## DREAMING THEORY and Notes about Noise

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A barrel of rotting vegetable matter after rain is brewing away, a stew, and somehow the barrel gets overturned, and the mightiest stink is unleashed. It fills the surroundings with the most gutwrenching effluvia. Amplitude arises from the noisy crowd, and intensity comes from the movement of a swarm of points under pressure. A marauding density of invisible entities fills the space.

According to the prolific cultural theorist Hillel Schwartz, many scientific specialists in chaos and complexity appear to point towards noise as the undifferentiated 'protean' expressive state, par excellence

Schwartz introduces us to 'stochastic resonance' – a shaper of noise into a structure. Stochastic resonance can be thought of as an agent of difference, an injection of an energetic stream into a receptive gathering; this is one way that structure and change appear in causal interactions:

Itself an increasingly technical term, chaos would come to seem as "normal" to the observations of physicists, biologists, and ecologists as "a certain class of stochastic functions" whose "sufficiently common occurrence in nature", wrote Eckart, justified calling them "normal

"Strictly speaking, stochastic resonance occurs in bistable systems when a small periodic (sinusoidal) force is applied together with a large wide band stochastic force (noise). The system response is driven by combining the two forces that compete/cooperate to make the system switch between two states. [4]

Things emerge from the drama of noise. Difference is noise reconfigured, not of an order that precedes noise, but as syntax that arises in patterns and harmonies and discordant configurations that we recognise in all manner of situations – the result of expressive forces swept up as causal interactions in a gathering.

Humans tend to conceive of unity preceding chaos. Theology – the essence – the one – those account for chaos. Rudolf Anaheim points out that "order makes it possible to focus on what is alike and what is different, what belongs together and what is segregated."[5]Our senses and technical instruments (that extend our senses) allow us to hear, see and smell noise and to harness the spectrum of this horde compositionally.[6]

Territorial animals compose, and Homo Sapiens are Masters of Composition. They harness noise through the cloak of logic and put it to work and take pleasure from the joy of experiencing patterns and placing an order in the place of chaos, or they flirt with disorder by exploiting a risk-taking thirst for creative adventure.

It is because chaos is continually differentiating that we can think of it as a protean medium, and that found within it are islands of stability that have been moulded into place by the powers of other forces. We also attempt to develop these differences into shapes, patterns, language, and symbols, and we bring order into the world by way of anchoring raw expressions. We take material information out of the way of the violence of physical forces by assigning abstract value in symbolic networks that become even more powerful when they are converted between material and thought. In other words, we preserve thoughts by making them transcendent. This does not mean that the symbolic now lives in a fortress, since, as Bruno Latour proposes, everything undergoes negotiation - concepts and symbols are continually being eroded, as much as they are forming within all kinds of battles.

F.T. Marinetti, the founder of Futurism, credited the smell of oil and gasoline spilled in a car accident with inspiring him to create a new artistic movement. In one of the many Futurist manifestos produced to outline their aesthetic of "simultaneity," the use of smells, along with noise and tactility, was encouraged to activate all faculties of the viewer. The Futurists also advocated the use of sneezing powder during their soirées, testifying to the extremity of the actions they would take in their quest to renew their audiences' perceptual faculties. [7]

Many artists work directly with shaping noise for sheer aesthetic reasons. Japanese artist Merzbow utilises high volume sound in which room-filling static is analogous to the intensity that the artist claims is felt in acts of bondage. Yet, beats and phrases are constantly emerging from his modulations. Overdubs are said not to be utilised in the 25-year journey undertaken by New Zealand experimental rock group The Dead C. This form of composing layering would be anathema to seeking the collapse of musical structure. Each Dead C work seems to be on the threshold of collapsing into riotous chaos, and within this maelstrom, form is continually emerging in crashing crescendos and gentle murmurs.

