to motility, refers to an organisms means of self-locomotion, however, in a botanical sense, sessility means 'sitting', referring to plant parts that have no stalk. Botanically, dehiscence is known as the splitting along a so-called 'line of weakness' in a plant, this is in order to release, sometimes quite violently, its contents. Certain plants can fling their seeds over 100m, creating quite remarkable cracking sounds in the process. Dehiscence is often thought of as a process of abscission, which is to say a shedding of body parts, with the ejected structures said to be to caducous, which means, 'falling'. Anatomically speaking, in any creature with semicircular canals, dehiscence is most often used to refer to a 'surgical complication', where the edges of a wound no longer meet. Superior semicircular canal dehiscence, first reported by Lloyd B. Minor in 1990s (Minor, D.L. 1998, pg. 249) refers to a thinning, or a complete absence, of the temporal bone that overlies that part of the superior semicircular canal, and is often congenital.

The human inner ear is 'usually' a closed capsule, there is only one way 'in', and one way 'out'. Vibration is transmuted through the stapes bone into the inner ear, which then distils (as pressure) through the round window. This whole process causes the oval window to bulge in, as the round window bulbs out. Between the balance and hearing organs there is a kind of berm, a cartilaginous embankment. Semicircular canal dehiscence can result in what we might call a third window (a hole into and out of the inner ear) in addition to the round and oval windows. This allows motion of the endolymph, a conductive fluid, to be induced by both sound and balance stimuli. It essentially enables vibration and electricity to flow over and through the boundary.

The hole between the inner ear and the brain cavity can be as small as the tip of a ballpoint pen. Though it's important to note that there are multiple bores along the plane of the bone, much like the exit holes made by beetles through the trunk of a tree. Instead of spiralling throughout the cochlea, some of the vibration that passes into the inner ear is ejected out of the third hole of the canal. This means that when subsequent fluid moves, 'unnaturally', let's cautiously say, in the balance organs, the brain receives

afferent signals, as if the head were moving, though for all intents and purposes, it is not.

But sound is part of bone, a body is in so many ways the sound of its own integration. Pulse, heart, feet; the hiss and static of muscles, billions upon billions of biochemical responses... These energies can penetrate the balance organ of the inner ear through the third hole, and cause havoc; projecting self into a space of impossibility, one where it feels as if there are as many definitions and experiences of sound as there are sounds in the universe.

At the life of this hole, sound is in essence, made and remade, in much the same way as the brain can pull apart and remake a hydrogen atom. If we think of the human voice, for example, as it travels out of the mouth and around to the ears, it also travels through the jaw bone and passes into the hole, disturbing the balance organs, aggravating the voice as if at least two people were speaking, creating dendritic time and sensation. During such moments, the sounds I experience coalesce into a spaceless echo of my bodies, as I don't think they pass through the spiral of the cochlear, but rather reflect and ricochet around bone and the brain cavity. I think that what I feel during such moments is the sound of vibration itself.

Dehiscence turns my legs to jelly, a feeling comparable to sudden and unexplainable spikes of anxiety. Autophony, a side-effect of dehiscence which lifts my footsteps into my skull and back, unavoidably turns and folds listening up against itself. This is the emotion of motion in which my eyes, tongue, jaw, heart and bones absorb any residue of electromagnetism, accentuating the texture of the vibrating surface, a distension that treats the body as if it were a bellows.

3.

Vertigo doesn't answer questions so much as lengthen the resonance of questions unheard. It is to spin whilst passing oneself on the way round. Such a bewildered self is more akin to feedback than hierarchy, which is to say, each description of an I is implied

by another and in turn implies, or uncovers, another. To bewilder in this sense is to lose sense of where one is, where one hears, parts folding in the midst of unfolding, a nesting of larger in smaller holes. For the poet Fanny Howe, bewilderment offers a walk into a wild place, on “the threshold of love’s sanctuary which lies above reason.” (Howe, 2003, pg. 16). Another side of this experience is one that ejects preconception and normativity in favour of openness and experimentation.

