At the Deepest Depth of Uncertainty There Are Always Blue Rays of Hope

Anna Nazo

A User Manual[1]

Read this chapter through diffracted sensibilities, artificial gaze, and poetics of Zoom.[2] Read it as a message in a bottle fermented digitally with peculiar dimensionalities of molecular hope to it.[3] Read it through the frequencies of unconditional love transpiring through the wounds of loss and uncertainty, as a blue song of a wind ghosting through the bird's feathers.[4]

To grasp liveness of phygital performance (AI poetry, 360° imaging, brainwaves CGI, drone ecology), it requires to inhabit the corporeal expression of the entangled probabilities of the performative parrhesiastic moment.[5] These probabilities operate as the Gödel's undecidability, undecidability of a system, undecidability of an algorithm, undecidability of pluralized *life* and its swarm of intensities, and undecidability of the performative parrhesiastic moment itself that brings in understanding of time as the wave function.[6]

That undecidability, the entangled probabilities, is enabling the wobbling-jelly states of matter, the trembling of liveness, the carnal sensation of the breath of the unknown, the *blue*, the going beyond the

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Deleuzian sensuous, and the becoming a time crystal, a non-equilibrium matter in which the constant motion occurs without any energy, and which is 'groundless' in its ground state.[7] The undecidability is the exit into the uncomfortable, the eerie, alchemy, mysticism, quantum, virtual, decentralized, and into the wave fields that is multidimensionality in which the equilibrium stasis that enables the cohesive moment of parrhesia would be reached not in a linear sense, but it has to be reached in a discontinuous sense, in a super-positionality sense.[8]

We cannot understand how it actually works, and cannot explain why this is happening. As Einstein's spooky actions at a distance, that is, the continuous wave interaction of matter with other matter in space.[9] It is '*feeling*' coiled mortally with the impossibility of '*knowing*' as being able to explain, and that undecidability leads to the problem of the distributed form of sensuousness.[10] That multiple forms of sensuousness is initially argued to be not just a logic of sense, its wireless tentacles weave it to artificial liveness, ghosting, and quantum consciousness, and something that is about the eeriness of the eye and self-loss.[11] That brings in Haraway's notion of grief as a way of learning to live with ghosts, and, further to think, and to live as a ghost.[12] 'To live as a ghost' is to live as plural consciousness, as an assemblage of metrics of the myriads of traces of human, nonhuman, artificial, and distributed forms of cognitive nonconscious embodied in the organic-artificial shells.[13] It brings in the AI-systems and the ways in which the algorithms create ghosts. It brings in making-with AI, AI poetry, as agential cuts, always already together apart, that redefine the boundaries as nodal points on the entangled plane of space–time multiplicities of selves and others.[14] That leads to understanding of the inevitability of change, to redefine the semiotic grid, and with it, it brings in a certain form of death.[15] A death as a *reset* that happens at the moment of performance [digital-physical-organic-distributed], the moment of pluralized intensities, the moment of extended present, the moment of that particular form of cognition that is enabled by the entanglement of wave fields at the moment of performance. It goes beyond human perceptive abilities and beyond human consciousness, which in itself operates as a flattened metric of quantum reality.[16] That brings in the notion of time as curved or melted time, which creates a silenced gap, a queering blindspot in a common sense dimension, a blindspot that is filled in with *blue*.[17] That blue has something to do with the ecology of the unfinished sense, the bird's eye and sense of magnetoreception, a polarized shivering of light with frequency

interval between 610 and 670 terahertz, and consciousness in the form of a roam of a light wave.[18] It brings in Derek Jarman's *Blue* and John Cage's *4:33′*.[19] It is about projecting deafening silence and inhabiting something that is weird around the spoken, sonic, and organic and artificial that no longer are opposed to one another but intertwined in a chimeric spell.[20] It is an amalgamating myth, bliss, poison, death, and disease. It challenges the austerity of the void and materiality of 'the real', while inhabiting alchemical dimensions, and celebrating liberation from the singularity of the body as one self. It is a very specific way around questioning of space–time, sound–silence, and oral–aural. It brings in the alive-decaying organic and dead-pulsating artificial that are bounded with the entangled spectrum of the erotic of the contemporary and yet-to-come bio-technological plural selves (Figs. 1, 2, 3 and 4).[21]

