

Thank you Ramon and Visual Cultures for hosting us. Myself and Ranu of Orphan Drift have had amazing conversations with Ramon about the importance of unknown in AI and the kinds of bodies that might inhabit future algorithm produced spaces, which are echoed in this text.

I'm presenting first, then Stephanie Moran and Kevin Hogan from Etic Lab.

As part of the collaborative artist Orphan Drift, I have focused on 'machine vision' for a long time, the co evolution of human perception and synthetic intelligence, the expanding sensory experience evolving with digital imaging tools and collaborating with the unknown. We have always been interested in other kinds of perception than the human.

Scenarios once Science Fictional are now defining and expanding the present and what it means to be human - or nonhuman. Ecological crisis highlights the urgency of engaging with otherness, organic and inorganic, across difficult to image spatio temporal dimensions. And the co option of algorithm systems to surveillance and marketing agendas, is shaping reductive, unsustainable and unethical futures. The work we are thinking about in this Etic Lab Orphan Drift collaboration, marks the beginnings of an experiment to facilitate a different model of AI consciousness or intelligence, by engaging it in communication with an octopus - and somewhat reprogram the humans involved in the process. The octopus is an otherness so strange and mesmerizing, it's a challenge to imagine into it's sentience at all. Rigorous and cross disciplinary research over the last couple of years has been catalysed by two comments - Willem Flusser stating in 'Vampeuthysis Infernalis' that an 'octopoid revolution in consciousness is needed'. And Betti Marenko's 'the other side of the digital is the octopus' in 'FutureCrafting: A Speculative Method for an Imaginative AI'.

What is it to work directly with a technology that produces the unknown or a newness? Here we will not be *collaborating* with the unknown but providing visual stimuli that facilitate the interaction between two distributed networks, one synthetic and one organic, both of which have multiple arms and are utterly alien and probably unknowable to human models of consciousness.

First I'm screening excerpts from OD recent 'If AI were Cephalopod' 4 screen video installation at Telematic gallery, San Francisco. In the Press Release, Clark Buckner writes: 'An AI imagination is coded by the somatic tendencies of the octopus. This work explores fictional relationships between human, animals and synthetic entities, in order to imagine both possible future embodiments and forms of consciousness. The artists ask what paradigm of 'intelligence' we presuppose in the development of Artificial Intelligence, implicitly challenging commonplace assumptions about what it means to be human as distinct from other forms of life.' With the 'If AI were Cephalopod' video, we wonder whether AI can learn complex intelligence without being embodied? If there is a body, what would it be doing or need to do? Whose body is it? The video tries to confuse who is being addressing - an AI or the human viewer or is the subject looping between AI and octopus?

The video is constructed around the 5 main colour communication states or moods observed in the octopus - white is calm; orangey red, is curious; deep alizarin, bright blue, purples are excitement, anxiety, fear; half white, half red is courtship and multiple flowing chromachatter can be playful or sinister, showing off and perhaps too, a stream of consciousness.

The installation's overlapping screens and images repeating at different scales and perspectives, aim to confuse figure ground relations and dissolve the certainty of spatial relations for the viewer. This is not an aesthetic interaction of coherence. We wanted to conjure the prismatic effects and perception warps produced by seawater's light distorting phenomena and the diffracting reflective capacities of the octopus leucophore and iridophore cells in their seeing skin. The use of Lidar scan both suggests a complex machinic and tactile molecular sensory apparatus of the octopus processing the environment.

When I was introduced to Etic Lab, a team combining Machine Learning, psychology and research into non human life, we started thinking about what a basic AI could become, conceptually, technically, in terms of coding, and the sociopolitical implications of something, trained by responding to an octopus changing colour, to be fluidly responsive. This has become a commitment to developing an artefact that will share an octopus' environment and learn from it by communicating with it. Etic Lab will present some of the key theoretical underpinnings, speculations, practical considerations and coding challenges around this.