A spiral can be an experience of perplexity and loss of bearing. When walking is full of falling, stumbling, and pain. Trying to get in deeper and to get safe at the same time. Progressing at one level and becoming more and more lost at another. In this sense, to balance is also to listen, a subtly conjoined attempt to stabilise flux, or the opposite, to wrest one thing from another and watch them turn. For such a spiral walker there is no plain path, no up and down, no inside or outside. It is to walk like sound walks, the asymmetry of empty space in which there are strange returns and recognitions, but rarely a conclusion. What goes in, at that time, goes out. The feeling that I’m full, metabolically and energetically speaking, leads to the question, how can I empty myself out? And the only way I’ve ever known how to do that, is walking. Each movement forwards catches and diffracts what is coming toward, which of course is also away. Intention reverses along attention. Spinning is central to centreless bewilderment. An approach, dizzying and repetitive, dissolving particularities into a solid hollow of sound, matching the outwardly observed with the internally heard.

These subtle contingencies of obliteration are the worlds that encircle space, measurements beyond correlation. Howe developed her appreciation of bewilderment by assiduously living in the world, ejecting attention out and into her poems, rushing back and forth within an irreconcilable set of imperatives. Walking to empty leads through such points of repose which I equate to unlistening (by which I mean, not locating, walking in order to try not to try and listen, listening in order to try not to try focussing on walking), wherein listening-walking-selves have split apart, recombined, ejected.

4.

The human vestibular apparatus is not only an organ for perception (of movements and gravity), but gives rise to reflexes, to turning and progressive movement, in turn influencing

muscle tone, gait, and posture. Sensations from the vestibular nerve do not necessarily form a part of our conscious knowledge of the world. Such a sensory organ, full of preconscious impressions, leads to labyrinthine motility of an instinctive life, highly sensitive to emotions and the development of both imagination and psyche, where changes in either can succinctly express themselves in vestibular sensations, and in consciousness.

It may seem like a prematurely concluded individual who can stand apart from such experiences as I have been describing. In truth, the inclination, as aside from the ability, which quavers in intent and capability, is one that wishes to communicate, to transubstantiate the experience of what feels like an ever widening gulf, in which the pain and turmoil that accompany the loss (a plurality of states all drawn toward that roving centre) integrate through their opposites in order to be heard and felt.

In the 1930s, psychologist Paul Ferdinand Schilder devised a list rooted in such affective observation and experience, a list that focussed on the influence of gravity on emotions developed in accord with his understanding of the vestibular labyrinth of the human inner ear (Schilder, 1970, pg.94). Schilder would write as he simultaneously rode an elevator, assiduously monitoring his reactions with an intense ardour.

Schilder claimed that everyone has a potentially infinite number of body-images, and that the human psyche is a physical phenomenon, suspended in such space that we are affectively moving through as we are being moved, a kind of gravitationally concentric wax. "When the elevator is stopped", Schilder states, "the legs become heavier, but the rest of the body continues to go down, so that below the feet there are two lighter phantom feet." (Schilder, 1970, pg.95). He felt that vestibular irritation must change the perception of the gravity of our own bodies, so he studied the roles of gravity as a linear accelerative force, one which constantly influences vestibular function in connection with human development and behaviour.

In the 1980s, Psychiatrist David Hubbard astutely pointed out that Schilder's observations of the ego and its perceptions prevented him from riding in elevators in an absent-minded way like so many of us (Hubbard & Wright, 1995, pg.162). A notational sense of being shifting within and without his body as the elevator upon which he rode accelerated in relation to gravity. Clearly, as that which is inherently vestibular is irritated (due to excitation in the

sphere of the otoliths and the planes of the semicircular canals), parts of the substance of the body-mind wander, creating what we might call simulacra of indistinct and inaudible in-outlines.

“The emanation of the substance of the head out of its frame is of special importance”, writes Schilder in a beautifully Neoplatonic fashion (Schilder, 1970, pg. 96). He goes on to state that this emanating substance is the carrier of the localisation of the ego, nominally located in the height of the frontal bone between the eyes. And yet, when there is vestibular after-sensation, that which trembles becomes the carrier of the ego, a kind of lengthening and shortening of the body, a temporal dissociation between ‘vestibular’ head and ‘real’ legs.