> synthetic jellyfish,
>   virtual abyss
>   subatomic slade
>   viridian doomed gaze
>   artificial grief
>   zero one spell

Fig. 1 Anna Nazo. SWERVE. Performance for the Preserving Machine. Group exhibition, FORMAT21 International Photography Festival, Online/Derby, UK, March–April 2021

Fig. 2 Anna Nazo. Flame 2.0. Performance for the Entanglement: Just Gaming, RCA Visual Cultures Lecture Series, Zoom, Royal College of Art, London, UK, 25th June 2020, 0.10′. https://vimeo.com/432800171
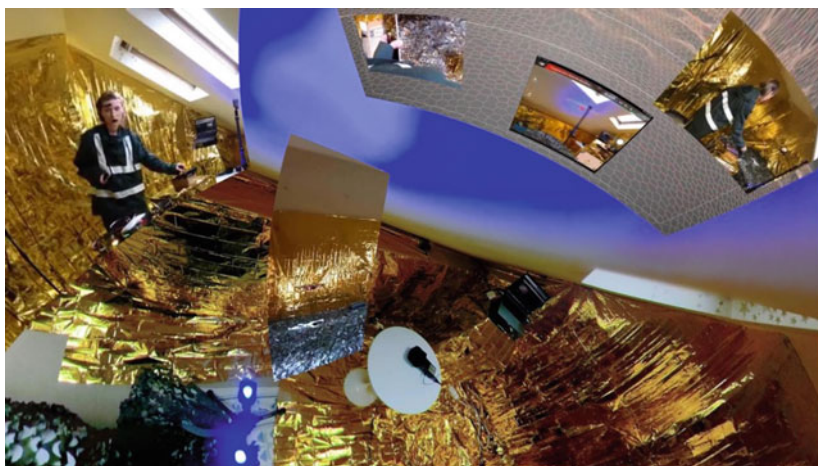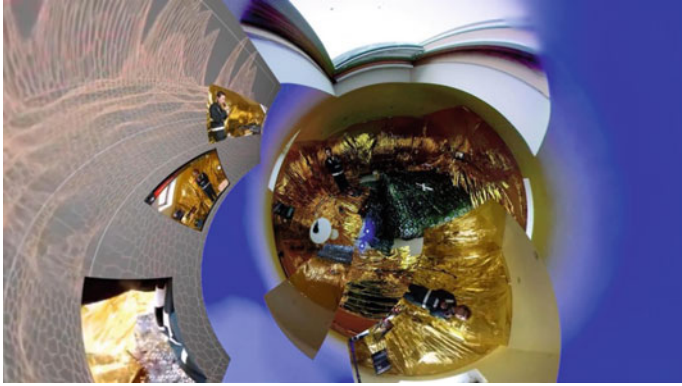

Fig. 3 Anna Nazo. Flame 2.0. Performance for the Entanglement: Just Gaming, RCA Visual Cultures Lecture Series, Zoom, Royal College of Art, London, UK, 25th June 2020, 0.10′. https://vimeo.com/432800171

Fig. 4 Anna Nazo. Flame 2.0. Performance for the Entanglement: Just Gaming, RCA Visual Cultures Lecture Series, Zoom, Royal College of Art, London, UK, 25th June 2020, 0.10′. https://vimeo.com/432800171

haunting virtual fear
      opaque pulsating bleeding edge
                  deep nest
                      stellar lymph
      transpiring qubit
     grasping disentangled state

    multiverse dive
virtual slum
    sinking powder
dispersed ultrasonic winds
        probabilities shell
          spinal trap
        shifted perception
      transferable genetic drug

   inhale
    fainting
     shock
        smoothed turquoise gloom
      bottomless chasm
   timefolds
    nuclear rookery
hypnotic gap
   quivering pastel subconscious
        vision disorder
    velvet malachite