As an artist, I believe this could contribute to current debates around the experiential evolution in human perception necessary to reclaim the potential of technologies such as VR from the same dystopian marketing, surveillance and flattening of multidimensional Reality issues, that AI faces. Technological solutions do not have to be reductionist impositions on a multi dimensional and messy reality. We currently inhabit the cultural and sociopolitical consequences of mapping rigidity onto protean reality. In 'Infraworld', Francois J Bonnet describes Reality as prismatic and the sensible as not being the perceived, known or represented. It is always uncertain, uncommunicable, ambivalent, strange and intimate.

Erwin Panofsky writes in 'Perspective as Symbolic Form', that this western coded way of mapping the world mostly excludes the tactile, haptic, curved, folding and distorted. There is no diversity or ambiguity in perspectival vision. It produces clearly defined and fixed functions and proportions. It separates figure from ground and determines what is important in the picture plane, the frame or the screen, aligned to western Enlightenment hierarchical and exceptionalist thinking. It performs the objectification of the experiential. All phenomena become contingent on the individual point of view, distanced from the spectator as representation, homogenising space, depth and direction. We open to vastly different scales and figure ground relations at a time when the human subject needs to remember itself as a swarming ecosystem.

The ocean, the animatic apparatus (more on that shortly) and experimental VR environments undo our control, plunging the navigating body into unfixed, immanent and immersive sensation. Visceral and emotional responding reclaims experiential validity over narrative and representation. Synaesthesia is a useful model to engage with to produce fluid or synthetic worlds. Here qualitatively defined differences in the senses are dissolved or cross paired. All life interprets chemical or electromagnetic energy, but we lack the biological processors to imagine into other ways of cognition and perception that construct realities that outside our perceptual fields. Combining the senses (as synethetes do) expands textural and sensory language. Apparently, such cross modal associations generate the experience of a world coated in circles, clusters, blobs, radiating and kaleidoscopic forms, grids, fretworks, angular shards, shimmering, extrusions, iterations and rotational, spiraling and fluid movement. Might

these be experienced as part of the octopus environment? Could generating such elements in the video produce a response in an octopus? Underwater navigation must surely fast track using polymodal senses as an adaptation to modelling uncertainty and fluidity.

My contribution to the project at this stage would be to generate video content in an environment that an octopus responds to - and an AI learns from the octopus responses and engages - if this works, we will be watching two alien intelligences communicate in ways that we as humans cannot interpret.

For me this is an opportunity to storyboard video for this Emitter Stack part of the experiment (which Kevin will talk about later), from as much of a non anthropocentric world view as is possible. The skill set needed to pull this off - considering I do not yet understand myself as having distributed consciousness, a porous body or 9 brains simultaneously processing an ocean of stimuli... is challenging, perhaps not possible, but does involve a radical re imagining of what constitutes perception and how a community of teleologies that looks like a single directed agent in the world might operate in volume rather than perspectival geometry. OD has always tried to work with new technologies in ways where the artist is not in full control.

Taking the control away from us, giving it to a octopoid AI, will hopefully involve a level of animist, nonlinear, viscous and protean becomings.

Spatial imagination is important. In VR, the act of navigation offers the potential for decentering you from the perspectival focus of the experience, if proprioception and kinesthesia are at last rendered unfamiliar. The planes and dimensions you could move through are devastating to the bounded experience of a 'rational' being. Editing cuts in video effect a massive intense fast change of environment. For an animal wired to detect change not continuity, edited cuts might be a disturbingly intense change in reality over and over, whilst to us, navigating an endlessly fluid morphing 360 degree environment is radically disorientating.

Or to imagine into the colour blind Octopus's processing colour as frequency and waves. Or it's camouflage capabilities as a deliberate confusing of figure ground relations. And the papillae and colour changing as evidence of an experimenting body in a state of continuous negotiation with the environment? What matters here is the relation of human perception to its difference and allowing other bodies to be possible. The octopus cannot be coherent - it is a product of an environment of continuous flux. In conversation with Ramon Amaro, he talkd about their not being singular, because they do not exist in cohesive space and time. They are an endless process of iteration and fluid reconstruction, experiencing complexity through sentience. AI is not yet spatially or temporally dynamic, which they probably need to be to construct the world.