Wavefronts push up against each other in places where humans hardly ever go. The staccato ribbon of ironstone through a band of sandstone that resists the erosion that happens all around it.[8] A stream of water running down a slope into a rock overhang, sheltered from the masses of rain spatters outside: uncountable differences emerge from noise. Figures ribbon their way up through noise, differentiated by frequency (a band of energy) from what we think of as the background. However, all kinds of resonances become mobilising forces — noise is a material that is shaped and kneaded into a topology. It is a gathering of things folded over on itself, as in the kneading of dough. And the dough is a lump from a particular frame, from another position altogether, which is made up of a vast

community of coalescing molecular forces of a specific type, interwoven, elastic, and stretchable to breaking point. This is perhaps what time looks like when we stand outside of the frame of time's arrow. Events started long before, bubble up in the present, the perfume bottled a century ago bought on eBay, the coal released from the ground now fuel, the Sun's heat warming our summer that started as a chain reaction a million years ago, the vintage wine opened at a birthday party bottled before you were born.

Open a bottle of perfume in the room, and the molecules will spread towards equal distribution; this is what the second law of thermodynamics describes. The creative artisanal cauldron affords change, and yet no fire is eternal; in the same way, no aroma is fixed in one place.

What you have in your hand and you can smell on that strip of paper is some of the smelly gunk coughed up by a sperm whale<sup>1</sup> This ball of gunk bobs around on the surface of the ocean and is eventually scooped up by passing sailors or picked up on the beach by intrepid ambergris hunters. Cured by brine and sun, once it has reached the shore, it smells extraordinary, a world away from the foul-smelling black fluid drained from a freshly torn carcass. This was an intensely cruel method that people once undertook in order to get hold of ambergris instead of searching for it in the wide open sea.<sup>2</sup>

Transformations and transportations are in play from the moment the whale swallows a squid. A secretion is produced by the whale that is thought to be a protective response against the irritation from ingesting the squid's beak.<sup>3</sup> The whale then vomits or excretes this fatty substance into the ocean, a battle between the whale and what it ingests. This pattern of events is an affair between many things - the sun and the ocean, the squid skeleton and the bobbing whale vomit. It is also a story of humans, ships, violence, alchemy, chance and the imagination.

Once ambergris is taken from the sea it becomes embroiled with signs, possibly from the first moment that it touched a sailor's hand. Modification of ambergris through language is as powerful as the curing of ambergris by the sun. For example, once ambergris is thought to possess powerful aphrodisiac qualities, the material then becomes popular as food. It has all of the powerful semiotic connotations attached to the act of eating. By the same token, language itself is being modified by way of the new articulations that have come from the connections that have been forged across the many dimensions that the aroma has passed through on its journey. Language, it seems, is made up of these turbulent ragged and noisy

<sup>2</sup> At the height of the whaling days American whalers took only the blubber, baleen, teeth and, in the case of sperm whales, ambergris. Kirsten Englund and Kathy Glass, "Japanese whaling: Saving whales in a clash of cultures," (*Whole Earth Review* 5(Winter):98, 1990.

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<sup>&</sup>lt;sup>1</sup> Physeter catodon L.,

<sup>&</sup>lt;sup>3</sup> Sepia officinalis.

feedback loops tied to these material inventions as much as the ocean is driven by currents.

'Ashes to ashes, dust to dust – the matter referred to here as dust is the residue of the complex animated human being seeping back to the elements through decomposition in death. The second law is about the slide back through chaos to equilibrium against open systems that take their energy from the Sun, our nearest star, a process of entanglement and tension that will endure until our star inevitably burns out and collapses. According to classical physics, the universe is said to be a closed system from which all the elements are made. Turbulent arms of stability and differentiation appear momentarily and eventually returning to smooth space. Just like a perfume as a model of the universe, each material coming out of the bottle there is, for a time, a stable discernible experience of a tendril of molecules that lasts as long as the time that we can smell them.

The Roman Lucretius's scientific poem "On the Nature of Things" (c. 60 B.C.) contains within it an uncanny intuition of the Brownian motion of dust particles. He uses this as proof of the existence of atoms and what a model it is. Simply replace dust with the molecules of perfumery for a vivid picture of motion in the air:

Observe what happens when sunbeams are admitted into a building and shed light on its shadowy places. You will see a multitude of tiny particles mingling in a multitude of ways... their dancing is an actual indication of underlying movements of matter that are hidden from our sight... It originates with the atoms which move of themselves [i.e., spontaneously]. Then those small compound bodies that are least removed from the impetus of the atoms are set in motion by the impact of their invisible blows and in turn cannon against slightly larger bodies. So the movement mounts up from the atoms and gradually emerges to the level of our senses so that those bodies are in motion that we see in sunbeams, moved by blows that remain invisible.