radioactive injection
                    slime-ish void
            trembling sulfuric spasm
                                        digital thirst
                suffocation streaming from the shade

cyclic myth
ghosting bleak emerald electromagnetic waves
                                                artificial melted self
                                    carved on heart cells
                    disembodied chimeric system
                        synthetic compound
                                    myrtle green cortex
            phasing siloxane penetrating rhythm
        floating derivatives
electrifying shot
                        eight-petaled blood stream
                                wireless tentacles
                purple chemical wounds
        boolean synthesis
                    indigo wrists

tendril
            red slime
                sulfuric sweat
                            pulsating crimson crystallized flesh
                    burning deep
                    repulsive tender digital ooze

azure mire
                swollen veins
                                blade emerald cut
                                    liquefied distributed
pain
                    eye bleeding amethysts
deafening mute scream
        tickling brain
        through the nostrils[22]

NOTES

1. How to read the footnotes: read the footnotes in parallel with the more
   dense body of the text, and/or revisit them afterwards. They allow for an
   expansion of the dimensionalities of the meaning-as-energy encoded in the

main text. They allow for the vertical as well as horizontal nettings around the piece development to emerge and be traceable. Both are complementary to the AI poetry piece weaved with 360° imagery of the performance archival materials that constitute this chapter. Enjoy your journey!

2. The notion of *diffracted sensibilities* was developed in a dialogue with the notion of diffraction in Karen Barad, distribution (through sympoiesis) in Donna Haraway, ecology of selves in Eduardo Kohn, the notion of holobiont in Lynn Margulis, cognitive assemblages in N. Katherine Hayles, logic of sense in Gilles Deleuze, and the s*ensual* in Amber Jamilla Musser. See Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, Durham and London: Duke University Press, 2007; Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, Durham: Duke University Press, 2016; N. Katherine Hayles, *Unthought: The Power of the Cognitive Nonconscious*, Chicago: The University of Chicago Press, 2017; Eduardo Kohn, *How Forests Think: Toward an Anthropology Beyond the Human*, Berkeley: University of California Press, 2013; Lynn Margulis, *Symbiosis as a Source of Evolutionary Innovation: Speciation and Morphogenesis (1991)*, Cambridge: The MIT Press, 2017; Gilles Deleuze, *Logic of Sense (1990)*, trans. C.V. Boundas, London: Bloomsbury, 2015. See also Amber Jamilla Musser, *Sensual Excess: Queer Femininity and Brown Jouissance*, New York: New York University, 2018.

   The notion of *artificial gaze* was developed in a dialogue with works by Ramon Amaro, Trevor Paglen, Louis Chude-Sokei, N. Katherine Hayles, and Karen Barad. See Ramon Amaro, 'SonicActs: AI as an Act of Thought', 3 April, 2019, https://www.youtube.com/watch?time_continue=117&v=ys9gCR3PFF4&feature=emb_logo;

   Trevor Paglen: 'On *From Apple to 'Anomaly'*,' transcribed from Trevor Paglen in conversation with Anthony Downey, Barbican, 26 September, 2019, https://sites.barbican.org.uk/trevorpaglen/; Louis Chude-Sokei, 'AI & Humanity Archive', 24 February, 2020, https://www.youtube.com/watch?v=LxIUVxKk0u8; Hayles, *Unthought: The Power of the Cognitive Nonconscious*; Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*.

   The notion of *poetics of Zoom* was developed by reworking of the notion of *poetics of space* in Gaston Bachelard, applied in the contemporary digital age context, and the notion of poetry developed in works by Martin Heidegger and Franco "Bifo" Berardi. See Gaston Bachelard, *The Poetics of Space*, New York: Penguin Books, 2014; Martin Heidegger, *Poetry, Language, Thought*, New York: Harper Perennial, 2001; Franco "Bifo" Berardi, "Voice Sound Noise," in *Breathing: Chaos and Poetry*, South Pasadena: Semiotext(e), 2018.