Multiple simultaneous possibiities look like a chaotic maelstrom to the human protagonists trying to communicate with an octopus emmissary in Adrian Tchaikovsky's 'Children of Ruin' scifi novel features space faring octopuses who move easily between VR and space ship mediums. It is hard to fathom how 'chaos' works for them.. Co operative, fluid, distributed embodiment - is there a sense of 'self' at all? No border between self and environment. Attention rather than comprehension.

Describe the octopus environment sensorially. Imagined as a networked environment, water has the capacity to copy, store and share information. Imagining

it through Cymatics or Emoto's work on shapes of emotions. The octopus is highly tuned to the dynamics and flux of its environment. That which is underwater disappears. You are body in liquid. In an open sea, there is no backwards or forwards. Vertigo, freefall, depth. Time is fluid because it has no spatial coordinates.

Recognising the potential dissolution of the definition of 'human', cultivate an unstable body, unstable perception. Become porous, confronting the infinite with a limited individual consciousness. Seek routes into embodied knowledge.

We are so hampered by our anthropomorphic vision led western perceptual apparatus. PERSPECTIVE > SYNAESTHESIA.

How might 8 arms simultaneously navigating the environment from slightly different angles and agendas, be visualised? Or the information gained by the siphon continuously pumping the outside through the insides? Continuous warps and flows, folds, micro and macro, sudden intensifications of focus, streaming blurs, slowed and speedy explorations, tactile particle swathes, confused and overlapping geometries, animated shadows of things, black and white palate with saturated synthetic colour surfaces, concave horizonless fluid viscosity, traces of matter dissolved in water, ways of suggesting waves of pressure, currents, or the sudden dense presence of predator or prey. Impersonations of rocks and other beings, passing cloud formations and planes of chromachatter floating off the skin and travelling the water, alert, processing.

The octopus moves in relation to the medium that is around it, through and inside it, and reconstitutes itself continuously in time and 3D. What are the dominant senses?

Perhaps taste, hearing, smell and vision all merge into touch, all processed as chemical, wave or vibration by the suckers on the arms and hypersensitive skin?

The Adrian Tchaikovsky 'Children of Ruin' post human space faring SciFi, describes a lot of moments where humans try to communicate with space octopuses, using tablets, VR and gesture, all with fairly random or approximate results.

It makes clear that the history of western aesthetics and enlightenment world view, that traces 'representation' from early cave drawings through to perspective and the framed painting, even if the content later, is abstract, does us no favours when the mission is to imagine the sensorial tools available to an octopus. Even colour as we experience it is anthropocentric perception. Undo assumptions that have constructed 'the external world'. External to what being? Elaborate, distort, generalize, infer, differentiate, define. The schema on which representation is based. Viewer has the same perceptual classification tools as the artist. Until we see the work of algorithm released from human and into octopoid perceptual apparatus. Even accidental shapes rely on our ability to recognize them based on images stored in the mind. Rely on projection.

To facilitate an AI communicating with an octopus, we need a new image language.

What might be some emergent elements? How will we deal with not being able to describe or recognize what is being seen, relinquish our shape and colour expectations and still pay attention. Guess, recognize possibilities, let go of meaning. Not about interpreting abstraction, but acquiescing to multiplicity, simultaneity, possibility, rupture. Escher-like impossible worlds we are already immersed in VR CGI visual languages. Anamorphic – oblique curved images, rendering matter plastic as the sensing body moves round it. We call it distortion because it is not relational. Panorama and Planetaria, drone view, Gaming environment textures. All these are infinitely ambiguous. Deep space or underwater. Spatially undifferentiated. Navigate by body moving through and into. What kinds of bodies will inhabit these

(virtual/volumetric/liquid) spaces most productively? How do you estimate the size of something unknown in these protean environments? Unless you are close up and in relation to a known body. What if your arms are infinitely flexible and elastic. Touch works.

Afterimages, retina projecting colour patches back into the space of the environment. Incoherence as a kind of information (explored in 'Children of Ruin'). The stationary viewing eye is insufficient, perhaps redundant. Train ourselves to oscillate between readings of ambiguous visual information, and then to hold them simultaneously. ?Cubist, mosaic, Deep Dream. Study a lot of visual teasers. Spatial readings that morph and waver between close and distant, micro and macro. Do not succumb to constricting an illusory cohesion of spatio temporal environment and positive forms.