Considering that the ego could be located between the eyes cannot but lead me to think of D.W. Winnicott’s theory of ‘ego orgasm’, so beautifully espoused by Catherine Clement, in which the ego cannot be localised, as “it invades the body, the skin, the consciousness” (Clement, 1994, pg. 217). Such a point of view cultivates an image of deformation, of body-mind-environment always at a remove, each ejecting from, and subsequently merging with, another location.

The movement between this section and the next is characterised by the proposition that gravity itself holds and manifests emotion in a manner familiar to the multiplicitous individual, permeating the boundaries of identity and ensouling the world. As the philosopher Martin Buber writes, “everything broken points to the unbroken” (Howe, 2003, pg. 13), to which Fanny Howe responds, “the awareness of both continuum and rupture occurring together may form the very rhythm of consciousness.” (Howe, 2003, pg. 13).

5.

If to be bewildered is to lose sight of where we are, to forget where we’ve been, to be cast away, what if we didn’t know where were to begin with? Bewilderment can follow a collapse of reference and reconcilability, cracking open dialectics to witness the motion of myriad selves.

Writing in the 1970s, Psychologist Andrew Peto claimed that the vestibular system acts as

a precursor of those mental functions which are grouped together as superego: "This vestibular forerunner includes imagery and fantasies which develop in the course of those traumatic experiences of the child that are part of normal maturational and developmental conflicts." (Peto, 1970, pg. 401). Peto writes through Schilder and stresses he laid on disturbances of vestibular life in relation to depersonalisation, or the equilibrium of disturbance and interaction between ego and environment, claiming, in a manner that echoes Margulis and Sagan, that whenever a person is giddy, they cannot maintain the unity of their body (Peto, 1970, pg. 408). Peto observed that such situations recreate childhood feelings of being abandoned and losing one's balance, wherein vestibular interplay between the superego and the ego can be perceived as physical disorientation and giddiness. "A situation of being cast away comes about and giddiness develops, symbolising in a somatic regressive form the moral conflict between ego and superego." (Peto, 1970, pg. 401). This feeling may be experienced in a very concrete way, manifesting in confusion, despair, bewilderment, "one part of the self may look at the other part or may feel in some every way that it is separated from the other part." (Peto, 1970, pg. 407).

Building on the research of Peto and Schilder, David Hubbard and Charles Wright studied the potential influence of gravity in relation to human personality development, and further speculated that alongside the more traditional stages of psychosexual development, that of oral, anal and genital, alongside the phallic and latent, there existed the gravitational (operative over a lengthy period of personality development), realising that it was in dire need of deeper consideration and attention. (Hubbard & Wright, 1985, pg. 162). Hubbard and Wright stipulated that such a gravitational stage could be more influential than many of the aforementioned Freudian stages of development, particularly in relation to personality function and neurological reflex. Subsequently they returned to the image of the infant's first years of life, learning to move, to orient their physical body against and with such an ever-present force as gravity. Not to mention the subsequent maturational life of motor skill development and coordination in spite of such a pervasive energy, wherein the fear of gravitational pull may well serve as the paradigm of all subsequent fears.

Evidently, the attempt to overcome gravity, to become with gravity, constitutes a

principle struggle throughout the early years of existence. The child, if possible, manages to control their position within the crib, to sit, crawl, walk, run, jump, fall, even to be still. Gravity, in this sense, is felt to be the cause of the first ego strain, leading Freud to remark, “Where id was, ego shall be” (Freud, 1933, pg. 112), to which Hubbard replied, “and its perpetual antagonist is gravity, which speaks through its own organ.” (Hubbard, 1971, pg. 72).

Conscious sensation and affect might arise not only from motion, but from loss or gain of otoconial mass. The one is the other, in a way... The acuity of the hearing ear can be accurate in terms of one-millionth of a second in the localisation of a sound source, and it is conceivable, according to Hubbard, “that the phylogenetically older vestibular system could have equal or even greater sensitivity in the perception of stimulus variations.” (Hubbard & Wright, 1985, pg. 181).