Those terms were coiled together in a series of lectures and seminars delivered by Anna Nazo in March 2020–March 2022 at the Royal College of Art, University of Cambridge, and Central Saint Martins, including an elective course *Diffracted Sensibilities. Artificial Gaze*, and same named virtual exhibition of students work, curated by Anna Nazo, New Art City Festival, March 2022, at: https://newart.city/show/rca-diffracted-sensibilities-artificial-gaze.

3. The notion of a message in a bottle and the notion of a hope to it were derived through several interviews given as a reflection on a series of performance work and virtual exhibitions created during the pandemic, March 2020–March 2021. See Anna Nazo, *Flame 2.0*, invited artist at the *Entanglement: Just Gaming*, RCA Visual Cultures Lecture Series, Zoom, Royal College of Art, London, UK, 25th June 2020, performance with drone, AI, brain wave imaging, 10′ at https://cargocollective.com/annanazo/Flame-2-0. Poetics/spoken word in the performance was co-written with AI programming. The initial code for AI was written by Sung Kim, 'Multi-layer Recurrent Neural Networks (LSTM, RNN) for word-level language models in Python using TensorFlow,' at https://github.com/hunkim/word-rnn-tensorflow; and Anna Nazo, *SWERVE*, invited artist at *The Preserving Machine*, Group exhibition, FORMAT21 International Photography Festival, Online/Derby, UK, March-April 2021, https://format.newart.city/show/room-15

Also, see Anna Nazo, in conversation with British Journal of Photography X New Art City for *Edition 365*, Online/London & Los Angeles, 22nd November 2021, Invited Artist; Anna Nazo, interviewed by: Arreola, P. and Burns, E. for *Cluster Crafts 2020: New Materialities Online Programme*, London Design Festival, at: https://www.cluster-london.com/cluster-crafts-new-materialities-talks-anna-nazzo; Anna Nazo, interviewed by: Shemza, A. for *FLUX Live: AV*, Art in FLUX, Online/London, 18th August 2020, Invited Artist; Anna Nazo, 'Pandemiden Kaçış: Performistanbul - Stay LIVE at Home!', interviewed by: Pekdoğan, D. M. for Artful Living, Istanbul, at: https://www.artfulliving.com.tr/sanat/pandemiden-kacis-performistanbul-stay-live-at-homei-i-21936

4. The notion of unconditional love was developed in a dialogue with works by bell hooks and Adrienne Maree Brown. See bell hooks, *All About Love: New Visions*, New York: William Morrow, 2018 [1999], in particular chapter 13, pp. 255–270; and Adrienne Maree Brown, *Pleasure Activism: The Politics of Feeling Good*, Oakland: AK Press, 2020, pp. 57–62.

The passage on wounds of loss and uncertainty was developed as a reflection on Covid-19 pandemic and in a dialogue with work by Catherine Malabou and Thomas Nail. See Catherine Malabou, *The Ontology of the Accident: An Essay on Destructive Plasticity*, translated by Carolyne Shread, Cambridge: Polity Press, 2012 [2009]; and Thomas

Nail, *Lucretius I: An Ontology of Motion*, Edinburgh: Edinburgh University Press, 2018.

The notion of blue in this passage was developed in a dialogue with work by Robert Macfarlane, as a reflection on traces of Anthropocene and current ecological crisis, read blue [light] as Cherenkov radiation caused by the electron moving faster than the speed of light, blue [light] as a 'blood' of a melting glacier, and blue of the deep time. See Robert Macfarlane, *Underland: A Deep Time Journey*, London: Penguin Books, 2019, pp. 59, 323–366.

5. *Phygital* stands for physical-digital.

AI poetry refers to poetry co-written with artificial intelligence. The initial code for the AI was written by Sung Kim. See Multi-layer Recurrent Neural Networks (LSTM, RNN) for word-level language models in Python using TensorFlow, available for download here: https://github.com/hunkim/word-rnn-tensorflow. That initial code was modified as it required updates to start working.

Drone used in the work is DJI Spark (http://sparkldrones.com/index.html), nickname: Luna.