Noise heaped upon noise is one way that noise creates, by folding back on itself as resonance. Several fields of expertise have shown how noise plays a role in the formation of many things. Stochastic resonance occurs when noise of a different frequency is added to a system and changes the system somehow. [9] What we have then are structures appearing from noise and then decomposition in entropy. These two states are the heart of composition.

Within the remarkable chapter titled "Everyhow," in Schwartz's *Making Noise*, after an expose on the ability of "pink noise" to dither and improve the quality and the "intelligibility of electronic communications and to even strengthen the coherence of audio," he writes of how stochastic resonance, (S.R.) in the text below:

maybe vital to the process of driving sensory responses, as it is with the mechanoreceptors of crayfish, a phylum so ancient that biologists speculate that (S.R.) had a large role in earliest animal evolution. If not primordial (S.R.) was primal. According to neurobiologists and microbiologists, (S.R.) was "evolvable" for and integral to gene expression. In the long run it made possible the detection of "quiet" events or small changes in biological systems, which are "dominated by noise, or random neural firings" – as in the Brownian motion of the stereocilia of the cochlear hair cells or the fibrillations of the heart.

As physicists Garcia–Ojalvo and Sancho would write with metaphorical verve, "In convectively unstable regimes, the presence of noise seeds the system of small perturbations everywhere, and, as a consequence, spatial structures." The implications were grand: a universe seeded with, seething with noise must be one in which noise makes things solid. [10]

I can say that aroma is a multiplicity – noise is multiplicity. Noise is the conjoiner: Michel Serres remarks that "there is noise in the subject and noise in the object".[11] We can draw from this that the forms we work with as Artists forms a bridge between subject and world.

What could be humbler than the enticing homely aroma of dinner being cooked, wafting up the street at night when walking home - a cloud of aroma molecules, a compendium of calming signals hanging in the air that instigates all kinds of thoughts, memories and sensations.

On the other hand, noise is certainly frightening in its power to cancel out the senses. However, there is something within this fear that goes beyond the agony of volume, or the terror of stampede, or the thrill of the sublime – the almost too much, perhaps we fear the disquiet and challenge of noise.

Michel Serres in his remarkable book Genesis, attempts to grasp at a pre-phenomenological Ur Noise, always in tension with concepts of unity and order – a tension that reveals an impoverished need for control against the multiple:

We are fascinated by the unit; only a unity seems rational to us. We scorn the senses because their information reaches us in bursts. We scorn the groupings of the world and we scorn those of our bodies. For us they seem to enjoy a bit of the status of 'being' only when they are subsumed beneath a unity. Disaggregation and aggregation, as such, and without contradiction, are repugnant to us. Multiplicity, according to Leibniz, is only a semi-being. A cartload of bricks isn't a house. Unity dazzles on at least two counts: by its sum and its division. That herd must be singular in its totality, and it must also be made up of sheep or buffalo. We want a

principle, a system, integration, and we want elements, atoms, and numbers. We want them and we make them. A single God and identifiable individuals.[13]

Aggregation and disaggregation come naturally to the artist because it is what is experienced every day within a practice. Whilst never effacing language entirely, the artist seems more willing to accept the unformed. This dance with chaos and this straddling of form and formlessness has always belonged to the 'tunings' of art, even in its most representational moments. There are all kinds of scumblings in the background of paintings by Gustav Courbet, for example, dissonances in music, chips and gouges in sculpture and architecture, a non-linguistic material styling perhaps found most prolifically within the style known as *wabi-sabi* in Japanese culture. The impressionists scumbled the entire picture plane to represent the effects of light. And so does the actor who contorts his face in agony and the dancer that leaps and freezes momentarily, the discord that creates an accord. In perfumery, a range of unpleasant materials is utilised to mould and shape the tone of a fragrance.