In Otto Isakower’s paper on the ‘auditory sphere’ (Isakower, 1938, pg. 340) he begins by commenting on Josef Breuer’s suggestion (in the late 1800s) that the otolith organs do not play a role in the function of hearing, rather in the perception of the movement and position of the body, relative to environment. Isakower, a physician, relays an intriguing observation, he tells us that certain crustaceans lose their otoliths, together with their shell, at every moult, subsequently developing new ones, often by searching the aquarium floor, in order that they might fill their otocysts ^[vii] with grains of sand, literally coming apart, casting away. Ingeniously, Isakower compares this process of integration to the development of the ego, part of which he calls the human auditory sphere (Isakower, 1938, pg. 341-342). The superego is held then, as a mental derivative of a separate force, that of gravity, of environment, functioning, as Peto states, like a “psychical organ of equilibrium”. (Peto, 1970, pg. 402).

6.

In *Software for People*, Pauline Oliveros writes that she would like to amplify the sound of a bull dozing. (Oliveros, 1984, pg., 18). In my ear, I hear a bull rushing. Bulrushes disperse their seeds and spores via a type of dehiscence, producing millions of dust like grains that travel on the wind, the beaks of birds, human feet, and much more besides, moving in a

manner similar to how I imagine vestibular irritations, particularly when I bring to mind Peto's claim that 'whenever a person is giddy, they cannot maintain the unity of their body'. (Peto, 1970, pg. 408).

The following sections are an attempt to mix together being and doing with images of vertigo (the 'individual' ever coming apart as together), corresponding to a creature both 'imaginal' and 'real'. The wild and symbolic nature of the bull goes hand in hand with the idea of a labyrinth, an overriding purpose and idea of being lost. Asterion is the name of the Cretan minotaur of the labyrinth, previously a dance floor, built by the inventor Daedalus. In human anatomy, the Asterion is a visible point on the exposed skull, just behind the ear. The very presence of Asterion symbolises the enticement of a hole, a pulse where three cranial bones meet. Many neurosurgeons use the Asterion to orientate themselves in order to plot safe entry into the skull. Coins minted in Knossos from the fifth century show the bull, kneeling, adorned with cereals and grains, the underside shows a star at the centre of a series of meander patterns. The star is itself, Asterion, part of the constellation, Canes Venatici. Bull emerges from itself, and thus is more than it appears.

Many representations of the bull push it into the ring or the farm, a soulless machine ^[viii], but the bull that is Asterion still wanders the labyrinth. Reading 'The House of Asterion', a short story by Jorge Luis Borges, told from the point of view of the bull (Borges, 2000a, pg. 170/173), helped me to realise that the dehiscent ejection of ego is at the same time akin to receiving what returns, that the outside always leaks in, creating an indefinite and perpetual vacillation of egos.

Brownian motion, otherwise known as pedesis, or 'leaping', describes the random movements of particles, detailing how larger particles can be moved by the impact of many smaller masses ^[ix]. It is a visible means by which to detect invisible effects, a discontinuous structure of matter that appears to be "a one-dimensional random walk" (Knight, 1962, pg. 218) that can sometimes look remarkably like the diagrams in Darwin's book concerning plant motion. It can even help one imagine just how Asterion runs and walks in the Borgesian labyrinth, the lines of which, as Borges himself states, trace the

lineaments of his own face (Borges, 2000b, pg.183).



Regarding my predilection for picturing bull in terms of Brownian motion, I don't so much concentrate on 'seeing' bull the way in which I picture them, but in the light by which I see them. In this way, bull is not a colour, not a form, but the phenomenal means by which I am able to see in light, hear in sound, etc. Bull is a labyrinth roaming a labyrinth, ruminating, a spinning structure of convulsive and ejecting meaning, a living chronology of fractal shifts and unpredictable causality. Tiny rootlets of chiral vibration fill such inner wind like a meshwork of flashing interstices, dendritic roots detach themselves with vertiginous speed from the wind-contracted mass that swallows them.