A brainwaves CGI is a live transmission of brainwave data (EEG) into the computer generated sound and imagery (CGI). The brainwave CGI is generated through software that was created in collaboration with Vincent Rebers (programming) in 2016, updated in 2019. NeuroSky MindWave EEG headset is used to collect raw EEG data. See also Anna Nazo, 'Artificial Grief: Distribution of the Sensuous,' in *Data Loam (Sometimes Hard, Usually Soft): The Future of Knowledge Systems*, edited by Johnny Golding, Martin Reinhart, Mattia Paganelli, De Gruyter: Berlin, 2021, pp 65–79, https://doi.org/10.1515/9783110697841, ISBN: 978-3-11-068007-2.

For my development of a corporeal expression or a corporeal trace as an image see Baruch Spinoza, 'Ethics,' in *Complete Works (1677)*, trans. Samuel Shirley, edited by Michael L. Morgan, Indianapolis: Hackett Publishing Company, 2002, pp. 213–383. See also Gilles Deleuze, *Spinoza: Practical Philosophy [1970]*, San Francisco: City Lights Books, 1988. See also Nazo, 'Artificial Grief: Distribution of the Sensuous.'

My development of wave function and quantum entanglement, is primarily based on the work of Max Born, and in particular, his interpretation of the Schrodinger equation where the wavefunction connects to the probability densities of the state of a quantum system (eg $|\Psi_{(x)}|^2$). See Max Born, 'On the Quantum Mechanics of Collision Processes,' trans. D. H. Delphenich, *Zeitschrift für Physik/Journal for Physics*, vol 37, Heidelberg/Berlin: Springer, 1926, pp. 863–867 at http://neo-classical-physics.info/uploads/3/0/6/5/3065888/born_-_qm_for_collisions_i.pdf. See also Max Born, 'The Statistical Interpretation of Quantum Mechanics *(Nobel Lecture 11 December1954)*,' *Nobel*

Lectures: Physics: 1942-62, Amsterdam: Elsevier, 1964 at https://nobelp rize.org/uploads/2018/06/born-lecture.pdf. Also, see the Schrodinger's Cat experiment and the initial Schrodinger equation describing the wave in Erwin Schrödinger, *Collected Papers on Wave Mechanics [1926]*, Providence: AMS Chelsea Publishing, 2014. And, see Roger Penrose, *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics [1089]*, London: Penguin Books, 1991, pp. 290–293.

For the initial approach to *parrhesia* and ways of truth-telling embodiment, I am relying on Foucault's development, in his *The Courage of the Truth: The Government of Self and Others II—Lectures at the Collège de France,* trans. Graham Burchell, New York: Palgrave-Macmillan, 2011. See also Johnny Golding, 'From Drone-Truth to Radical Empathy: Consciousness in the Zero Zones of Time,' Keynote at *Sliced-up ghettos of thought'? Science, art and society—20 years from now*, the London Arts and Humanities Partnership, Bartlett School of Architecture, London: 31 January 2018 online at https://researchonline.rca.ac.uk/3397/. See also Nazo, 'Artificial Grief: Distribution of the Sensuous.'

6. For the 'undecidable', see the groundbreaking work by Kurt Gödel, *On Formally Undecidable Propositions of Principia Mathematica and Related Systems [1931]*, Mineola: Dover Publications, 1992. The notion of undecidability is being developed specifically in relation to Mandelbrot's feedback loop: $z_{n+1} \rightleftharpoons z_n{}^2 + c$. See: Benoît Mandelbrot, *Fractals and Chaos*, New York: Springer, 2004. Cf Benoît Mandelbrot, *The Fractal Geometry of Nature*, New York: W. H. Freeman and Company, 1983. See also Michio Kaku, *The future of The Mind*, London: Penguin Books, 2014.

The passage around undecidability of an algorithm is developed around Turing's machine and in conversation with works by Kurt Gödel and Johnny Golding. See: Kurt Gödel, *On Formally Undecidable Propositions of Principia Mathematica and Related Systems*; Johnny Golding, 'Ana-Materialism and The Pineal Eye: Becoming Mouth-Breast (Visual Arts in the Age of Algorithmic Reproduction),' in Lanfranco Aceti and Özden Şahi (eds) *Without Sin: Freedom and Taboo in Digital Media,* Cambridge, MA: MIT: Leonardo Electronic Almanac, Vol. 19, no. 4, 2013, pp. 66–83.