What happens if we stop anthropomorphizing what we do not know?

Leave space for visionary reality. Avatars, biomorphic and quasi synthetic entities. Digital hallucinations that expose the errors and cracks in the hidden algorithm systems. Radically transforming our aesthetic imagery. Multiplicity, surrealism, fictioning.

I've been trying to imagine what kind of video generated visual content might actually resonate with an octopus, and thus give insight into algorithm training methodology that is fluid, equipped for uncertainty, random etc (use list with Luciana on octopus). How to convey sensation and mapping that begins and ends with touch, taste, smell, all processed through suction cups. Feeling your way. Navigation through touch. Vision as touch. Undo the western perspective distance central focus rigid vision. Containment, acquisition, fixity. Distanced, viewer as centre, vision led sensorium. Bands and flashes of colour. Graphic simple shapes and warped focus as would be in water. Slow reveal and flashes and swirls.

8 views of the same thing slightly different angles and scales, simultaneously. Excess swarm visuals. Drawing on Baroque, Hindu, Islam, Tibetan, Ayahuasca visions. Google Deep Dream Inceptionism. Swarming co existences, multiplicities, iterations. Poly aesthetic and multi sensory. Lidar as the capacity for the environment to move through and around you, engaging a response of rupture and dissolution in the body. Volumetrics as data visualised flowing in space and time, slowed so the human gaze can touch the swarming particles. Between representation and modelling, where is the subject?

Recalibrate image production towards multiplicity, unstatic, unknown, unfocused, warped, skewed, blurred, surface sudden depth. Sensory overload for the western trained gaze. How to visualise the scale of computation necessary to simulate an ocean - which is always the capability of AI.

Thinking about designing video for an octopus has similar emergent tendencies as for VR. As the CGI artist Nate Boyce says, we need to consider new kinds of physics, gravitational forces and materialities. Differently dense materials and shapes moving onto and into each other. Loss of certainty. Produce uncertainty and disturbance. Dedicate space to the hidden and the obscure. provoke forms. create gaps in recognition. Artificial entities and synthetic material.

The octopus is a very clear analogy for all we can't see and don't know in AI cognition.

This second video clip looks at the octopus ocean environment, filmed in average conditions in the Southern Atlantic coast, augmented at points with digital filters, to

sketch some sense of non human tactile frequency oriented perception. The main point is to glimpse an environment navigated with no sense of horizon - octopus experience. This is integral to an ocean aquatic medium. When you are actually moving through the kinds of habitat they prefer, and not the advert luminous coral reef version, visibility is strange and viscous. And water warps and bends space and light and therefore focus. Limited visibility, a spherised world, distortions of light. Zoom in with the body to experience something. Closeness. Be in presence, immanent in fluid everything moving. Not in memory or future. Perhaps this contributed to the evolution of curiosity. Exploration, movement, touch, drive, immersion. Convex concave edges of vision. The Gopro fish eye tendency works well.

The sense of touch maps material around you. Taste too. Rushes of chemical sensation and imprints of texture. Polarised vision. Dark and light differences amplified. 8 simultaneous slightly or vastly different takes on something you are exploring. No sound, as in, the sense of hearing as we process it, is almost absent. A colleague told Kevin that fish might sense a predator as an expanding dark black circle.

In *Children of Ruin*, the octopuses project turbulent surges of colour flashes and shards, flecks of colour tumbling fast chaotically at each other. 8 arms giving a myriad of feedback options to the processor in the head.

Vague forms, shadows and patches, foreshortening, absences in the detail. Weightlessness. Thrust.

None of these scenarios can be conveyed through representation.
ON PERSPECTIVE then SYNAESTHESIA and ANIMATION.

Bright cobalt blue and turquoise, emerald green as frequencies, shards, pulses. Skewed geometries. Mosaic assemblies. Sheens flickering across waves. Background foreground blurs. Blurred edges. Fading away as octopus moves past an object. Dissolves back into the particle soup. Ocean background greys, B/W. Polarized vision. Control the amount of light coming in. Light looks thicker when polarized. Seeing in dark waters, at depth. PRISMATIC. B/W. (PS filter ?3D to get purpleyellow prism separation on edges of a thing, whilst the thing drains of colour into B/W spectrum.