Jackson Pollock's action painting flings the paint through space in arcs of chance, landing on the canvas, which is now on the floor instead of being supported in a horizontal position. With this approach, he can discern the density and the direction of the paint in his noisy paintings. The accidental shatter of Duchamp's *The Large Glass* is a famous example of an artist riding the aleatory. Many aspects of John Cage's work in sound and music continually rely on chance operations, all realised within formal boundaries, except now, the frame of the work is duration rather than an edge of moulded timber.

Hermann Nitsch gets hold of Pollock's methodology and reverses the terms by naming it "Painting Action", and instead of the brittle car duco that signs itself with the United States motor industry, paints with blood spatters. This is the animal blood of Europe, and the blood of the provincial farm and of peasant farmers, and of the horrors of war, and he calls on the god Dionysius as part of his cathartic ritual. At the same time, his work belongs to the orgy of mass production, the sausage factory, the curtains of blood on the walls and floor of the abattoir, forming glorious patterns. In his ritual actions, one palpably smells the blood, and one sees up close the separation of the iron of the red blood cells into brown stains of oxidation, and if one is holding the bucket and it happens to touch bare skin on the leg, the warmth of blood, fresh from the kill can be felt.

The smell in the space is antiseptic and of the animal. There is a thick, velvety smell in the air that tickles the trigeminal nerve system [14] as much as it is ringing in the olfactory epithelium. Over six weeks, as the fresh blood diminishes from its almost hospital-like antiseptic olfactory qualities, the smell becomes even more of an irritant and metallic, as if the dust of crushed chilli and powdered

aluminium has been flung into the air. In Nitsch's work, we have a situation of controlled decay or a tonal synthesis of the cadaver, a reduction or distillation of the carcass as only a part of the animal is in the room. Missing are the strange smells of gut and faeces and secretions from the other organs. [15] Little wonder Nitsch is an artist fascinated by the drones of musical organs as much as he is by animal organs. [16]

Artists don't have exclusive rights on harnessing chaos towards creative ends; this belongs to the entire world. Science moulds and studies chaos, and so does religion and politics. We are both grounded and free. Grounded by language and our subjectivity and yet when language escapes us, ecstasy, laughter, or humiliation takes over. When our subjectivity dissipates, we are heading towards nirvana, euphoria, or alternately under threat, heading into panic-stricken chaos. Could this be why aroma has been pushed aside because it couldn't be held in check by the comfort of critical distance, nor could it be contained by the chill of certain logic?

Let us be done for now with the 'subject-object distinction and instead try to imagine 'things' swarming and bumping into other things. We have language and the symbolic, and it gifts to us. It keeps us grounded, and yet it too produces 'ecstatic' noises – the cries and screams of children on the beach in summer or the cries of the crowd at the match – the angry mob. All the cries that belong to the guttural pre-figurative sounds mixing with words before the separation back to our houses.

The background noise is always there, the signal claps like a flash of lightning, *rumour* rushes forth. The signal is a unit, pandemonium is undefined, and rumour is a plurality. The ruckus fluctuates like choppy waters lapping, the signal is a fluctuation, the rumour's noise is the flux, or the totality of fluxions. It increases, decreases, globally, locally it is multiple, various, variegated. Voices, cries, tears, thundering's, rumblings, whistles and crashes, breaths, blasts, grindings, blows, chains and beats, cracklings and sounds, growling and waves, moans that die away...the river of noise carries along a thousand tonalities.[17]

Our senses are continually adjusting to noise, responding to changes in energy; we constantly come up against this fabric of noise that is ridden in everything. Our sensory organs are transducers that convert parts of this informational spectrum into other kinds of information. How is it that any dualisms hold up when we have developed such incredible systems for converting information from one type to another – information that can be so distant and beyond language and yet can belong to it? Things are irreducible, and yet its powers are converting as emanations and transmitting signals.

Saturation point – back to noise: within many of these systems, there is a threshold where the intensity peaks and it is cancelled out; the flesh is fragile and sensitive. Too many chemicals bombard the nose,

and the system momentarily stops working. We all experience this type of anosmia. [18]

Air is the medium that surrounds us, constantly moving in turbulent spirals, full of particles, sound, water, mist, noxious vapours, fragrance, and smoke. The outside is noisy, and yet so is the interior because there is no way of escaping the spectrum, which is on the inside of the body as well. We cannot escape odours except in sleep, or inebriation, or anesthetisation. We can try to filter the senses by blocking our ears, pinching our noses and breathing less deeply, or by covering our eyes, but only for as long as we can hold our hands over these openings. [19] The best method is to run away from it.