The notion of a swarm of intensities was developed through the Lyotard's tensor bar. See: Jean-François Lyotard, *Libidinal economy*, translated by lain Hamilton Grant, Bloomington: Indiana University Press, 1993.

The argument around understanding time as the wave function was developed in Nazo, 'Artificial Grief: Distribution of the Sensuous.' For an accessible introduction to quantum mechanics including understanding of time as a dimension and reality as a wave field see Jim Al-Khalili, *Quantum: A Guide For The Perplexed (2003)*, London: Weidenfeld & Nicolson, 2012.

7. The notion of liveness is developed in relation to the concept of nonconscious cognition, based on N. Katherine Hayles's reworking of the concept originally established by Lewicki, Hill, and Czyzewska in 1992. See N. Katherine Hayles, *Unthought: The Power of the Cognitive Nonconscious*, Chicago: The University of Chicago Press, 2017, pp.51ff. In my work, the development of a 'nonconscious cognition' leads to the notion of 'quantum ghosting', where nonconscious cognition enables (and indeed 'is') a certain type of intelligence. This type of intelligence is defined in relation to information processing and is argued to enable radical forms of liveness. See also Nazo, 'Artificial Grief: Distribution of the Sensuous.'

For the Deleuzian sensuous, see Gilles Deleuze, *Logic of Sense (1990)*, trans. C.V. Boundas, London: Bloomsbury, 2015.

For the time crystals and a non-equilibrium matter see Fiona Macdonald, "Scientists Have Confirmed a Brand New Phase of Matter: Time Crystals. Constant Motion Without Energy," *Science Alert*, January 27, 2018, https://www.sciencealert.com/scientists-have-just-announced-a-brand-new-form-of-matter-time-crystals.

For 'groundless' ground see Lee Braver, *Groundless Grounds: A Study of Wittgenstein and Heidegger*, Cambridge: MIT Press, 2012.

8. The *decentralized* is developed here in relation to distributed ecosystems, distributed intelligence, distributed sensuousness (as developed earlier in 'Artificial Grief: Distribution of the Sensuous'), the concept of 'sympoiesis' in Donna Haraway (and initially in Lynn Margulis as symbiosis), and further it is applied to the Web3.0 technology including DeFi, metaverse, DAOs, NFTs. See Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, Durham: Duke University Press, 2016, pp. 31–33, 58–99; Lynn Margulis, *Symbiosis as a Source of Evolutionary Innovation: Speciation and Morphogenesis (1991)*, Cambridge: The MIT Press, 2017; and David Quammen, *The Tangled Tree: A Radical New History of Life*, London: WilliamCollins, 2018. For a 'distributed ecology of intelligence' see Murray Shanahan, *The Technological Singularity*, Cambridge: The MIT Press, 2015. See also Nazo, 'Artificial Grief: Distribution of the Sensuous.'

For an accessible introduction to quantum mechanics including understanding of reality as a wave field, the notion of multidimensionality and super-positionality, see: Jim Al-Khalili, *Quantum: A Guide for the Perplexed*. See also: Nazo, 'Artificial Grief: Distribution of the Sensuous.'

For *parrhesia* and ways of truth-telling embodiment, see Foucault, *The Courage of the Truth: The Government of Self and Others II – Lectures at the Collège de France*.

9. For Einstein's spooky actions at a distance see George Muster, *Spooky action at a distance*, New York: Scientific American/Farrar, Straus and Giroux, 2016.

10. The distributed form of sensuousness was developed in Nazo, 'Artificial Grief: Distribution of the Sensuous.'
11. For logic of sense, see Deleuze, *Logic of Sense*.