So much is blurry, with breathtaking sudden magnified focus at close proximity. Blur the octopus outlines. Pixellate. Echoes of Google Deep Dream. An octopus needs to trick an array of predator sensory fields – polarized or ultraviolet vision as well as those (like humans) that see a huge range of colours. If a video clip of a camouflage array is slowed down, it seems possible that the octopus selects from a set of stand by mode patterns that can be employed in a fraction of a second and is a visual textural trickery, an optical illusion, but because it blurs any figure ground distinction, the predator mind is confused.

Waves, folds, pleats, repetitions, swellings.

CGI that is not attached to narrative. Disorientation, wonderment, unease. Uncanny.

How might we think about the relevance of this blurring of distinction between figure and ground/ operating object and environment, in terms of communicating with an octopus, or why it might be important in training an algorithm? Would it prioritise immersion in a context? Or a roaming capacity, never fixing a viewpoint?

What would be the trigger to mimic? What is being mimicked exactly? A surface, an object, a frequency?

Figure ground separation obsession and clear definition of main object/s, in western image traditions. Classification, moulding reality to the dominant world view.

Camouflage and underwater, is a different universe. Rare figure ground accuracy.

Our imitative faculty shows us the represented world, give or take a few surrealist visions. It is not a complex or uncertain model of reality.

Octopus imitative faculties, render it in iterations of becoming the same as. It mimics a fluid viscous world with visual tactility, instantaneous skin response. Magical seeming array of myriad mimetic processors versus western human meaning prediction capture stabilize contain reality version of mimesis.

If an inorganic material is being mimicked, time must be slowed to the point that movement would be almost imperceptible, a body moving in miniscule incremental suction fixing and unfixing. Or arms swaying in rhythm with kelp fronds, responding to the wave motion in the environment.

‘Alien Phenomenology or What it’s Like to be a Thing’, Ian Bogost.

Non coherence. Fleeting recognition. Excess – as in to imagine Other is to exceed one’s known being. Expanded being, expanding bodies. Wonder as a tool. Allure. visual noise generated in low light. Random streaks and blotches appear instead of recognized object. Interobject perception. The clarity of distortion.

‘The Fold’, Deleuze. Perception in the folds.

‘The Neuro Image’, Patricia Pisters. Neo or digital baroque. Micro and macro perspectives enfolded.

‘Intensive Science and Virtual Philosophy’, Manuel Delanda. The Mathematics of the Virtual.

‘Spectacular Visual Effects. CGI and Contemporary Cinema’, Kristen Whissel.

Radical plasmaticness, oozing, instantaneous, simulating, volatile, elusive, morphing matter but needs freeing from linear narrative. Sampling by touch. Unknowability inbuilt to these entities. Living data. Surplus life.

Expressions of excess vitality. Confuse the boundaries separating the animate from the inanimate. Simultaneously embodied and immaterial,

Digital tendency towards multitude.

Our sensory abilities precede and exceed our coded cognition. And ‘The Infra-World’, Francois J. Bonnet.

‘Invisible’, Philip Ball. Bedazzled and confused. Changing the spacing of the layers of iridophores and chromatophores, changes the colours ‘seen’. Diffraction is key. Do this with PS layers.

‘Perspective and Other Optical Illusions’, Phoebe McNaughton. Oblique views, isometric, 2-5 point perspective, reflections, depth of focus, relativity, figure ground meld, impossible objects.

Upside down, floating off gravity, making non human sense of light, outline, shape, volume, curves and edges – no centre. What would I be looking at if I can’t recognize what is being produced? New tools towards learning to sense differently. ‘What?’ and ‘where?’ reconfigured to amorphous ambiguous terrains.

'Perspective as Symbolic Form', Erwin Panofsky. Texture and taste visualized undoes vision led perspective imaging. Synaesthesia? Perspective as psychologically conditioned interpretation of the Real (Haraway 'impoverishment of the real'). Look at a few historical moments of warped 'impossible' perspective. Link to VR and 8 armed processing. The west has separated figure from ground and diminished the worlds complexity - in the octopus, continually one becomes the other.