Bull could then be another term for an ego that is in the self-same process of returning and ejecting, a monstrous multiplicity that distends, parts, and reunites with its roaming indefinite individuality. In 1883 the mathematician Georg Cantor created what he called a 'monster', taking a straight line and breaking it into thirds, erasing the middle third, taking those two lines, taking out the middle thirds, and doing it again and again and again, spiraling through infinite points where, under scrutiny, the Cantor set (otherwise known as fractal geometry), appeared to stay the same (See Jersey & Schwartz. 2008). In a manner familiar to this infinite identity of the splitting stillness of appearance, bull rushes

in an ancient labyrinth that is ever without emptiness, regardless of how it may appear. Within the ear we might find, on the level of its energy, a glimmer that is the reflection of the shedding of magnitude, a camera silenta^[x] in which bodies within bodies transform as ruminants of each other's edges.

Ego without ego, passing through and returning in maturational stages, never seems to reach fructification. Sound shakes into patterns and bull becomes a star, a harp of periodic harmony and dissonance at the centre of a centreless labyrinth. As subjectivity dissolves more is revealed, akin to the monads of Leibniz, where each portion of matter may be conceived as "a garden full of plants, and as a pond full of fish". (Leibniz, 1984, pg. 190). Every branch of each plant, every member of each animal, every drop of their liquid parts, is in itself a self-similar garden or pond in a philosophy of organism, wholes that are made up of parts that are themselves wholes on another level. This is pollen moving on the surface of a lake that is itself a layer in an organism of revolving life, an indefinite variation of forms, of patterns, of insights, the minotaur as minted coin, the energy drawn from constellations.

Everywhere around the ear such energy swirls in the midst of its own transduction, bending motions in spiral volumes, producing affective movement in and of its extension. Like Isakower's crustaceans and the goal of Margulis and Sagan to shake off competition and cooperation, parts of self and environment are constantly recombined, enfolding in development rather than pitting one thing against another, introjected into integral parts of orienting elements and bodies, or what Isakower calls an 'auditory sphere'^[xi].

7.

As depth psychologist James Hillman reminds us, the term 'animal spirits' was once used in psychological explanations used throughout Western history. It referred to 'what goes on inside'. (Hillman, 2008, pg.61). The first letter of the Hebrew alphabet, aleph, derives from a glyph that represents the face of an ox, or bull. A is not then for apple and the fall, A is for aleph and bull.

The aleph is a fourth dimension, one that captivated Borges as a child, playing with a collection of 4-dimensional cubes, composing a bright tesseract, an infinite combination of the planes that nevertheless cannot be reduced to any sense of their supposed totality. (Couliano, 1991, pg.27). Just as Schilder felt psyche to be a physical substance, the same could be said of the aleph, an analog of a fourth dimension which would require, in this context, a fourth canal in the ear, a hypercanal, vibrating to such a fine degree that it is pure energy, the electricity that drives gravity.

Hillman writes that, “when confronted with a great animal power, we do not sing to it, bow down, dance in its honour, rather, we interpret it. We wave the hermeneutic wand to make the force go away by transforming it into a meaning.” (Hillman, 2008, pg.62). In other words, we so often meet bull with our own bull. The power of the image of bull, says Hillman, “is like the power of the imagination itself” (Hillman, 2008, pg.63), Martial and Venusian vibration, earthbound and cosmogonic. Bull is another way of channelling speculative fecundity, the ways in which the ecstatic moves out and the enstatic moves in. Borges’s Asterion longs for ears that hear all the sounds of the world (Borges, 2000a, pg.172), so what, I wonder, might such appendages look like?

Just as Borges’s Asterion seeks to hear all sound, the aleph is said to be the source of all articulate sound, a perfectly spherical zero, akin to disintegration of the ego, altering balance and orientation. “To hear the aleph”, says Gershom Scholem, “is to hear next to nothing” (Schloem, 1965, pg.30), it is the preparation for all audible language, but in itself conveys no determinate, specific meaning within an infinite system of meaning devoid of specific meaning, always on the verge of translation, of doubling, of splitting.