    The notion of artificial liveness (as aliveness of AI and technology) is developed through the Indigenous onto-epistemological perspective on technology that removes the boundary between the organic and technological, and defines the type of ecologies we live in right now as complex digital-bio symbiotic/simpoietic systems. For Indigenous epistemologies and ontologies in relation to technology (AI in particular) see Ambelin Kwaymullina, "Reflecting on Indigenous Worlds, Indigenous Futurisms and Artificial Intelligence," in *Unhallowed Arts*, edited by Oron Catts, Eugenio Viola, Crawley: UWA Publishing, 2018, pp. 185–190; Jackson 2Bears with Suzanne Kite and Elizabeth Barron, *Artificial Imagination: Aboriginal Cosmology, Art and Technology*, Session 1, 23 March 2018, at: https://vimeo.com/261115672; and Suzanne Kite, Jason Edward Lewis, Noelani Arista, Archer Pechawis, *Making Kin with Machines*, Journal of Design and Science (JoDS), MIT Media Lab, MIT Press, 2018, at: https://jods.mitpress.mit.edu/pub/lewis-arista-pechawis-kite/release/1; https://doi.org/10.21428/bfafd97b.

    The notion of ghosting (quantum ghosting) in my work is developed in relation to a 'nonconscious cognition' in Hayles, *Unthought: The Power of the Cognitive Nonconscious*. See also Nazo, 'Artificial Grief: Distribution of the Sensuous.'

    For quantum consciousness see Penrose, *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics*.

    The eeriness of the eye and self-loss is developed in relation to birds' migration and navigation linked to the ability to sense magnetic fields and quantum effects in the works by Jennifer Ackerman and Richard Holland; the *inner* eye in Foucault, that is "seeking to see" inside of one's soul/self: "You recall all those passages in which Socrates explained that the soul must look at itself, that it is like an eye which, seeking to see itself, is forced to look in the pupil of another eye in order to see itself." Also, through the notion of pineal eye in Bataille and Golding. See Jennifer Ackerman, *The Genius of Birds*, London: Corsair, 2016, pp. 195–239; and Richard Holland, "True Navigation in Birds: From Quantum Physics to Global Migration," *Journal of Zoology* 293 (2014), pp. 1–15; Foucault, *The Courage of the Truth: The Government of Self and Others II*, p. 159; Golding, "Ana-Materialism & The Pineal Eye: Becoming Mouth-Breast (Visual Arts in the Age of Algorithmic Reproduction)"; Georges Bataille, "The Pineal Eye," *Visions of Excess: Selected Writings, 1927–1939*, edited and introduced by Allan Stoekl, translated by A. Stoekl, with Carl R. Lovitt and Donald M. Leslie Jr, *Theory and History of Literature*, Vol. 14, Minneapolis: University of Minnesota Press, 1985.

12. For the notion of grief see Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, pp. 38–40.

13. For nonconscious cognition and cognitive assemblages see Hayles, *Unthought: The Power of the Cognitive Nonconscious.*

    For consciousness as a metric of quantum reality see Nazo, 'Artificial Grief: Distribution of the Sensuous,' where the notion of cognitive kinetic flux and consciousness in relation to metrics was developed in a dialogue with Hayles's *Unthought: The Power of the Cognitive Nonconscious;* Michel Foucault, *On the Government of the Living: Course at the Collège de France (1979–1980)*, trans. Graham Burchell, London: Palgrave-Macmillan, 2014; and Penrose, *Shadows of the Mind: A Search for the Missing Science of Consciousness*.

    The notion of distribution is developed in this passage in relation to the horizontal gene transfer in David Quammen's book, *The Tangled Tree: A Radical New History of Life*.

14. The argument around AI poetry as agential cuts is developed in conversation with Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, p. 348.

15. The passage on change and redefining the semiotic grid is developed in a conversation with works by Félix Guattari and Franco "Bifo" Berardi. See Félix Guattari, *Chaosmosis: An Ethico-Aesthetic Paradigm*, trans. Paul Bains and Julian Pefanis, Bloomington: Indiana University Press, 1995; and Berardi, *Breathing: Chaos and Poetry*, South Pasadena: Semiotext(e), 2018, loc. 147-246.