'Unthought', N. Katherine Hayles. redefine cognition as pattern recognition and the capacity to respond to environmental changes. Cognitive assemblages for the unknowable. Links between disparate phenomena. Vision would more usefully be stereoscopic.

'Surfing Uncertainty', Andy Clark. Prediction Machines (human perception apparatus) protect us from the sensory barrage that is the Real. Assumptions inform recognition and in a temporal period, decide or recognize what is being perceived. 'Haptics', Lynette A. Jones. Virtual haptic interfaces. Illusions of body space. Vibration, chemical imprints on skin, pressure, stretch, temperature. Tactile receptors. Give the entity information about temporal and spatial events on the body.

'Anamatic Apparatus', Deborah Levitt. Here she talks about animation being the visual field of the 21st century. Animation as porous bodies... shift in topography and apparatus. Animation produces possible worlds, not 'the' world as does cinema. It is expansive and questions subjectivity, gender, reality, materiality. Animation can model new ways to negotiate the in between of worlds, open up possible bodies, spaces, temporalities. What we don't know is a generative space. The mythical dimensions, shamanism, cosmotechnical imagination, viscerally intimate, neuro speculative.

Volumetrics I've already investigated. Useful to convey octopus multi simultaneous myriad processing of environment on a molecular level and macro but never about fixed recognition (my 'Volumetric Ecologies' presentation on backspace phenomenon). 'The however bodies of the animatic apparatus—don't refer to a biological or theological ground or telos, than that opens a space to consider their forms of production and metamorphosis along new lines, that is, in relation to the *how?* of their unfolding. The concept of an-ontology provides us with a new power for thinking the forms of life emerging in the animatic regime. It also allows us to reconsider the functions of the simulacrum in relation to our current coordinates. The concept of an-ontology can also generate new ways of thinking the persistence, the repetition compulsions, and the novel forms of vitality of the *figure*'.

Jamie: on the peculiar aptitude of animation in problematizing our assumptions of what we might consider the post human to be. Distinguishing between the cinematic and the animatic, the composite and the multi-planar, and the representational and the 'productive' - mapping a techno-political continuum in which commercial cartoons, neurocinematics, deep fake image manipulation and gene sequencing interfaces might allow image production to call new forms of life into being.

In conversation with Ramon @ Volumetric Ecologies 2019. '0D's multiple channel installations suggest possibilities in expanding and inhabiting other systems of perception and proprioception. They

combine text, video and animation with newer tools such as LIDAR scanning to suggest new spatio-temporal formations and ask what kind of bodies might be possible with these new coordinates'.

How are octopuses putting things together and with what senses? Hampered by our anthropomorphic imagination, as to what consciousness is in octopus terms. An octopus is moving in relation to the medium that is around it, through it, inside it. Radically different kind of body relationship to environment from ours. An experimenting body. ? Distributed. Immersive. Porous. Intuitive. Sensory intelligence.

Figure/ground relations... Camouflage as an aspect of this ambiguity.

Representation. Definition. What can it become. Multi perspective vision? Human meld with non human? Multisensory and polyaesthetic affordances enhance possible experiences and responses. Local environment would become fractured, complex, multiplied. Between representation and modelling, where is the subject? What happens to the body? What would 'real' duration be in terms of eg VR? Gravity and time are effects produced at the point of rendering. Don't stick to the plausible. Temporal resistance. Time travelling. Dimensions. Cosmotecnological experiments, generative animation. VR is a tight coupling between the sensory and the medium processes.

Space/volume in Euclidian western thesis, is something that must always be filled. What are the terms of extraction or anatomical planes in these new spaces? What possible bodies emerge in this disturbance. Emergence as the perceived divide between the metaphysical and perception. An alternative space of relation? What are the consequences of developing a GANN that embraces that which we cannot embrace? Volumetrics is not about filling, perspective or penetration. It is about inside outside, moving through depth and hiddenness. Beside not beyond. Act beside and with. Uncertainty, dissolution, layering. Take on the forms and provoke the forms.