Sometimes we must shout over ourselves to get past the noise and the fury of all the chaos that is chattering within – the noise of tinnitus versus the maelstrom of consciousness. Listen for the libido that natters endlessly and the niggling anxieties that seem to crop up all day long. We are populated by a multitude. Listen to this endless daily argument – this unceasing chatter of the laughing skull that allows things to enter – molecules and thoughts. And yes, these effects settle down and become mere chatter, though at times there are so many voices shouting within they become a crowd – stress and noise. [20] As neuroscientist David Eagleman points out:

There is an ongoing conversation amongst different factions in your brain, each competing to control the single output channel of your behaviour. As a result, you can accomplish the strange feats of arguing with yourself, cursing at yourself, and cajoling yourself to do something – feats that modern computers simply do not do. [21]

Frederick Nietzsche thought about it this way:

The assumption of one single subject is perhaps unnecessary; perhaps it is just as permissible to assume a multiplicity of subjects, whose interaction and struggle is the basis of our thought and our consciousness in general? A kind of aristocracy of "cells" in which dominion resides? *My Hypothesis:* The subject as multiplicity.[22]

The noise of the sea and rain and storm, the howling wind, the confused patterns of deep grass, the tangle in the rainforest, the noisy crowds in a protest rally, the mists and the fogs, the plumes of vapours of frangipani and eucalyptus in summer. Or the subtle emissions of magnolia after winter rain, subdued perhaps, by a drop in air temperature. Or what about the sweet narcotic stench of death, of food rotting and of pollution, gas emissions in swamps, the tangle of scree:[23]

Noise cannot be a phenomenon; every phenomenon is separated from it, a silhouette on a backdrop, like a beacon against the fog, as every message, every cry, every call, and every signal must be separated from the hubbub that occupies silence, to be, to be perceived, to be known, to be exchanged. As soon as phenomenon appears, it leaves the

noise; as soon as form looms up or pokes through, it reveals itself by veiling noise. So noise is not a matter of phenomenology, so it is a matter of being itself. It settles in subjects as well as in objects, in hearing as well as in space, in the observers as well as the observed, it moves through the means and tools of observation, whether material or logical, hardware or software, constructed channels or languages; it is part of the in-itself, part of the for-itself. [24]

Manual Delanda explains how information operates in all kinds of realms, how patterns emerging from chaos are expressive forces at the centre of what it means to live and to exist:

> These expressive patterns are what scientists call "information". This term does not refer to the semantic information that we may get from, say, newspapers but to linguistically meaningless physical patterns. That physical information has nothing to do with semantic content is demonstrated by the fact that information theory was developed during World War II to deal with problems of communicating encrypted military messages, that is, messages in which the linguistic form and content were hidden. Physical information pervades the world, and it is through its continuous production that matter may be said to express itself. Material expressivity, on the other hand, crossed an important threshold when it ceased to be mere fingerprint and became functional in the form of the genetic code: groups of three nucleotides, the chemical components of genes, came to correspond in a more or less unique way to a single amino acid, the component parts of proteins. Using this correspondence, genes can express themselves through the proteins for which they code.

> This implies that expression has gone beyond the production of information to include its active storage and processing. And this, in turn, implies that when populations of information-storing molecules replicate themselves, and when this replication is biased in one or another direction by the interactions of proteins with each other and with their environment, the expressive capacities of material entities may evolve and expand in a multiplicity of novel ways. Like atoms, living organisms can express their identity by the emission of patterns, chemical patterns for example. But unlike atoms, this expression has functional consequences since it allows the recognition of an organism's identity by members of the same species, a recognition that is crucial for genetic replication. [25]

And here is a provisional formula for an aromatic cloud: a turbulent particle system that is light enough to float in the air, made up in all probability of a variety of molecules (since smells are unlikely to consist of one molecular type), each a carrier of information and each subjected to the surrounding forces, in particular temperature, airflow

and gravity; moisture is a factor, as well as these molecules, are attracted to water. Noise is in the background, but it is not a background; it is the ground.