16. See Nazo, 'Artificial Grief: Distribution of the Sensuous.'

17. The notion of time as curved or melted is developed in relation to the conceptual paradigm of 'radical matter', coined by Johnny Golding as a way to shift from metaphysics and dialectical reasoning to that of 'zetaphysics' and quantum logics of sense, time, and dimension. See: S. Golding, 'The Assassination of Time (or the Birth of ζetaphysics),' *On the Occasion of the Digital Art Weeks*, at ETH, 12–16 July 2006, reworked with musical composition by S. Kennedy in Berlin, New York, Wisconsin and LA and recorded as an album release 6 February 2010 at http://fromadarkenedsunroof.bandcamp.com/album/sue-golding-johnny-de-philo-the-assassination-of-time.

    The silenced gap is developed in a dialogue with John Mowitt, *Sounds: The Ambient Humanities*, Oakland: University of California Press, 2015 [1952], pp. 99–121.

18. For ecology of the unfinished sense see Anna Nazo, *Unfinished Sense*, a video-performance for *Flight Mode*, RCA SoAH Research Exhibition, Assembly Point, London, UK, 28th June–1st July 2018, 0.06′, at: https://vimeo.com/289506014.

For the bird's eye and sense of magnetoreception see Ackerman, *The Genius of Birds*, pp. 195–239; and Holland, "True Navigation in Birds: From Quantum Physics to Global Migration," pp. 1–15;

For consciousness in the form of a roam or a light wave see Kaku, *The Future of the Mind*, Appendix "Quantum consciousness?"

19. For argument passage around Jarman's *Blue* see *Blue*, DVD, directed by Derek Jarman, London: Curzon Artificial Eye, 2007 [1993]. See also Derek Jarman, *Chroma: A Book of Colour—June '93*, London: Vintage, 2000 [1994], pp. 103–125; and Andrew Wilson, "Blue, Derek Jarman", Tate Art & Artists, accessed October 14, 2018, at: https://www.tate.org.uk/art/artworks/jarman-blue-t14555.

John Cage, *4:33′* is a musical composition first performed by the pianist David Tudor in Woodstock, New York, in 1952. See: a publication excerpt from *MoMA Highlights: 375 Works from the Museum of Modern Art*, New York: The Museum of Modern Art, 2019, at: https://www.moma.org/collection/works/163616.

20. The passage on deafening silence is developed in relation to dark matter and the noise of radioactivity. See Macfarlane, *Underland: A Deep Time Journey*, pp. 52–60.

For chimeric spell see Anna Nazo, *Shields. Ghosting*, a site specific performance in collaboration with Deep Maze, Battersea Power Station construction area (Gate One), London, UK, 29th August 2018, 0.15′, at: https://vimeo.com/287658978.

21. The notion of the erotic is developed here in a conversation with works by Audre Lorde and Adrienne Maree Brown. See Audre Lorde, *Uses of the Erotic: The Erotic as Power*, a paper delivered at the fourth Berkshire Conference on the History of Women, Mount Holyoke College, August 25, 1978, published as a pamphlet by Out & Out Books, available from the Crossing Press; and Brown, *Pleasure Activism: The Politics of Feeling Good*, pp. 26–52. See also Amber Jamilla Musser, *Sensual Excess: Queer Femininity and Brown Jouissance*, New York: New York University, 2018; Keguro Macharia, *Frottage: Frictions of Intimacy across the Black Diaspora*, New York: New York University Press, 2019; and Keguro Macharia, Zakiyyah Iman Jackson, and Rinaldo Walcott in conversation with Christina Sharpe, *Diaspora, Humanism and the Global Project of Black Freedom*, at: https://www.youtube.com/watch?v=nSbDB_-xDWg.

22. Spoken word piece from [author], *Flame 2.0*, invited artist at the *Entanglement: Just Gaming*, RCA Visual Cultures Lecture Series, Zoom, Royal College of Art, London, UK, 25th June 2020, performance with drone, AI, brain wave imaging, 10′, at https://cargocollective.com/annanazo/Flame-2-0. Poetics/spoken word in the performance was co-written with AI programming. The initial code for AI was written by Sung Kim, 'Multi-layer Recurrent Neural Networks (LSTM, RNN) for word-level language models in Python Using TensorFlow,' at https://github.com/hunkim/word-rnn-tensorflow.