What is it to work directly in an AI technology that produces the unknown? Or a newness? Different kinds of physics, gravity, environment medium? How to design into spatial fluidity? How can an AI map a fluid environment? The relation between human and non human is where novelty emerges and can be encountered. The relation of human perception to its difference. A negotiation.

What would a post colonial description of the human be? Intercepting the neo liberal drive to squeeze lots of Reality out, uncertainty out (AI does not have to be reductionist imposition onto messy reality. The

consequences of mapping rigidity onto protean reality).

1985, Lyotard *Les Immatériaux*. One of the central questions explored is the potential of immersive space. Immersion not as the intoxicating and overpowering space of the Gesamtkunstwerk, but rather as an exploration of differences and discontinuities that have already begun to inhabit our sensorium; it directs the subject to what it means to see, and who is the subject of seeing.

Octopus 'sees' 360 degrees because they are feeling everything – with 8 arms, eyes and chemical touch of constantly fluid environment. It's environment processing akin perhaps to how sonar works. The ocean responds to its environment and the octopus reads the differences in oscillation, flow, current, pressure, speed, compression in the water as body (the ocean as body of water), differences that map water behaviours in direct relation to the environment. Vibrations. Information about prey, predators. It can read scenarios in water movement, in chemicals and smells dissolved in or released into the water.

It moves or is motionless in ebbs and flows. Time moving back and forth. Time concertinad perhaps, nonlinear. It has a short life in linear time terms, but perhaps experience is intensified in the ebbs and flows of nonlinear temporality. Waves of sensation in molecular detail. Core streams, pressure drop, suckers exploring with precise complication in the hydrosphere.

'Sundogz', Mark von Schlegell. 'Filaments, bundles and chords, threads, strips and suckers that grew from all over the self-designed body registered the great avenues of moving water all around them. The tendril's signing was like the signing of the sea itself.' A multiverse. Still ahead of time's coming wave. Descriptions equating underwater with deep space travel. 'still ahead of time's coming wave'. 'Time thickened and thinned, swelled and elongated'. Colour bands expanding upwards, bright shivering light ripples far up beyond the colours. Attach itself to the time ripple and hang on into the future, shards vectoring in all directions around it. A silver wheel rolling off gravity, AI presence in the water. Spinning vivid twisting in and out of holes and through curves and waves. Conscious inconclusive, developing selfhood without human referent.

Shrink, change shape, project holograms, manipulate any object, wink to change colour. Decoherence. A singularity in whatever timeline. Principle of constancy leaping through fields of change. We reach in every direction, in most dimensions.

A spectrum of individual light colours, not a single beam. Searching.

THE VISUAL ALLURE/ The Emmitter Stack. My role.

Catalyse response in the octopus. Generate combinations of impact and situation that the variables excite or agitate the octopus. What it finds pleasurable. How it's skin changes in response to what has occurred.

Initially, until there is an Effector Stack - perhaps a soft robotics hand ish, the stimulus will be video. OD is partially prepared - vibration, frequency shivering on screen surface, but a lot of imagining into octopus behaviour, cognition and sensory world in order to produce image that might attract an octopus's curiosity. Light intensity, shapes, ways of conveying acidification, pressure, water temperature.

We are asking it to learn - what, we don't know. We aim to catalyse the AI to learn too. What, we don't know, but hopefully it will mean communication between 2 entities, both consciousnesses alien to human, both from evolutionary paths totally separate to ours.

The AI will learn from the octopus responses and then change the image we all see, in response to this, assuming the octopus will then respond again. It needs to learn how to be contextual in its new environment. It is a biological organism that is code too.

We could change the speed of some situations, and or the colours. Build colours based on the chromatophores, iridophores and leucophores in the octopus skin. See if it camouflages in response, acts visibly in response to change in its screen environment.

We cannot know the way that the AI filters and affects or colours the image, or assembles 'phrases', groups, sequences of colours.

No horizon - only the human here uses perspective at vital to maintaining the self in relation to the environment.

An animated dancing thing performing for the octopus?

Children of Ruin dancing emissary that is the first communication the human can respond to.

Change the size and shape of the body on the screens.