A spectre haunts the ‘Aleph’, another short story by Borges that draws from infinity the possibilities of cacophony and chaos. Its protagonist, one of Borges’s innumerable alter egos (in which those egos too possess an alter ego, and so on)^[xii] mourns the death of a lost love, ruminates on the impossibility of stone in which “the universe shall change, but I shall not” (Borges, 2000b, pg.118). Reading and spending time with Borges’s ‘Aleph’, or

the immanent situations of the Leibnizian Monad, I realise again and again that I don't know how I listen, but I do know how I imagine listening, particularly as I walk. Vertigo is a means of participating in such dissipation, where coming to know a world is indelibly linked to changing it and being changed by it. Dehiscence leads me, as gravity leads it, along undulating and spherical degrees of the vertiginous and auditory imaginal, never more active than when I am walking, when I am, with every footstep, ejecting and returning among a vibrating field of relations.

CONCLUSION.

If we think back to the hole in the canal of the ear's labyrinth, we imagine bull, Asterion, as a vibration within a vibration, and so on. Inevitable step by obstructive step, infinitesimal vortices in a maelstrom of sinusoidal tones. I imagine bull as the constant growth of bodies dispersed in infinite divisions of matter and energy, sucked in and out of the labyrinth via the recapitulant third window, the hole that is also a fold.

A reaction need not always come directly from a subsequent action, and so the aleph, a simultaneous occupation and evacuation of all things, presents a shift in the micromolecular structure of the semicircular canal, which in fact, may not register in the eye, as it has been shown to do (Branona & Straker, 2018, pg.1) but in an entangled wave passing through the feathers of a migratory bird twenty years in the future. This is in part how I have come to consider listening as by-product, the world drawn into the body that is in the world, an undulating flow of temporal dissipation wherein listening is both expulsion of energy and return of matter.

Borges describes how an aleph may exist in the heart of one of the stone columns surrounding the central courtyard of the Amr Mosque in Cairo, inside of which, he says, lies the universe (Borges, 2000, pg.133). This is the vestige of the primal sea that remains in chemical reactions linking the mitochondria in our cells to celestial cytoplasm, the illusion of irreversibility intimately affected by us, and yet it is one our eyes cannot see. The stone avails itself in bustling rumour to the ear that is willing to return to the ground, to both shed and retain its bipedal imagination, like the ipecac ego, both milking and

growing its auditory lobe.^[xiii]

The Borgesian aleph (which we could almost think of as an archetypal dissipative structure, the memories of atoms held apart by gravity, the frequencies buried in those in between spaces) maintains its identity only by remaining open to the flux of environment, by equating timelessness to time. I have tried in a variety of ways to picture, imagine, fabulate and communicate vertegonous self, a stratified and emergent gravitational vacillation, one that retains its structure because it is at the same time falling apart, a relational process of patterning in which to listen is to be listened to, to walk is to be walked. Walking with the influence of vertego, as if it were a constellation, these differences can also be felt in reverse, gravity breaks the cast of the self that is beyond the control of the ego and the anatomical planes, and so dehiscence does not survive the difference of inside and outside, of listening and walking, or is it the other way around?

The vacillating and fuzzy vantage point that is semicircular canal dehiscence is for me a threshold of unlistening. Just as sound walks, vertego draws a line only to try and cross it as I try not to try. It is an ejection that is somehow also a return, a multiplicity of auditory relationality, balance and body- mind-environment, that, to paraphrase Margulis one last time, neither competes nor cooperates, but cohabits and straddles.

^[i] www.patrickfarmer.org

^[iii] Thinking about how anything hears, or indeed does not, is for me a moment by moment prediction and interrelationship that will by its very nature alter how we hear and equally what we're hearing, and not. Dehiscence strains and elaborates upon my abilities to walk and to listen, to be with, as, and among the world.

^[iv] Following the psychoanalyst, Melanie Klein, in this essay the terms 'ego' and 'self' are interchangeable. I see them as shifting volutes of positionality in which one serves to

differentiate 'me' from 'not-me'. See Hinshelwood, R.D. A Dictionary of Kleinian Thought. Free Association Books, London, 1991.

[v] This essay looks at Peto's theory of a vestibular superego in a variety of mental and physical phenomena. (Peto, 1970, pg.401-416).

[vi] For more information about the events that led to the exacerbation of these conditions see: (Farmer, 2019)

[vii] Generally now known as a statocyst, an organ of balance and orientation in many aquatic invertebrates.

[viii] According to David C. Smith, cows are forty-gallon fermentation tanks of four legs. In contrast to this, Margulis writes that they, cows, "...ingest grass but they never digest it because they are incapable of cellulose breakdown. Digestion in cows is by microbial symbionts in the rumen. The rumen is a special stomach, really an overgrown oesophagus, that has changed over evolutionary time. Cows that lack rumens don't exist; cows (and bulls) deprived of their microbial symbionts are dead." (Margulis, 2003, pg. 14/15).

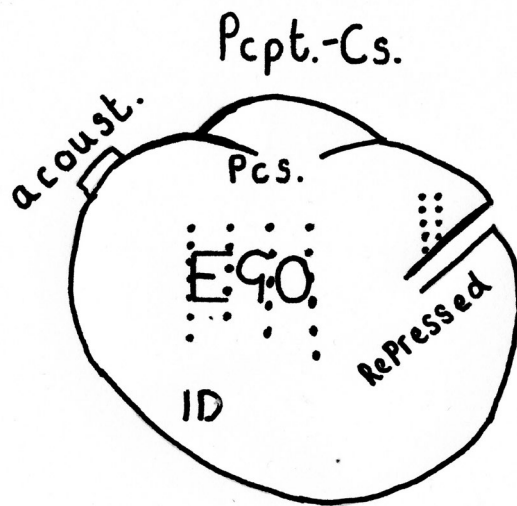
[ix] For an overview of this phenomenon, see (Perrin, 1916, pg. 109-133)

[x] For those interested in learning more about the development of the silent room, camera silenta, and communication technologies, see Schmidgen, H. (2013). *Camera Silenta: Time Experiments, Media Networks, and the Experience of Organlessness*. Osiris, Volume 28. No.1. University of Chicago Press.

[xii] For Isakower, the term 'sphere' includes "not only the whole apparatus in all its portions from the periphery to the centre, but also the part of the psychical structure to which the actual sensory apparatus is subordinated and which provides for the further elaboration of incoming perceptions." (Isakower,1939, pg. 342). I can't help but append to this eerily mechanistic (yet addictively curious) premise, an observation made by Arthur Koestler in his book *The Sleepwalkers*. In a section titled 'The Arguments for the Earth's Motion', Koestler writes on the Copernican orthodoxy regarding circles and spheres, wherein gravity is a 'natural inclination' combining parts into the form of a sphere, 'contributing to their unity and wholeness', a property Copernicus claimed to be present even in the sun. "Thus the properties of a whole stick together because of their desire to make a perfect shape", responds Koestler, and thus gravity, to Copernicus, "is the nostalgia of things to become spheres." (Koestler, 1989, pg.199).

[xiii] A manner of splitting or moulting that bears similarity to the notion that the amplification of bifurcation can lead to order or to chaos, the proverbial garden of forking paths. See (Borges, 2000a, pg.282)

[xiv] In *The Ego and the Id*, published in 1923, Freud perceives the ego has on one side, an auditory lobe, quite literally "a cap of hearing that is worn crooked" (Freud, 1923, pg,29). In his revision of 1933, the auditory lobe has been replaced by the super ego (Freud, 1933 ,pg.111). To me this suggests that the superego is, in part, an appendage (in direct proximity to its vestibular counterpart) through which the mutable ego listens to itself whilst attending with the equally mutable and intertwined body as it moves and is moved through the world. This is reflected in Peto's essay where, if the vestibular superego abandons (casts away) the ego, the subsequent loss of balance can cause "a general transient disorientation of the ego, where it interprets such giddiness as "a sign of disapproval by the superego". (Peto, 1970, pg.406/407).



GLOSSARY

Otolith Organs – Gravity receptors, the utriculus and sacculus, located inside the vestibular labyrinth.

Otoconial Mass – The totality of minute crystals, made of calcite, covering the otolithic membrane.

Semicircular Canals – Three half-circular interconnected tubes, located inside the vestibular labyrinth.

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Illustrations by Patrick Farmer, based on Charles Darwin's notes on plant movement, Jean Perrin's notes on atomic motion, and Sigmund Freud's structural model of the mind, respectively.